

Global Trends 2015: A Dialogue About the Future With Nongovernment Experts

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The U.S. National Intelligence Council recently released a paper analyzing global trends to 2015 entitled *Global Trends 2015: A Dialogue About the Future With Nongovernment Experts*. The Council's self-described mission is to "manage the U.S. Intelligence Community's estimative process, incorporating expertise inside and outside the government." The *Global Trends 2015* paper is stated to have been prepared in close collaboration with US Government specialists and a wide range of nongovernmental experts. I have summarized what I consider to be the major points of the paper and then provided my analysis.

Summary of Global Trends 2015

The U.S. National Intelligence Council assisted by experts from the Intelligence Community harnessed US Government and nongovernmental specialists to identify drivers that will shape the world of 2015, to determine which ones matter most, to highlight key uncertainties, and to integrate analysis of these trends into a national security context. Several points should be kept in mind: No single driver or trend will dominate the global future in 2015; each driver will have varying impacts in different regions and countries; the drivers are not necessarily mutually reinforcing, in some cases, they will work at cross-purposes.

Judgments about demographic and natural resource trends are based primarily on informed extrapolation of existing trends. In contrast, many judgments about science and technology, economic growth, globalization, governance, and the nature of conflict represent a distillation of views of experts inside and outside the U. S. Government. The former are projections about natural phenomena, about which we can have fairly high confidence; the latter are more speculative as they are contingent upon the decisions that societies and governments will make.

Taken together, these drivers and trends intersect to create an integrated picture of the world of 2015, about which we can make projections with varying degrees of confidence and identify some troubling uncertainties of strategic importance to the United States.

Demographics

World population in 2015 will be 7.2 billion, up from 6.1 billion in the year 2000, and in most countries, people will live longer. Ninety-five percent of the increase will be in developing

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countries, nearly all in rapidly expanding urban areas. Where political systems are brittle, the combination of population growth and urbanization will foster instability.

Natural Resources and Environment

Overall food production will be adequate to feed the world's growing population, but poor infrastructure and distribution, political instability, and chronic poverty will lead to malnourishment in parts of Sub-Saharan Africa. The potential for famine will persist in countries with repressive government policies or internal conflicts. Despite a 50 percent increase in global energy demand, energy resources will be sufficient to meet demand; the latest estimates suggest that 80 percent of the world's available oil and 95 percent of its gas remain underground.

In contrast to food and energy, water scarcities and allocation will pose significant challenges to governments in the Middle East, Sub-Saharan Africa, South Asia, and northern China. Regional tensions over water will be heightened by 2015. By 2015 nearly half the world's population - more than 3 billion people - will live in countries that are "water-stressed" - have less than 1,700 cubic meters of water per capita per year - mostly in Africa, the Middle East, South Asia, and northern China.

Contemporary environmental problems will persist and in many instances grow over the next 15 years. With increasingly intensive land use, significant degradation of arable land will continue as will the loss of tropical forests. Given the promising global economic outlook, greenhouse gas emissions will increase substantially. The depletion of tropical forests and other species-rich habitats, such as wetlands and coral reefs, will exacerbate the historically large losses of biological species now occurring. Developing countries will face intensified environmental problems as a result of population growth, economic development, and rapid urbanization. An increasing number of cities will face the serious air and water quality problems that already are troubling in such urban centers as Mexico City, Sao Paulo, Lagos, and Beijing.

Global warming will challenge the international community as indications of a warming climate - such as meltbacks of polar ice, sea level rise, and increasing frequency of major storms - occur. However, some incremental progress will be made in reducing the growth of greenhouse gas emissions.

Over the next 15 years the pressures on the environment as a result of economic growth will decrease as a result of less energy-intensive economic development and technological advances. For example, increased use of fuel cells and hybrid engines is likely to reduce the rate of increase in the amount of pollution produced, particularly in the transportation sector. Also, increases in the utilization of solar and wind power, advances in the efficiency of energy use, and a shift toward less polluting fuels, such as natural gas, will contribute to this trend.

Science and Technology

Fifteen years ago, few predicted the profound impact of the revolution in information technology. Looking ahead another 15 years, the world will encounter more quantum leaps in information technology (IT) and in other areas of science and technology. The continuing diffusion of information technology and new applications of biotechnology will be at the crest of the wave. IT will be the major building block for international commerce and for empowering nonstate actors. Most experts agree that the IT revolution represents the most significant global transformation since the Industrial Revolution beginning in the mid-eighteenth century. However, disaffected states, terrorists, proliferators, narcotraffickers, and organized criminals will take advantage of the new high-speed information environment and other advances in

technology to integrate their illegal activities and compound their threat to stability and security around the world.

The Global Economy and Globalization

The networked global economy will be driven by rapid and largely unrestricted flows of information, ideas, cultural values, capital, goods and services, and people: that is, globalization. This globalized economy will be a net contributor to increased political stability in the world in 2015, although its reach and benefits will not be universal. In contrast to the Industrial Revolution, the process of globalization is more compressed. Its evolution will be rocky, marked by chronic financial volatility and a widening economic divide.

The global economy, overall, will return to the high levels of growth reached in the 1960s and early 1970s. Economic growth will be driven by political pressures for higher living standards, improved economic policies, rising foreign trade and investment, the diffusion of information technologies, and an increasingly dynamic private sector. Potential brakes on the global economy - such as a sustained financial crisis or prolonged disruption of energy supplies - could undo this optimistic projection.

Regions, countries, and groups feeling left behind will face deepening economic stagnation, political instability, and cultural alienation. They will foster political, ethnic, ideological, and religious extremism, along with the violence that often accompanies it.

National and International Governance

States will continue to be the dominant players on the world stage, but governments will have less and less control over flows of information, technology, diseases, migrants, arms, and financial transactions, whether licit or illicit, across their borders. Nonstate actors ranging from business firms to nonprofit organizations will play increasingly larger roles in both national and international affairs. The quality of governance, both nationally and internationally, will substantially determine how well states and societies cope with these global forces.

Globalization will increase the transparency of government decision-making, complicating the ability of authoritarian regimes to maintain control, but also complicating the traditional deliberative processes of democracies. Increasing migration will create influential diasporas, affecting policies, politics and even national identity in many countries. Globalization also will create increasing demands for international cooperation on transnational issues, but the response of both states and international organizations will fall short in 2015.

Globalization and technological change are raising widespread expectations that increased international cooperation will help manage many transnational problems that states can no longer manage on their own. Efforts to realize such expectations will increase, but concerns about national interests as well as the costs and risks involved in some types of international activism will limit success. International cooperation will continue to increase through 2015, particularly when large economic stakes have mobilized the for-profit sector, and/or when there is intense interest from nonprofit groups and networks.

Criminal organizations and networks based in North America, Western Europe, China, Colombia, Israel, Japan, Mexico, Nigeria, and Russia will expand the scale and scope of their activities. They will form loose alliances with one another, with smaller criminal entrepreneurs, and with insurgent movements for specific operations. They will corrupt leaders of unstable, economically fragile or failing states, insinuate themselves into troubled banks and businesses, and cooperate with insurgent political movements to control substantial geographic areas. Their

income will come from narcotics trafficking; alien smuggling; trafficking in women and children; smuggling toxic materials, hazardous wastes, illicit arms, military technologies, and other contraband; financial fraud; and racketeering. The risk will increase that organized criminal groups will traffic in nuclear, biological, or chemical weapons. The degree of risk depends on whether governments with WMD capabilities can or will control such weapons and materials.

Future Conflict

The risk of war among developed countries will be low. The international community will continue, however, to face conflicts around the world, ranging from relatively frequent small-scale internal upheavals to less frequent regional interstate wars. The potential for conflict will arise from rivalries in Asia, ranging from India-Pakistan to China-Taiwan, as well as among the antagonists in the Middle East. Their potential lethality will grow, driven by the availability of Weapons of Mass Destruction, longer-range missile delivery systems and other technologies.

Internal conflicts stemming from religious, ethnic, economic or political disputes will remain at current levels or even increase in number. The United Nations and regional organizations will be called upon to manage such conflicts because major states - stressed by domestic concerns, perceived risk of failure, lack of political will, or tight resources - will minimize their direct involvement.

Export control regimes and sanctions will be less effective because of the diffusion of technology, porous borders, defense industry consolidations, and reliance upon foreign markets to maintain profitability. Arms and weapons technology transfers will be more difficult to control.

Prospects will grow that more sophisticated weaponry, including weapons of mass destruction - indigenously produced or externally acquired - will get into the hands of state and nonstate belligerents, some hostile to the United States. The likelihood will increase over this period that WMD will be used either against the United States or its forces, facilities, and interests overseas.

Role of the United States

The United States will continue to be a major force in the world community. US global economic, technological, military, and diplomatic influence will be unparalleled among nations as well as regional and international organizations in 2015. This power not only will ensure America's preeminence, but also will cast the United States as a key driver of the international system. Diplomacy will be more complicated. Washington will have greater difficulty harnessing its power to achieve specific foreign policy goals: the US Government will exercise a smaller and less powerful part of the overall economic and cultural influence of the United States abroad.

Key Uncertainties

Examining the interaction of these drivers and trends points to some major uncertainties that will only be clarified as events occur and leaders make policy decisions that cannot be foreseen today:

Science and Technology

We know that the possibility is greater than ever that the revolution in science and technology will improve the quality of life. What we know about this revolution is exciting. Advances in science and technology will generate dramatic breakthroughs in agriculture and health and in leap-frog applications, such as universal wireless cellular communications, which already are networking developing countries that never had land-lines. What we do not know about the S&T revolution, however, is staggering. We do not know to what extent technology will benefit, or further disadvantage, disaffected national populations, alienated ethnic and religious groups, or the less developed countries. We do not know to what degree lateral or "side-wise" technology will increase the threat from low technology countries and groups. One certainty is that progression will not be linear. Another is that as future technologies emerge, people will lack full awareness of their wider economic, environmental, cultural, legal, and moral impact - or the continuing potential for research and development. Rapid advances and diffusion of biotechnology, nanotechnology, and the materials sciences, moreover, will add to the capabilities of our adversaries to engage in biological warfare or bio-terrorism.

The Global Economy

Although the outlook for the global economy appears strong, achieving broad and sustained high levels of global growth will be contingent on avoiding several potential brakes to growth. These include: The US economy suffers a sustained downturn; Europe and Japan fail to manage their demographic challenges; China and/or India fail to sustain high growth; Emerging market countries fail to reform their financial institutions; Global energy supplies suffer a major disruption.

Significant Discontinuities

The trends outlined in this study are based on the combinations of drivers that are most likely over the next 15 years. Nevertheless, the drivers could produce trends quite different from the ones described. Below are possibilities different from those presented in the body of the study:

1. Serious deterioration of living standards for the bulk of the population in several major Middle Eastern countries and the failure of Israel and the Palestinians to conclude even a "cold peace," leads to serious, violent political upheavals in Egypt, Jordan, and Saudi Arabia.
2. The trend toward more diverse, free-wheeling transnational terrorist networks leads to the formation of an international terrorist coalition with diverse anti-Western objectives and access to WMD.
3. Another global epidemic on the scale of HIV/AIDS, or rapidly changing weather patterns attributable to global warming, with grave damage and enormous costs for several developed countries - sparking an enduring global consensus on the need for concerted action on health issues and the environment.
4. A state of major concern to US strategic interests - such as Iran, Nigeria, Israel, or Saudi Arabia - fails to manage serious internal religious or ethnic divisions and crisis ensues.

A growing antiglobalization movement becomes a powerful sustainable global political and cultural force - threatening Western governmental and corporate interests.

5. China, India, and Russia form a defacto geo-strategic alliance in an attempt to counterbalance US and Western influence.

6. The US-European alliance collapses, owing in part to intensifying trade disputes and competition for leadership in handling security questions.

7. Major Asian countries establish an Asian Monetary Fund or less likely an Asian Trade Organization, undermining the IMF and WTO and the ability of the US to exercise global economic leadership.

Four Alternative Global Futures

In its Appendix, *the Global Trends 2015* sets out Four Alternative Global Futures for 2015: Inclusive Globalization; Pernicious Globalization; Regional Competition; and Post Polar World. The four alternative global scenarios can be grouped in two pairs: the first pair contrasting the "positive" and "negative" effects of globalization; the second pair contrasting intensely competitive but not conflictual regionalism and the descent into regional military conflict. In all but the first scenario, globalization does not create widespread global cooperation. Rather, in the second scenario, globalization's negative effects promote extensive dislocation and conflict, while in the third and fourth, they spur regionalism. In all four scenarios: countries negatively affected by population growth, resource scarcities and bad governance fail to benefit from globalization, are prone to internal conflicts and risk state failure; the effectiveness of national, regional, and international governance and at least moderate but steady economic growth are crucial; and US global influence wanes.

Analysis of Global Trends 2015

The Global 2015 paper provides a view of the world in 2015 which is based on current global trends from a primarily U.S. perspective. Accordingly it has both a limited mandate and a limited perspective. The world of 2015 that is portrayed is solely an extension and expansion of the world of today. It assumes a "business as usual" perspective based on the authors' and contributors linear and traditional thinking. Specified uncertainties such as the positive vs. negative effects of globalization in 2015 and the level of regional conflict are mentioned as well as a number of possible discontinuities in the predicted trends. No consideration is given to any alternative or transformational trends or scenarios as even remote possibilities.

Global 2015 sets out a number of primarily negative trends and scenarios for the world in 2015 based on the existing macro-trends selected. A number of trends are portrayed as likely overall positives such as the growth of globalized economy are and the development of new technologies.

However, even the most optimistic trends and scenarios presented give us a world in 2015 that has fewer resources, more environmental damage, more pollution, more conflict, more hunger, more poverty and more disparity between rich and poor. Accordingly, the world of 2015 the paper presents is clearly not a desired or preferable future for almost anyone.

Based on the Global 2015 paper, our shared global future appears to be one of an increasingly divided world that is both more unstable and more unsustainable. This is the best-case scenario which assumes that no significant global crises will occur by 2015. What will happen after 2015 is not speculated upon but it's apparent that there will be little chance for any significant improvement.

The only major 'good news' presented, if you buy into the now globalized economic mantra of 'growth, growth, growth,' is that "the global economy will return to the high levels of growth reached in the 1960s and early 1970s." However, even this apparent good news isn't as "the evolution of the global economy will be rocky, marked by chronic financial volatility and a widening economic divide" and "potential brakes on the global economy - such as a sustained financial crisis or prolonged disruption of energy supplies - could undo this optimistic projection."

What Global 2015 is really saying is that the year 2015 is going to be a lot like the year 2001 except that it will be considerably better for a shrinking minority in the developed world and considerably worse for a growing majority in the developing world.

This global future will undoubtedly become a reality despite the fact it is a future that a vast majority of people in both the developed and developing world would wish to avoid. But how so? If we confine our thinking and actions only to what has gone before there is no hope for a positive future for the vast majority of humanity. Only if we consider the possibilities for new and transformative thinking and actions can we hope to avert the bleak future that Global 2015 portrays.

If we maintain the western, Industrial age mind-set that dominates today's thinking and acting and which will lead us to such a year 2015, we will ultimately be unable to shift this future to a positive one and our civilization may well end-up self-destructing sometime thereafter.

If, however, over the next few years a sufficient percentage of humanity can move to a new way of thinking and acting which holistically integrates society and ecology, our inner selves with our material needs and our technologies with true wisdom, we may hope for a much better future and a much better world. Many people worldwide have, of course, already moved in this direction.

The alternative trends that support this shift are all around us and all over the globe. They are not the trends focused on or identified in the Global 2015 paper. These are the trends to a "green" energy, economy, technology and politics. Information and communications are becoming global, renewable energy use is increasing, recycling and reuse is expanding and new environmentally sustainable technologies are being developed as well as new economics theories and political parties in tune with this new paradigm. There are major new trends from massive consumption and consumerism to voluntary simplicity and 'smaller is better', trends toward spiritual reawakening and meaning, trends for the development of universal values and ethics and trends toward human partnership and unity between men and women, humanity and the earth and all peoples and cultures.

These are the trends that can lead humanity toward a peaceful and sustainable future for all which must become our shared vision and goal if we are to avoid the Global 2015 future and what lies beyond it. Such a desired future envisions a world where economic growth is balanced

harmoniously by the needs of people and the planet and where today's world of a few 'winners' and many more 'losers' has become one of all 'winners.'

It is thus apparent that humanity has truly reached an evolutionary crossroads. For our societies to continue to develop and our species to survive into the long-term future a crucial choice about our collective future direction must now be made. It is a choice that will decide whether we ultimately head for further evolution or toward possible extinction.

Today we clearly face unprecedented societal and ecological challenges. At the same time we have developed many extraordinary new opportunities. The crises confronting us, as outlined in Global 2015, arise out of collective actions and behaviours that are founded upon an older and incomplete view of reality and the world. The opportunities before us result substantially from fresh insights and understandings about the natural world and ourselves.

What we think significantly determines how we act. Great hope for our future lies in this statement as changing our current thinking is the key to changing our actions and changing our actions is the key to changing our future.

Our ability to reflect, think ahead and choose actions in advance are the culmination of the evolutionary advantages humanity has developed over its 150,000 year history. The utilization of such foresight enables us to imagine the future and consider a preferable situation, scenario or circumstance. Once such concepts are created we can turn them into goals and then attempt to achieve them.

The real message of the Global 2015 paper, and many other current projections for the short-term global future, is apparent: Human population and economic growth and the Earth's eco-systems and resources are presently in a directly inverse relationship. Increased growth, in our current model, directly and often permanently depletes natural wealth. Human well-being is presently at the immediate expense of the Earth. It is clearly a non-sustainable situation that must eventually come to an end - one way or the other.

If the world economy as it now structured continues to expand at the current rate, it will eventually destroy its' natural support systems, decline and collapse. The Global 2015 paper indicates that as the trends in this direction intensify we will also see the rise of violent conflicts between nations and within nations over diminishing natural resources. Such increasing conflict will greatly accelerate the current downward spiral.

There are now two clear paths before us: a sustainable one, which will likely lead to unprecedented prosperity for humankind in the new Millennium and the unsustainable one we are currently on which will likely lead to a collapse of our civilization and perhaps also our ultimate extinction. We are now being compelled by the changing environment resulting from our own success to choose our future path. This choice must be made very soon or the choice will be made for us.

The greatest hope for humanity in this current situation is that a new and planetary worldview is now emerging which draws upon a much more complete picture of nature and reality than our current worldviews. Its hallmark is a new understanding of the relationship between humanity and the earth.

Flowing out of the new worldview are numerous universal values that embody its belief system and are derived from our new understandings. A global consensus on such universal human values is emerging which may be capable of dramatically altering the future. These values come from the way the natural world actually works and include: balance, harmony, partnership, diversity and sustainability. Early adaptation to the emerging worldview and these key values will greatly increase the prospects for the future success of humankind in the 21st

century.

Another essential aspect to ensure our collective success at the start of this century and millennium is that of leadership. Positive leadership at the individual, national and global levels is urgently required.

The Global 2015 paper was prepared from the strategic perspective of how the United States can remain the leading nation in the troubled times of a more unstable and divided world ahead. It thus assumes that the self-interested leadership of the USA will continue on a global playing field of hundreds of national actors vying for the upper hand either regionally or globally. It also assumes that such continued “leadership” is sufficient to avert a global disaster in the near future. This “status quo” approach is extremely unlikely to deliver an ultimate positive benefit either to the USA or to humanity at large as the Global 2015 paper itself indicates. The assumption that one nation can have a positive long-term future while much of the rest of world disintegrates is of course, completely untenable. Our global future will ultimately be a shared one.

It is apparent that the societal institutions to which we would expect to look for positive leadership have so far failed us. Our political leaders are too busy worrying about the next election to think about the future 10 or 20 years from now. Business leaders have invested heavily in the current worldview. Our religious leaders seem to be mainly focused on the issues of the first millennium. Educational leaders appear confused about their role in preparing students for the future. And, the media are busy covering the important stories of the day such as the latest celebrity scandal. In general, all are preoccupied with lesser or even trivial issues and are thus not seeing the “big picture.”

Accordingly, it is primarily the people of the world who are addressing humanity’s future with vision and action. Millions of people worldwide have realized that we must adapt to changing realities and a changing environment by changing ourselves. They have understood that our current assumptions about nature and reality are erroneous - that the opposite of our older, industrial worldview appears to be true. They know that the decisions we make today will have a much larger impact on the future of humanity than those of any previous generation.

Today we must all become leaders for the future. This requires significant new actions based upon the individual acceptance of responsibility for the future and the transformation of our thinking.

Therefore, a major key to humanity’s longer-term success will be the individual and collective development of a new and higher consciousness. This is a “planetary consciousness” which recognizes the essential interdependence and oneness of all humanity and our planetary home. At an individual level it means that we must each become true “citizens of our world” in addition to being citizens of our communities and countries. At a societal level it means recognizing that we are “one people sharing one planet and one future” as we build the first planetary society.

This ‘futures’ perspective is also a critical aspect to the new thinking as it is a perspective which can lead us to understand that we can collectively shape our desired future rather than be at the mercy of the past and current trends. With this perspective we can together identify our preferred alternatives and make the choices and take the actions that will lead to the creation of a peaceful and sustainable global community in the new Millennium.

Humanity today has the knowledge, tools, and understandings to shape our destiny for the first time in our history. Acting today for tomorrow we can choose to apply our new abilities cooperatively in partnership for the benefit of all humankind. Millions of people worldwide have

already transformed their thinking to the planetary level and millions more will do so in the important years to come. Global communication networks are developing which are rapidly connecting people around the globe to enable such collective dialogue and action.

We have reached the level in our evolutionary development where there is now only one path to our future success. It is the sustainable path. If we can now apply our new tools, skills, knowledge and understanding towards this path we will begin a remarkable new chapter in humanity's evolutionary story - the coming of the "Age of Wisdom."

The only way for us to reach this desired, successful future is to see it clearly and work together towards it. The future world we are currently heading for is just as clear thanks to the Global 2015 paper.

For the full Global 2015 paper see:

<http://www.odci.gov/cia/publications/globaltrends2015/index.html>