

G8

Perspectives from

Barack Obama • David Cameron
Angela Merkel • Stephen Harper
Ellen Johnson Sirleaf • Robert Fauver
Angel Gurría • Dilma Rousseff
Supachai Panitchpakdi • Lars Thunell
José Graziano da Silva • Kanayo F Nwanze
Etharin Cousin • Michel Sidibé • Anthony Lake
Achim Steiner • Maria van der Hoeven

THE CAMP DAVID SUMMIT

MAY 2012

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Accountability, Innovation and Effectiveness

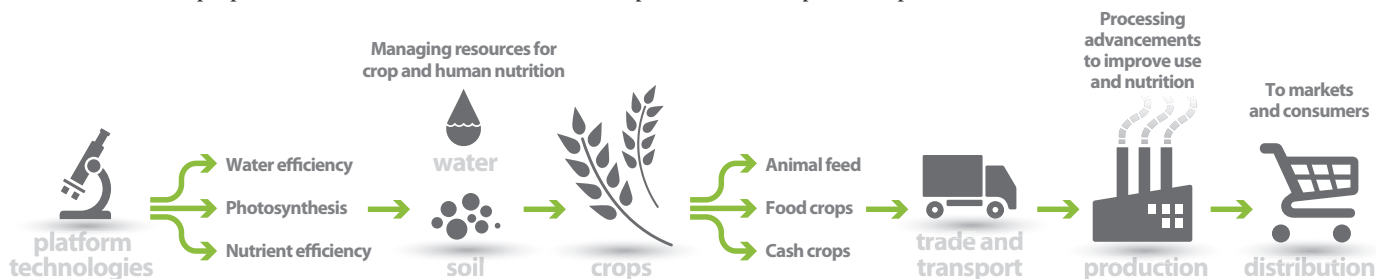
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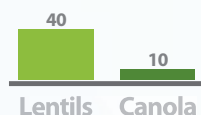
The proposed global food security institute at the U of S will help optimize the food supply system to make the best use of natural resources and deliver the best nutrition to people round the world—with a focus on wheat, pulses and related prairie crops.



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% of global production



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A time of transformation

US president and G8 Camp David Summit host Barack Obama looks back at a challenging decade that has seen incredible changes in political regimes and a real move towards international peace and security

This has been a difficult decade. But today, we stand at a crossroads of history with the chance to move decisively in the direction of peace. And in that effort, we have reason to hope. This year has been a time of extraordinary transformation. More nations have stepped forward to maintain international peace and security. And more individuals are claiming their universal right to live in freedom and dignity.

One year ago, the hopes of the people of Tunisia were suppressed. But they chose the dignity of peaceful protest over the rule of an iron fist. A young market vendor lit a spark that took his own life, but through that act he ignited an international movement.

The Gaddafi regime is over. Gbagbo, Ben Ali, Mubarak are no longer in power. Osama bin Laden is gone, and the idea that change could only come through violence has been buried with him. Something is happening in our world. The way things have been is not the way that they will be. The humiliating grip of corruption and tyranny is being prised open. Dictators are on notice.

But let us remember: peace is hard. Progress can be reversed. Prosperity comes slowly. Societies can split apart. And we have more work to do. In Iran, we have seen a government that refuses to recognise the rights of its own people. Men and women and children are being tortured, detained and murdered by the Syrian regime.

Pursuing the goal of true peace

We believe that each nation must chart its own course to fulfil the aspirations of its people, and America does not expect to agree with every party or person who expresses themselves politically. But we will always stand up for universal rights, rights that depend on elections that are free and fair, on governance that is transparent and accountable, respect for the rights of women and minorities, justice that is equal and fair.

Even as we confront these challenges of conflict and revolution, we must also remind ourselves that peace is not just the absence of war. True peace depends on creating the opportunity that makes life worth living. And to do that, we must confront the common enemies of humanity: nuclear weapons and poverty, ignorance and disease.

To lift the spectre of mass destruction, we must come together to pursue the peace and security of a world without nuclear weapons. America will continue to work for a ban on the testing of nuclear weapons and the production of the fissile material needed to make them. But even as we meet our obligations, we have strengthened the treaties and institutions that help to stop the spread of these weapons. And to do so, we must continue to hold accountable those nations that flout them.



Confronting the pressing issue of nuclear proliferation, particularly with regard to Iran and North Korea, is central to Barack Obama's pursuit of global peace



President Obama is dedicated to promoting global economic growth by actively supporting open markets, innovation and entrepreneurship around the world



The Iranian government cannot demonstrate that its programme is peaceful. It has not met its obligations and it rejects offers that would provide it with peaceful nuclear power. North Korea has yet to take concrete steps towards abandoning its weapons and continues belligerent action against South Korea. There is a future of greater opportunity for the people of these nations if their governments meet their international obligations. But if they continue down a path that is outside international law, they must be met with greater pressure and isolation.

To bring prosperity to our people, we must promote the growth that creates opportunity. In this effort, let us not forget that we have made enormous progress over the last several decades. Closed societies gave way to open markets. Innovation and entrepreneurship have transformed the way we live and the things that we do. And yet, three years ago, we were confronted with the worst financial crisis in eight decades. And that crisis proved a fact that has become clearer with each passing year – our fates are interconnected.

Today, we confront the challenges that have followed on the heels of that crisis. Around the world recovery is still fragile. Too many people are out of work. Too many others are struggling just to get by. We acted together to avert a depression in 2009.

We must take urgent and coordinated action once more. Here in the United States, I have announced a plan to put Americans back to work and jump-start our economy, at the same time as I am committed to substantially reducing our deficits over time. We stand with our European allies as they reshape their institutions and address their own fiscal challenges.

To preserve our planet, we must not put off action that climate change demands. We have to tap the power of science to save those resources that are scarce. And together, we must continue our work to build on the progress made in Copenhagen and Cancún, so that all the major economies here today follow through on the commitments that were made. Together, we must work to transform the energy that powers our economies, and support others as they move down that path.

And to make sure our societies reach their potential, we must allow our citizens to reach theirs. Together, we must harness the power of open societies and open economies. ■

Based on remarks made by President Obama at the UN General Assembly, as selected by the White House for this G8 Camp David Summit publication

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To learn more about what we're doing and why we're doing it, join us at livepositively.com



United for freedom and enterprise

During a visit to the United States, UK prime minister David Cameron shared his views on how the two countries are working together to tackle difficult international issues

There are some countries whose alliance is a matter of convenience, but ours is a matter of conviction. Two states united for freedom and enterprise, working together, day in, day out, to defend those values and advance our shared interests. That has been the fundamental business of this visit and we have just made important progress on four vital areas: Afghanistan, Syria, Iran, and economic growth.

Mission in Afghanistan

Recent days have reminded us just how difficult our mission is in Afghanistan and how high the cost of this war has been for Britain, for America and for Afghans themselves. Britain has fought alongside America every day since the start. We have 9,500 men and women still serving there. More than 400 have given their lives and today, again, we commemorate each and every one of them. But we will not give up on this mission, because Afghanistan must never again be a safe haven for al Qaeda to launch attacks against us. We won't build a perfect Afghanistan, although let's be clear: we are making some tangible progress, with more markets open, more health centres working, more children going to school, more people able to achieve a basic standard of living and security. But we can help to ensure that Afghanistan is capable of delivering its own security without the need for large numbers of foreign troops.

We are now in the final phases of our military mission. That means completing the training of the Afghan forces so that they can take over the tasks of maintaining security themselves. That transition to Afghan control, as agreed at Lisbon, is now well under way, and next year, as President Obama said, in 2013, this includes shifting to a support role as Afghans take the lead. This is in advance of Afghan forces taking full responsibility for security in 2014, and as we have always said, we won't be in a combat role after 2014. At the same time we will also back President Karzai in working towards an Afghan-led political settlement.

Strategy on Syria

A year on from the United Nations Security Council resolution on Libya, we agreed we must maintain our support for the people of the Arab world as they seek a better future. I am very proud of the action Britain and France and others took – but let us be absolutely clear: none of that would have been possible without the overwhelming support and overwhelming force that the United States provided in the early stages of that campaign, exactly what you promised you would do, that actually made that intervention possible, and has given that country a chance of prosperity and stability and some measure of democracy.

Most urgently now in Syria, we are working to get humanitarian aid to those who need it, and Britain is today pledging an additional £2 million in food and medical care. At the same time, we must properly document the evidence so that those guilty of crimes can be





David Cameron said the partnership between Britain and America is vital in upholding global security, supporting the spread of democracy and boosting the economic growth of both countries

Britain and America's shared stance over Iran, Syria and Afghanistan, means Prime Minister Cameron's deliberations with President Obama inevitably hinge on foreign policy discussions



held to account. Above all we must do everything we can to achieve a political transition that will stop the killing. So we must maintain the strongest pressure on all those who are resisting change at all costs. We will give our support to Kofi Annan, as he makes the case for that transition, and we are ready to work with Russia and China for the same goal, including through a new United Nations Security Council resolution. But we should be clear – what we want is the quickest way to stop the killing. That is through transition, rather than revolution or civil war. But if Bashar Assad continues then civil war or revolution is the inevitable consequence. So we will work with anyone who is ready to build a stable, inclusive and democratic Syria for all Syrians.

Approach to Iran

We have discussed Iran's nuclear programme. The president's tough, reasonable approach has united the world behind unprecedented sanctions pressure on Iran, and Britain has played a leading role in helping to deliver a European Union-wide oil embargo. Alongside the financial sanctions being led by America, this embargo is dramatically increasing the pressure on the regime. Now we are serious about the talks that are set to resume. But the regime has to meet its international obligations. If it refuses to do so, then Britain and America, along with our international partners, will continue to increase the political and economic pressure to achieve a peaceful outcome to this crisis. As the president and I have said, nothing is off the table. That is essential for the safety of the region and the wider world.

Fuelling economic growth

Both Britain and American are dealing with massive debts and deficits. Of course, the measures we take in our domestic economies reflect different national circumstances, but we share the same goals. Delivering significant deficit reduction over the medium term and stimulating growth. One of the keys to growth is trade. The EU and the US together account for more than half of all global trade. Foreign direct investment between Britain and America is the largest in the world. It creates and sustains around a million jobs on each side of the Atlantic, and it provides a strong foundation for bilateral trade worth nearly \$200 billion a year. So deepening trade and investment between us is crucial and can really help to stimulate growth. Barack and I have agreed to prioritise work ahead of the G8 on liberalising transatlantic trade and investment flows.

So we have had some very important discussions this morning, and I am looking forward to continuing our talks at the G8 and at NATO summits, and visiting Barack at Camp David and in his home town of Chicago. As Barack has said, the relationship between Britain and America is the strongest that it has ever been. And I believe that is because we are working together as closely as at any point in our history. And together am confident that we can help secure the future of our nations and the world for generations to come. ■

Excerpts from a press conference given by David Cameron with US president Barack Obama at the White House, Washington, DC, US, 14 March 2012

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Counterfeit medicines are a serious threat to health care. They are fake medicines that may be contaminated or contain the wrong or no active ingredient. They could have the right active ingredient but at the wrong dose. The International Police Organization Interpol estimates that up to 30 percent of all medicines in Africa are either counterfeit or of inferior quality. The lack of appropriate treatment through counterfeited medicines will lead to a deterioration of quality of life of a person and can, at worst, harm or even kill him. On a country level, counterfeited medicines

can prevent the return of healthy workforces to labor and therefore stall the economic growth.

In order to assure our patients that they are indeed receiving the right medicine, Merck was the first to use the Mobile Authentication Service (MAS) on several of their products. MAS is a cell phone based approach supplied by Sproxil Inc. The MAS technology is based on asymmetric encryption, which is also used in bank transfers and e-commerce ensuring protection.

Patients buying medicines covered by the MAS can send a 12-digit code, included in a scratch panel on the medicine's labeling, via a text message to the system for verification of the product authenticity. Sending the text is free. The response is received instantly to confirm or refute the genuineness of the product.

This service allows not only authentication of the medicine but is also used as an educational platform to promote disease awareness. Patients are now looking out for the medicines covered by the MAS and will not accept their regular prescription without it.

Praziquantel Donation Program



Over 200 million people in Africa suffer from the widespread tropical worm disease schistosomiasis. Every year, more than 200,000 people die from this insidious disease. The consequences of an infection are particularly serious for children since

schistosomiasis stunts growth and cognitive development and also leads to anemia.



Since 2007, Merck has supported WHO (World Health Organization) in combating schistosomiasis in 14 African countries. Since then, 80 million praziquantel tablets, the most effective treatment for schistosomiasis, have been distributed and 19 million children treated. In 2011 alone, around 25 million tablets were provided in eleven African countries, treating more than five million children.

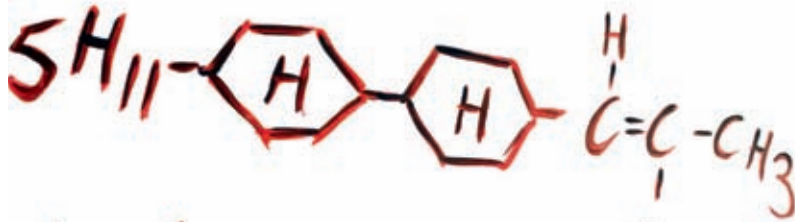
Earlier in 2012, Merck announced that it wants to eliminate this tropical worm disease in Africa. The major offensive in this effort is Merck's commitment to a tenfold increase, from 25 million to 250 million, of its annual donation of praziquantel tablets.

In addition to the tablet donation, Merck is also supporting an awareness program at African schools; it uses comic booklets and posters to explain the causes of schistosomiasis and teaches pupils how to prevent the disease.

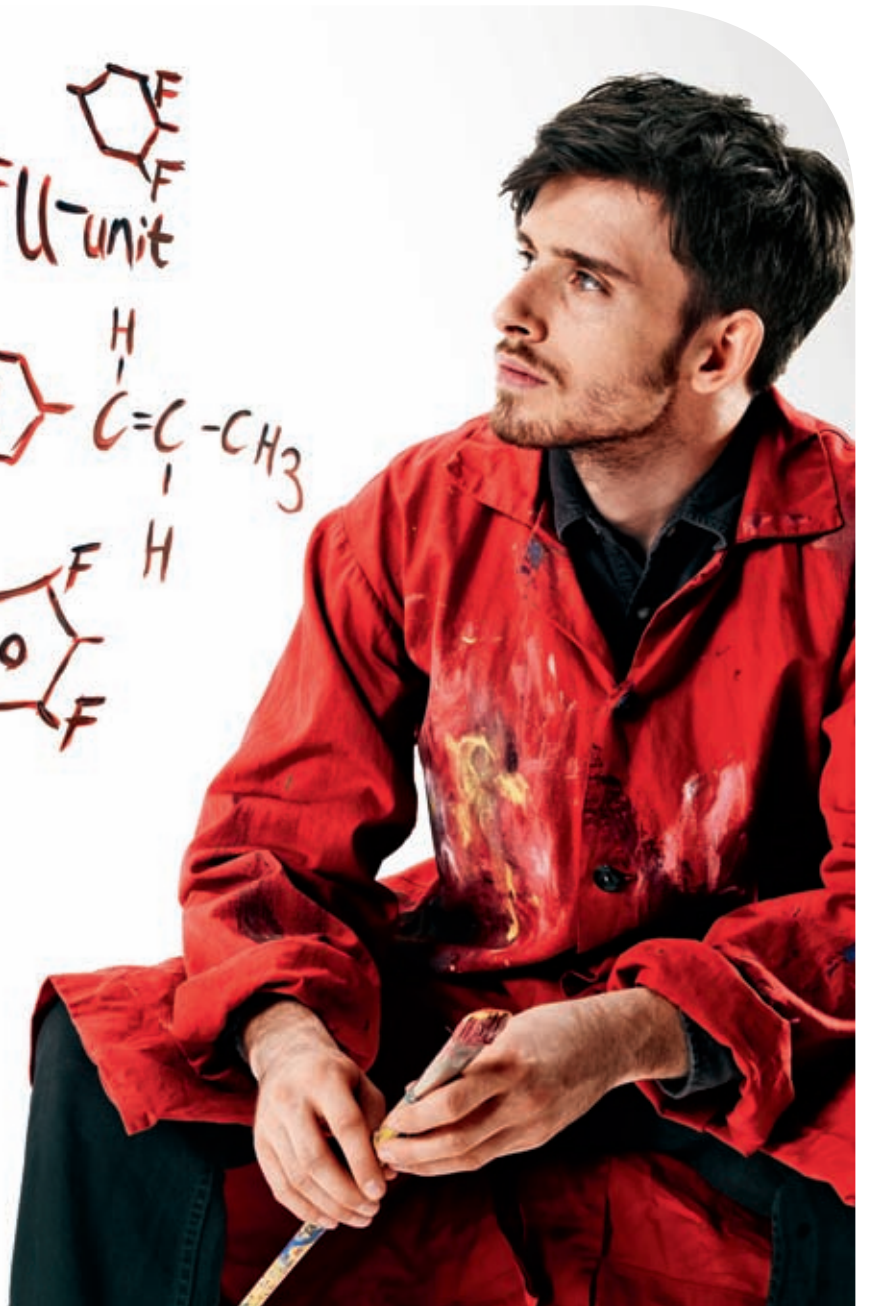
Furthermore, Merck is actively researching and developing a pediatric formulation of praziquantel that will increase therapy acceptance and improve treatment outcomes.

For more information, visit us at www.merckgroup.com

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Cooperation, responsibility, solidarity

German chancellor Angela Merkel on the key tenets guiding the G8's work

In my view, the three core principles of the work done by the G8 and G20 are cooperation, responsibility and solidarity. Our talks at the forthcoming summits in Camp David and Los Cabos will also be guided by these principles. The list of issues that we want to address at these summits is long but, of course, not conclusive. At the G8 Deauville Summit last year, we showed that we can react quickly to urgent developments in the world. We grasped the opportunity presented by the changes that swept North Africa and the Middle East to form a partnership with the transition countries, a partnership that will provide a framework for our cooperation for many years to come. Both the G8 and the G20 summits offer the heads of state and governments of both the leading industrialised countries and the world's emerging economies the chance to devise joint proposals on how to resolve current global issues. We have to take advantage of this opportunity.

Events in North Africa and the Middle East have brought home to us the enormous potential for economic and political development in this region. The aim of the Deauville Partnership is, in short, to enable this potential to be realised through cooperation with the G8. Therefore, our task at Camp David will be to give this cooperation more substance and to come up with concrete projects. For instance, legal cooperation on the return of expropriated state property should be extended and the reciprocal opening of markets advanced. The expansion of the geographical scope of the mandate of the European Bank for Reconstruction and Development (EBRD) to include the Southern Mediterranean countries has already progressed considerably.

Getting young people into work

We continue to attach special importance to the fight against youth unemployment. The International Labour Organization (ILO) has stated that the world's highest youth unemployment rates, at 25 per cent, are to be found in the North African and Middle East region. Getting off to a bad start has serious consequences not only for the young people concerned, but also for the economy as a whole. The G20 has therefore drawn up an entire catalogue of measures and best practices aimed at improving the quality of vocational training and its practical relevance, as well as entry into the job market after school or higher education. This now has to be implemented. An approach that has been particularly successful in Germany, Switzerland and Austria is the dual system, which combines vocational schooling and on-the-job training. Under this system, there is a much greater chance that young people will find a job once their training is completed. According to the ILO, youth unemployment in Germany is low, at around eight per cent, and this is without doubt due to the success of our model. A German vocational training programme in Egypt is attempting to apply this experience in concrete terms in a Deauville partner country, thus making a very practical contribution towards improving working conditions and quality of life on the ground.

This year will also be the year of the Rio+20 conference and the 18th United Nations Climate Change Conference in Qatar. We must all assume responsibility for our future and for that of coming generations, renew our political commitment to sustainable development and advance the Durban Platform in order to ensure that we can conclude a new international climate change agreement by 2015 at the latest.

All of this has to be considered when we shape the framework for global economic growth, for we in the G20 have set ourselves the goal of fostering strong, sustainable and balanced growth. This formula must now be put into practice. Mexico has helped in this by choosing green growth as the cross-cutting issue of its G20 presidency.

Economic growth and environmental protection go hand in hand and create new potential. According to forecasts, the global turnover in environmental technologies will grow to more than €4,400 billion (\$5,780 billion) by 2025, a threefold increase compared to 2007. Investments in energy efficiency, sustainable water management or new transport strategies have been producing impressive growth rates for many years now. Moreover, they boost innovation in the entire economy. We have to carry on promoting this dynamic growth.

As representatives of the largest economies – the G20 accounts for 80 per cent of world trade – we bear a special responsibility for free trade and open world markets, vital prerequisites for dynamic growth in the global economy. However, in recent times we have witnessed a series of G20 states introducing an increasing number of protectionist measures. At the forthcoming summits, therefore, Germany will call on the G8 and G20 to stand by our commitment to free trade and to step up our joint efforts to prevent protectionism and liberalise world trade.

Supporting African nations

Solidarity with other states, in particular African nations, has always been one of the G8's priorities. I welcome the fact that this also increasingly applies to the work of the G20. The issue of food security highlights what the two forums can achieve. One example of this is the L'Aquila Food Security Initiative, initiated by the G8 in 2009 and supported by many other states. In the past three years it has been able to make a real difference to its beneficiaries through its financial support for a whole host of large and small food-security projects.

Another example is the Agricultural Market Information System (AMIS), launched by the G20, which promises to lead to more transparent, and thus fairer, prices on local markets in Africa. However, the disaster in the Horn of Africa last year demonstrated once more that we have a long way to go before we have vanquished hunger. We therefore have to seek new and even unconventional solutions in order to ensure that the solidarity we can show as leading industrialised countries and emerging economies has maximum impact.

The best way to combat hunger is to support the many millions of smallholders in sub-Saharan Africa, increase agricultural productivity, transfer agrotechnologies and – probably the most important and effective means – create the framework for sustainable and durable private investments. Only when a reliable local market for food has evolved, with efficient cultivation and storage methods as well as fair and transparent prices for producers and consumers, will a long-term solution be found to the problem of malnutrition.

Time is of the essence. UNICEF has estimated that today 38 per cent of all children in Africa are suffering from malnutrition-related development problems. This considerably lessens their chances of earning an adequate living later to support themselves and their families. According to the World Bank, the malnutrition of children alone results in a decrease of two to three per cent in gross domestic product in the countries affected. This is unacceptable, both in human and economic terms.

This is only a small selection of the issues we will address in an open and constructive exchange at the Camp David and Los Cabos summits. I am certain that if the G8 and G20 countries make decisions and act in unison, we will be able to achieve remarkable progress. ■



Chancellor Merkel believes that the Camp David Summit can help the G8 to make significant progress on worldwide issues such as youth unemployment and sustainable development

G8: acting together for global prosperity and security

Canadian prime minister Stephen Harper considers the progress made on agreements at recent G8 summits and how continued cooperation is crucial to addressing both new and ongoing challenges

In 2010 in Muskoka and last year in Deauville, the G8 addressed critical situations affecting global peace and security, promoted solutions to improve maternal and child health in the developing world, and stood up for values we hold dear: freedom, democracy, human rights and the rule of law. The G8 continues to serve as a key actor and catalyst for launching concrete and credible responses to global challenges.

As we near the 2012 summit at Camp David, I am pleased to see that the work on another key component of the G8, namely accountability, continues. Last year, building on the annual accountability reporting process that Canada initiated at Muskoka, the French G8 presidency released the Deauville Accountability Report, which focused on commitments made, and results achieved, by G8 partners in the areas of health and food security. Ensuring G8 accountability stood high not only on the list of Deauville Summit priorities, it also figures prominently in the US G8 presidency's plans for the Camp David Summit this year. Continuing to make the G8 more accountable, and ensuring that it better delivers on its commitments, makes it a stronger and more effective international forum. The notion that an accountable G8 is a more effective G8 is now commonly accepted and, together with the Muskoka Initiative on Maternal, Newborn and Child Health, is one of Muskoka's great legacies.

At the Deauville Summit, I was also proud – both as Canada's prime minister and as co-chair of the United Nations Commission on Information and Accountability for Women's and Children's Health – of Canada's role in improving the health of women and children in developing countries around the world, including by encouraging G8 leaders to support and implement the recommendations of the commission and urging others to do so as well.

This year again, Canada will have a strong record to present at the Camp David Summit, particularly on food security, as we were the first among G8 members to have fully disbursed our \$1.18 billion 2009 L'Aquila commitment to support sustainable agriculture development. Moreover, Canada has fully delivered on its promise to untie 100 per cent of food aid, and has been at the forefront in addressing urgent

humanitarian crises, including the East Africa drought. But we will not stop there. There is a need to invest in innovative solutions and to engage with the private sector to promote investments in agriculture. Canada is committed to working closely with its partners to further strengthen global efforts on this issue.

Despite our progress on these issues, real challenges remain. G8 leaders will once again be meeting at a time of global economic uncertainty, and Canada has again had one of the strongest economic performances in the G8. Our recovery has been fuelled by significant policy stimulus from Canada's Economic Action Plan, as well as by our sound fiscal and monetary policy framework, which have led to a strong rebound in consumer and business spending. While Canada's domestic economy has been resilient over the past year, the challenges of weaker global growth and global financial turmoil persist. With this in mind, I look forward to working with our G8 partners to foster the conditions required for enhancing global economic growth and ensuring long-term prosperity, notably by promoting trade liberalisation and market access and fighting protectionism.

Global peace and security challenges remain important issues for the G8. In Deauville, leaders discussed Afghanistan and Pakistan, the Middle East Peace Process, Iran, North Korea, the threat of terrorism and the transformations in the Middle East and North Africa. In an outreach session with the prime ministers of Egypt and Tunisia, the International Monetary Fund, the World Bank and the United Nations, leaders adopted a declaration on the Arab Spring and, along with the leaders of Egypt and Tunisia, launched the Deauville Partnership to support the transitions towards democracy in the Middle East and North Africa. The G8 is committed to accompanying transition countries on their path towards democracy and more inclusive

economic development. For its part, Canada will continue to promote key foundations of the Deauville Partnership, such as respect for democracy and fundamental freedoms, including the right to practise religious faith in safety and security.


Working alongside the international community, the G8 is addressing global security

Continuing to make the G8 more accountable, and ensuring that it better delivers on its commitments, makes it a stronger and more effective international forum

issues. Last year in Deauville, leaders issued a strong statement on Libya saying that Gaddafi had failed to protect the Libyan population and that 'he must go'. The people of Libya will soon be afforded the opportunity to choose their leaders in democratic elections.

However, the situation in Syria remains unacceptable. At Camp David, the G8 will draw further attention to the international community's expectation for the Syrian regime to urgently stop perpetuating violence against its own people.

Energy figures prominently on the Camp David Summit agenda. In this time of fiscal restraint, energy security is a critical factor in ensuring economic growth and prosperity. As a major energy producer and net energy exporter across the full spectrum of energy commodities and technologies, Canada is contributing to continental and global energy security and will continue to work with its partners to further this goal.



Canada's Stephen Harper is committed to working with the other G8 members to create the conditions needed for improved global economic growth and security

On the environment, Canada is committed to building upon the success of the Copenhagen, Cancun and Durban conferences and working towards a legally binding agreement that includes all major emitters. Domestically, through our sector-by-sector strategy, Canada is on track to reduce greenhouse gas emissions by 17 per cent from 2005 levels by 2020 – a target we share with the United States. Canada is also on target to deliver on its \$1.2 billion fast-start financing commitment. During the recent Summit of the Americas, Canada

announced funding to support projects for renewable energy, energy efficiency, adaptation and reducing greenhouse gas emissions.

The past few years have witnessed the emergence of numerous global challenges. The G8's agenda and actions prove a continuing capacity to work together and, with other partners, to address these challenges. Again, this year at Camp David, we will continue to find innovative and effective solutions to pursue global security, as this is the best assurance of security and prosperity in Canada. ■

Prospects for the Camp David Summit

The agenda is set for a small and intimate gathering of leaders with a shared desire to shape strategies for growth and security, and to build a better world

By John Kirton, director, G8 Research Group

The G8 summit, to be hosted by US president Barack Obama at the presidential retreat at Camp David, Maryland, on 18-19 May 2012, promises to be a significant event. It takes place in the political lead-up to the presidential election in November 2012, in which Obama will seek a second term.

It is being held in tight tandem with a summit of the North Atlantic Treaty Organization (NATO) in Chicago on 20-21 May, and will be followed by the G20 summit in Los Cabos, Mexico, on 18-19 June and then the Rio+20 summit in Brazil on 20-22 June.

The Camp David Summit is in the context of the preparations for the G20 summit being hosted by the United States' North American neighbour Mexico one month later. It is also designed to intensify the G8's return to a small, intimate, informal gathering, where leaders can be alone to act as leaders, making the big decisions that only they can. The need for political leaders to bond personally is reinforced by the return of Vladimir Putin to Russia's presidency and thus the G8 summit, and the arrival of new leaders from Japan and Italy. France's president will fly in fresh from a presidential election less than two weeks before.

The summit will feature a wide-ranging but highly selective agenda, aimed at producing a short, action-oriented communiqué. In a short time, starting with an opening dinner on the evening of 18 May and continuing with working sessions until late in the afternoon of 19 May, leaders will cover the economy of an America and a world struggling to generate good growth and jobs, global development as the 2015 deadline for delivering the Millennium Development Goals (MDGs) approaches, and peace and security to advance the G8's core mission of promoting democracy and reform and respond to crises in Iran, Syria, North Africa, Afghanistan and the Korean peninsula. America's priority themes are food security in Africa, follow-up to the 2011 Deauville Partnership with the Middle East and African countries, and civilian support for Afghanistan.

Leaders will focus first on the economy, at a time when the US and other G8 members need to manage a fragile economic recovery, with a recession in continental Europe, slowing growth in the major emerging economies of China, India and Brazil, and growing worries about a possible new financial crisis in countries such as Spain. This agenda includes macroeconomic policy, employment, structural and microeconomic reform, trade, investment, infrastructure and social policy with an emphasis on education and training. Supported by a

Europe preoccupied with domestic economic problems, the G8 is likely to set its own lines of action, if not produce a full-blown strategy, for growth and deficit reduction. It will look for ways to support rather than shape or supplant the broader G20 plan to be announced a month later at Los Cabos. It could well endorse the G20's Cannes Action Plan for Growth and Jobs and stress the importance of follow-up.

A particular concern could also be energy, at a time when Americans are paying high prices at the pump, seeing their economy struggle as a result, and blaming their incumbent president for both in the public opinion polls. The G8 is likely to take a comprehensive look at the energy mix, high oil prices, oil emergencies, energy efficiency, nuclear energy and climate change.

It may well signal that it is prepared to release oil from members' strategic petroleum reserves, if necessary.


Focus on food security

On development, the Camp David agenda will focus on partnership with Africa, especially on food security. The emphasis will be on the role of the private sector in agriculture, how governments can create an enabling environment, the investment framework, risk insurance, science and technology, research and development, and nutrition. Leaders will take stock of the food security commitments they made at the 2009 L'Aquila Summit, which are due for delivery this year. They will emphasise accountability and reporting on financial and non-financial results, based on a report on food security that could include annexes on related issues such as health. Leaders will consider what to do on food security in today's constrained fiscal environment, rather than mount a new pledging session. Thus private-sector development and its role in agriculture will have pride of place. African countries that have said they want to work on principles to

In a short time, leaders will cover the economy of an America and a world struggling to generate growth and good jobs, as well as global development, and peace and security

prompt private-sector investment in agriculture, and thus promote food security and development, will be featured. Led by the US and Britain, G8 attention could also extend to food- and nutrition-related aspects of maternal, newborn and child health, HIV/AIDS, tuberculosis, malaria, effectiveness and good governance.

On their political-security agenda, the Camp David leaders will follow up on last year's Deauville Partnership with now five reforming countries in the Middle East and North Africa. Recognising that the situation in each partner varies considerably, they will deal with the partnership's three streams of financial stabilisation and job creation, trade and investment, and governance including transparency, accountability, government procurement, integrity and anti-corruption. As hosts, the Americans seek to highlight concrete implementing actions from G8 countries and how to work with regional partners in order to do more.



The G8 leaders will spend time discussing security challenges, notably in Syria and Iran. They will also address Afghanistan from a civilian perspective

The G8 leaders will also address Afghanistan, from a civilian perspective rather than security one, as the country moves into its transformation decade with the withdrawal of international troops in 2014. Mindful of the NATO summit in Chicago immediately after, the G8 will deal with the impact of troop withdrawals on the Afghan economy, how these withdrawals relate to the security situation, and how to follow up, at the conference on support for Afghanistan, scheduled to take place in Tokyo on 5 July.

The G8 will also focus on critical regional security challenges, most notably in Syria and Iran, and perhaps the Korean peninsula. Any other crisis erupting on the eve of the summit could attract their attention.

It is here that the G8 could best show it is needed more than ever, as a fast, flexible, high-level, trust-based club that can integrate

economic, development and security instruments to save innocent civilian lives and produce global public goods – notably nuclear non-proliferation – that will benefit all. The leaders will address G8 governance, with a focus on accountability. This includes not only taking stock of the L'Aquila commitments on food security, but also improving transparency in reporting and involving civil society in this aspect of the G8's work. Possible advances are agreeing on indicators to measure results and having an external evaluator assess the G8's draft accountability report, with the comments included in the G8's final public report.

In all, there is much to do in the short 24 hours that the G8 leaders will be alone together. But this is likely to be time well spent in building a better world. ■

America's G8 summitry: back to the future

As the Obama administration's enthusiasm for the larger G20 forum wanes, the focus is shifting back to the more established G8 format

By Robert Fauver, former G7/G8 sherpa, United States

This year's Camp David Summit is likely to represent a return to prominence for the G8 as a multilateral forum for serious economic and political discussions and decision-making. The Obama administration would seem to have rediscovered the forum's potential value as a major body in the international sphere. The summit may also represent a watershed moment in the relationship between the G8 and the G20. Barack Obama made a personal decision to move the G8 summit from the original plan of holding it in Chicago – a very public atmosphere – to the quiet, thoughtful and more intimate atmosphere of the Camp David retreat. This reflects a decision by the president that greater use should be made of the G8 process and less reliance should be placed on the larger G20 format. For a number of the key issues facing leaders, an informal venue would be more conducive to reaching agreements.

This change could represent an almost full-circle adjustment to the view of the G8 and G20 held by the Obama administration. At the beginning of the administration, officials were quite taken with the G20 as an institution for resolving the global financial crisis. Early comments by officials indicated that the G20, because of its wider membership, would be more useful in determining macroeconomic and financial policy cooperation than the existing G8 format had been.

A return to classic policy issues

By the time of the Muskoka Summit in Canada in late June 2010, the Obama administration had successfully argued for a shift in the focus of the G8 away from the classic issues of macroeconomics, balance-of-payments adjustment, exchange rates, inflation and employment towards a much more limited focus on development. The communiqué, in fact, included a clear statement of the new role for the G8. "At Muskoka in 2010, we are focusing on an effective agenda to address key challenges in development, international peace and security, and environmental protection." This sweeping statement represented a fundamental reduction in the role of the G8.

For decades, the US – under various administrations – had viewed the Group of Five, then the Group of Seven and then the Group of Eight as the forum for economic policy coordination and cooperation. US administrations had used the G7/8 meetings as a focus of efforts to secure balance of payments adjustment, resolve various international debt crises and deal with a host of macroeconomic-related goals, from structural adjustment to support of multilateral trade negotiations.

The Obama administration is no longer enamoured with the G20 as a functioning body. Certainly, the G20 performed strongly as a body in addressing pressing problems in the wake of the global financial crisis.

Membership is considerably broader than the older G8 and, for the first time, major developing countries have a seat at the table. The first G20 communiqués issued the right degree of concern and commitment to undertake cooperative changes in financial market policy in order to secure a stronger global financial system. But it has become clear that follow-up on earlier commitments has been weak. The discussions have been good, but the implementation of policy commitments has been less satisfactory. Obama administration officials have also become convinced that a smaller group than the G20 is needed for useful discussions and to reach agreement on policy changes.

At the Camp David Summit, there is likely to be a return to the original agenda of the G7/8 summits. Instead of the Muskoka focus on development and environmental issues, leaders will concentrate on the classic issues of earlier G7/8 summits: macroeconomic policy, such as the state of the world economy and how G8 growth strategies can help strengthen the outlook for real growth and rising employment. There will be discussions on national debt-reduction strategies (with a particular focus on Europe and the US) and also on global energy issues, including joint efforts to lower oil prices.

Global energy concerns will play a crucial role

Thus, the Camp David Summit is likely to look more like summits of a decade earlier. It will produce a shorter, more concentrated communiqué that addresses the critical economic issues of the day: growth, employment and inflation. In addition, this year's summit is likely to recapture the political and strategic nature of early G8 summits.

Two pressing issues will receive a great deal of attention in the discussions: global energy policy and Iran's efforts to become a nuclear weapons state. On the energy front, the continued sharp rise in crude oil prices – and the concomitant rise in gasoline prices – has grabbed the leaders' attention. The existing weak recovery of the international economy – and worry about a double-dip recession in Europe – is worsened by high and rising oil prices. The potential for cooperative releases of government-owned oil stocks could receive considerable discussion at the Camp David Summit.

In addition, leaders will discuss methods of limiting the scope for speculation in the oil futures market. Most analyses indicate that a considerable part of the current high price of crude oil reflects not underlying demand and supply balances, but rather speculation in the futures markets about the situation in the Middle East. Changing margin requirements for futures markets could be on the table.

On the geopolitical front, the G8 is likely to put down clear markers on important issues of the day. The Iranian situation will receive considerable attention at Camp David. Although the sanctions are continuing to tighten, there remains little evidence of a change in Iran's policy of developing a nuclear weapons capability. The communiqué will search for new pressure points for combined efforts at dissuading Iran from attempting to build nuclear weapons.

The continuing problems in Syria will also be a matter for discussion in the G8. Among the major countries, only Russia continues to resist robust multilateral efforts to bring a cessation to the violence taking place in Syria. The leaders' informal discussions at Camp David will be looking for a way to bridge the gap between each other to reach a consensus on how to bring pressure on Syria to find a peaceful solution to the crisis there. ■

Issues surrounding global energy policy, together with Iran's nuclear ambitions, are likely to be the main focus of discussions by the G8 leaders





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Illinois – the place to do business

G8 host Barack Obama's home state is investing heavily to make sure it maintains its status as a world-class, cutting-edge centre for commerce

By Pat Quinn, governor, State of Illinois

We stand at an exciting crossroads. During my time as governor, the State of Illinois has taken the steps necessary to create a sound foundation for the next century of economic development, but our work is not yet done.

Illinois is the economic engine of the Midwest. We are first in exports, first in foreign investment and first in attracting visitors. I am committed to implementing policies that will continue to put Illinois residents to work for growing companies from around the world.

We have a world-class workforce, six million strong, that is one of the most productive in the US. We offer businesses unparalleled access to their clients and suppliers, and access to capital and other vital resources to help businesses of all sizes thrive – including the infrastructure that enables them to go anywhere and meet the needs of their customers around the world.

In the past few years, we have watched the accolades roll in:

- *US News & World Report* named Illinois as one of 10 'business-friendly' states that are gaining businesses;
- The State of Illinois and Chicago were named among the top 10 locations for new and expanded corporate facilities;
- *CNN Money* named Chicago the country's third most affordable city in which to do business; and
- *Money Rates* lists Illinois among the top states for making a living.

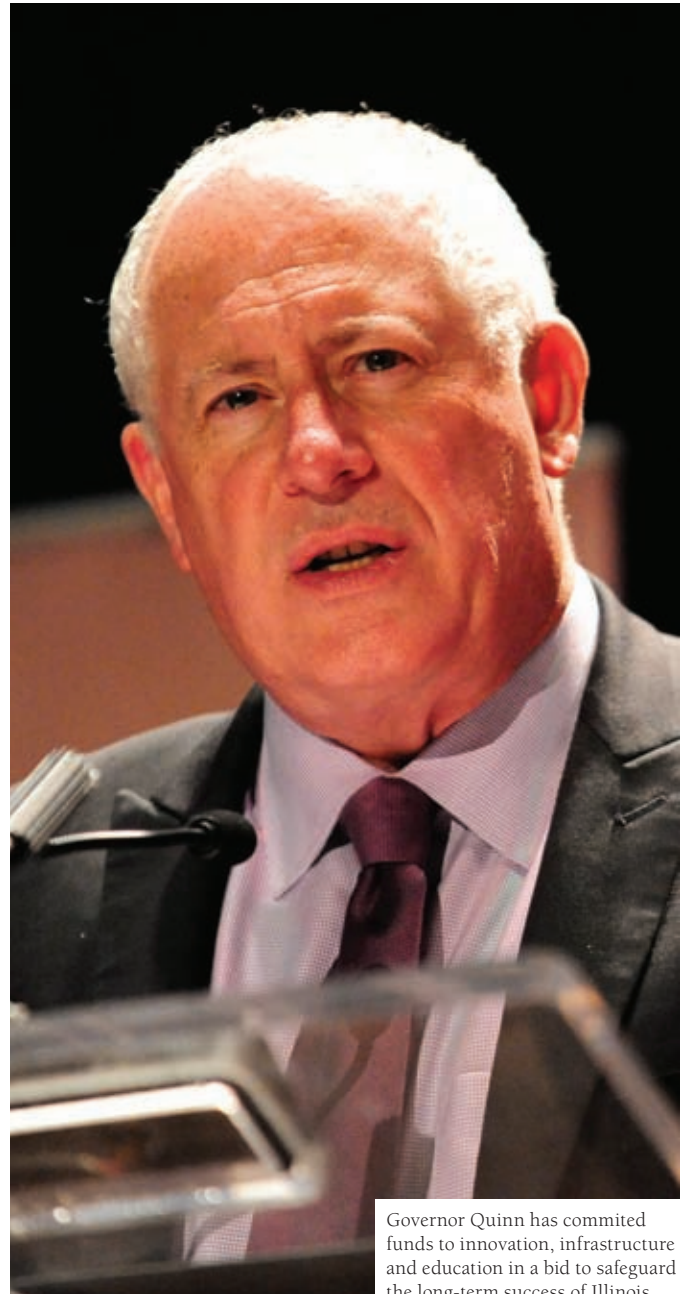
Illinois continues to be an excellent place to do business because we are making the kinds of investments that help companies thrive. My administration has an aggressive agenda for bringing quality jobs to Illinois, which means supporting innovation, exports and foreign investment, a business-friendly environment, education reform and continued improvements in our world-class infrastructure.

Innovation

My administration is focused on supporting innovation and emerging technologies. Illinois now ranks second in the country, trailing only California, for its number of high-tech start-ups. In recent years, annual venture capital investments in Chicago's start-up firms have risen to more than \$1 billion for the first time since 2000.

Just over a year ago, I launched the Illinois Innovation Council. The council is composed of key business executives, including the founders of Groupon, across a variety of critical sectors, along with science, technology and university leaders to help ensure the state remains at the cutting edge of the global economy.

We continue to make Illinois a destination for entrepreneurs by supporting start-ups and high-growth businesses. Last month, we launched '1871', a new 50,000 sq ft tech centre that will gather start-ups together, creating a community of mentors, partners, peers, developers and investors to spark innovation and create well-paid jobs.



Governor Quinn has committed funds to innovation, infrastructure and education in a bid to safeguard the long-term success of Illinois

Exports and foreign investment

Illinois is a great place to do business – whether your company began in Chicago, Los Angeles or Tokyo. We currently rank first in the Midwest for exports and foreign direct investment, with Illinois exports totalling more than \$50 billion in 2010, a 20.3 per cent increase over 2009.

There is a reason why Illinois is the America's sixth largest exporting state and exports more than any other non-coastal state – we are America's inland port. Illinois has an attractive transportation system, with Chicago as a major hub for international travel and the



Illinois is America's inland port with an attractive transportation system – its largest city, Chicago, is a major international transport hub



ability to move goods quickly to anywhere in the world. Our global mentality is evident in the dynamism of our workforce, our focus on infrastructure and the access to capital that Illinois provides. I am committed to making sure Illinois remains competitive on a global scale – my goal is to double exports by the end of 2014.

Illinois is already home to more than 1,500 subsidiaries of foreign companies. We are working hard to further our partnerships with countries around the globe to expand foreign direct investment and trade. We continue to work every day to make Illinois an even more attractive place in which to do business.

Business-friendly environment

Keeping Illinois globally competitive means bringing businesses to the state – and persuading them to stay here.

My administration has an aggressive agenda to help businesses large and small both to grow and to thrive. We have compiled a wide variety of tax credits and other targeted incentives for companies, further strengthening our business environment by supporting research and development, and making it easier for companies that are located here to increase innovation and to operate in the global marketplace.

Staying competitive also means implementing reforms. Last year, I enacted historic workers' compensation reform that will save employers more than \$500 million annually, while maintaining important worker protections. We also undertook major unemployment insurance reform that will save businesses \$400 million over eight years, but did not require cuts in benefits to workers.

We are also eliminating red tape to make it easier to do business. We have passed laws to simplify and streamline the environmental permit process to help Illinois' employers to create more jobs, and a tech bill to boost emerging technologies and create Illinois jobs in technology-based fields. According to a report compiled by Ernst & Young, Illinois is ranked fifth lowest in the country for its effective tax rate on new investment (at 4.6 per cent).

The steps we have taken, and are continuing to take, are ensuring our state's role in the emerging global marketplace.

Infrastructure

In addition, we are also keeping our brick and mortar foundation strong, making it easier than ever for companies to transport their goods both within and outside the State of Illinois.

With this aim in mind, shortly after coming into office, I launched the state's first capital construction programme in a decade.

Through this initiative we are making vital improvements to the infrastructure system that business depends on. By upgrading our roads and bridges, and by upgrading to high-speed rail, businesses have more direct routes to engage consumers. And by giving businesses the tools they need to relocate and expand, we have created 108,100 jobs since January 2010.

Education

Jobs follow brainpower, which is why Illinois continues to make significant investments in education.

Our state not only has one of the most productive workforces in the United States, it also has one of the best-educated – 30 per cent of the state's population has a bachelor's degree, while 11.2 per cent of the population holds an advanced degree.

And Illinois will improve upon that success with the next generation of learners. We are investing in early childhood education to give our children the building blocks for success. When they get to school, the educational reforms we passed last year will give them the tools they need to be productive workers and citizens.

Illinois is a global business leader. And our focus is on long-term economic development, so that we can continue to help businesses to grow in our state. The impact of global recession was felt around the world, and Illinois was no exception. However, the steps we have taken to build and invest in our state are continuing to make Illinois a great place in which to do business. ■

Africa's shifting landscape



**Lou Anna K Simon, president,
Michigan State University**

With more than 50 years of engagement with Africa and more than 160 faculty currently working on projects with African partners, Michigan State University has developed a rich reservoir of knowledge and

experience on the continent. From that, we find that five 'megatrends' will influence prospects for prosperity and food security in the next 10 to 15 years.

If underestimated, these trends will thwart the efforts of both Africans and their friends around the world to achieve positive development goals. These powerful currents will have different meanings for different countries, organisations, and individuals. But if we are to 'bend the trend' toward equitable and sustainable development, then governments, corporations, foundations, NGOs and universities today must carefully reckon the conditions under which we hope to proceed to this destination.

To begin with, policy debates need to focus more on development of a system that serves all people as democracy takes firmer root in Africa. Today, we can seize opportunities to work with the megatrends to create a better future for all, especially for those who are most at risk of being left behind.

MEGATREND 1: Urbanisation and pressures on land

Africa's food-consumption patterns will change dramatically over the coming decades. Rising urbanisation and growing per-capita incomes will double the marketed volumes of foodstuffs and ramp up demand for high-value foods (dairy, meat, fresh fruits and vegetables), processed foods, packaged convenience foods, and prepared foods. As fewer farm families support growing urban populations, farm productivity will need to increase in both crop and livestock production. Growing demand for packaged convenience foods will require substantial private-sector investment in food-processing technology.

But at the same time, people in rural areas are being squeezed onto smaller plots of land, leaving little room to expand farms and help meet the growing demand for locally grown food. While not fully understood, the squeeze is the result of an array of features that may include changes in traditional local land-allocation systems, as well as the flow of investments.

Strategic implication

To scale up processing of staple crops throughout Africa, the food industry will need to undertake research on the biochemistry of basic food fermentation and on nutritional outcomes under alternative processing technologies. To fuel necessary productivity increases, the system will require a steady flow of scientific and technical skills in support of farm production, feed industries, storage, supply-chain management and food processing.

Governments will need policy and programme analysts and regulatory experts accustomed to thinking and operating in a market economy to ensure that policies and regulatory structures promote innovation and growth. Policies must also incorporate the needs and concerns of small-farm producers. Disproportionately women, these smallholders are a major link in a rapidly modernising food chain and a key to African economic development.

As foreign direct investment increases, policies have to address potential negative impacts on the environment, marginalised groups of society and conditions that promote unlawful land grabs. At the same time, it will be crucial to collaborate with the business sector to encourage investment, share best business practices and develop policies.

MEGATREND 2: Connectivity

With 600 million cell phones on the ground, Africa is connecting like never before. This opens access to a variety of opportunities for users, while generating potentially useful information about public sentiment, economic activity, and even emerging health threats. Smallholders can use their phones to check market prices, giving them the global insight to set competitive prices for their produce. Telemedicine can deliver more of its early promise.

There is tremendous potential for wireless technology to enable African development and to contribute to development goals. Not only will this technology produce data about its users, it has the potential to advance education and modern agricultural extension services.

Strategic implication

As connectivity grows throughout Africa, so, too, can insights into its people and institutions. To harness resources in ways that will benefit the smallholder and others along the value chain, foundations, governments, and universities should work together to develop a talent pool with deep analytical expertise. Such information could identify troubling patterns at an early point and help guide programs supporting vulnerable communities and people with targeted education and assistance.





MEGATREND 3: Regional integration

Every nation in Africa is a member of at least one regional economic group. There is new momentum for regional integration, especially around efforts dedicated to strengthening regional agricultural capacity. With knowledge and communication leapfrogging boundaries, the case for regionalisation is strengthened. The African Union's repurposing of the New Partnership for African Development (NEPAD) into a continent-wide implementing agency, the development of the Comprehensive Africa Agriculture Development Program (CAADP), and the expansion of activities by long-standing regional groups such as SADC, EAC, ECOWAS, and COMESA are recent examples of these African-owned and African-led initiatives. Such efforts are intended to address vulnerability to rising global food prices and to food shortages.

Strategic implications

Africa has a wide variety of crops and agricultural environments. These differences provide a strong basis for productive agricultural trade based on comparative advantage. But a successful regional agriculture effort will be highly dependent on stakeholders' understanding of policy impacts on productivity, on market access, on income growth, on poverty reduction, and on the reduction of trade restrictions between African countries.

MEGATREND 4: Influences of democracy

There is a stubborn public perception that, for all the effort and foreign assistance over many years, there has been no meaningful change in sub-Saharan Africa. The fact is that in 1989 there were only three democracies in sub-Saharan Africa, while today there are more than 20. Never have so many low-income countries moved toward popular governance in such a brief period. Fragile and imperfect, these governments have a long way to go. But today they're on the road.

Strategic implication

As democratic ideals take hold, responsibility to address social problems will extend beyond government and become an expectation placed on businesses and organisations. Corporations and foreign direct investors will be asked to consider the social impact of their actions. We know that, on the whole, the economy improves when trust in the private sector is high and societal conditions improve. Social engagement and assumption of leadership on appropriate issues will become increasingly important in building trust and creating value for companies and organisations in Africa.



MEGATREND 5: Supermarketization

Africa is poised for rapid transformation of its retail food sector, embodied in the rapid spread of supermarkets. This follows a decade of similar change in East and South-east Asia and in Latin America. As the supermarket industry develops, leading chains are rapidly adopting technological, organisational, and institutional changes in their product-procurement systems.

Farmers face a rapidly evolving market with the potential to change the very nature, composition and volume of trade in the region. It will happen with unprecedented speed. What took 100 years in the West took 30 years in China, and Africa promises an even swifter transformation.

Strategic implication

To help small farmers grasp emerging opportunities and to help those who can't find other employment, development programmes will be challenged to assist small farmers to make the transition to the new market environment.

Conclusion

These megatrends say something about what we know about the future, but it is still uncertain how people and regions will react. We know that by supporting the development of resilient communities through informed policymaking, we all benefit – whether we are in Michigan or Malawi. Family farms the world over, after all, are increasingly buffeted by the winds of change in an increasingly global market.

Resilient communities are better positioned to shape their own futures and to address the big challenges, such as climate change, health and nutrition, education and the prosperity of their citizens.

At Michigan State University, we believe that universities play an important role in this process. We create a safe space to discuss equitable and sustainable development trajectories, where bold ideas are tested and the preferred future on behalf of the common good is pursued.

MICHIGAN STATE
UNIVERSITY

www.msu.edu



Our Values

For African Petroleum, human capacity development and social investments are a key part of a successful corporate strategy. We aim to build capacity, transfer knowledge and encourage local commercial participation across our areas of operation. To do so, we partner with NOC's and local academic institutions to ensure sustainable learning solutions that allow for technical skill transfer from exploration. In Liberia, our lead project to date, African Petroleum is making investments and building partnerships across the following key areas:

- Construction of a 'state-of-the-art' Geological & Geophysical computer lab at the University of Liberia, inclusive of supportive software and training
- Scholarships to pursue BA and MA coursework in the UK and technical workshops globally
- Supportive local content development through offshore training, certification and shadow work opportunities
- Industry Overview Courses and technical seminars to government ministries, universities and local business representatives
- E-learning software, technical and IT advice to the National Oil Company of Liberia and academic institutions
- Investments in health through the donation of medical supplies, equipment, and maintenance training



Improving Quality of Life
Building Human Capacity
Creating Training Opportunities
Supporting Local Businesses
Investing in Liberia's Future

PARTNERS IN EXPLORATION  **PARTNERS IN DEVELOPMENT**



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Progress in a democratic Liberia



Ellen Johnson Sirleaf – a Nobel Peace Prize laureate – greets supporters during a campaign rally. She has focused on rebuilding post-conflict Liberia

In her inaugural speech earlier this year, Liberian president Ellen Johnson Sirleaf described the long road to democracy, and how the process of reconciliation after past struggles offers fresh hope

We observe today, for the first time in two generations, the swearing-in of a second successive democratic government elected peacefully by the will of the Liberian people. Today, Monday, 16 January 2012, on this Capitol Hill, in the presence of international dignitaries and the eyes of a watching world, we inaugurate a new beginning, a rebirth of our democracy and a restoration of hope.

Today, we can state with conviction that our country has turned the corner. Liberia is no longer a place of conflict, war and deprivation. We are no longer the country our citizens want to run away from, our international partners pitied and our neighbours feared.

We have earned our rightful place as a beacon of democracy – a country of hope and opportunity. The achievements marked on this day, my fellow citizens, are yours. This is your moment. You are the heroes

of the day, and it is you whose triumph we come together to celebrate.

I am deeply honoured to have been re-elected to the presidency of the Republic of Liberia, to serve this great nation for another six years. I have sworn, for the second and final time, 'to protect and defend the Constitution and laws of the Republic', and faithfully execute the sacred duties of this office.

The second election in any emerging democracy is the most important. The first takes place on the world stage, in the spotlight, with great fanfare. But the second election is the true test of the will of the people and the institutions they have created. If the second election works, it establishes a pattern, a tradition, a routine of democracy that subsequent elections can follow.

You, my fellow Liberians, have conducted another national election, described by all observers as free and fair. It was a miracle

summoned by the people, and in so doing, we as a nation have set our faces irrevocably towards democracy and peace.

The cleavages that led to decades of war still run deep. But so too does the longing for reconciliation – a reconciliation defined not by political bargaining or by an artificial balance of power by tribe, region, religion or ethnicity, but by the equality of opportunity and a better future for all Liberians.

The spread of progress

True reconciliation means a process of national healing. It means learning the lessons of the past to perfect our democracy. But above all it means economic justice for our citizens and the spread of progress to all our people. It means creating jobs, opportunities and giving our young people the skills they need to prosper and create the life they choose.

The youth of Liberia are our future, and they sent us a message. They are impatient. They are eager to make up for years of conflict and deprivation. They are anxious to know that their homeland offers the grounds for hope. Let me say to them: we heard that

The second election in any emerging democracy is the most important. The first takes place in the spotlight. But the second election is the true test of the will of the people and the institutions they have created. If it is successful, it establishes a routine of democracy that subsequent elections can follow

message and it is our solemn obligation to ensure that their hope will not be in vain.

To all who have yet to feel the hand of progress touch your life, your time has come. We have laid the foundations for peace and prosperity, and we must now hasten our true mission: putting people, especially young people, first and lifting the lives of all Liberians.

Your government should offer you education worthy of our heritage, but it will be up to you to stay in school, to study hard, and to learn the skills required for success in this new technological world. Your government should foster equality of opportunity so that you can get a job, and to know the dignity of receiving an honest day's wage. But it will be up to you to work honestly and hard to realise those ambitions. Your government should provide a system



of justice that all of us can trust: law-enforcement officials who act out of a sense of duty, judges who interpret and apply the laws fairly, administrators who live up to their oaths of office whatever the temptations may be. But it will be up to you and to me to demand transparency and accountability.

Six years ago, I stood before you in this same place and pledged to you my commitment to a process of national renewal. Now I address a new and very different Liberia. I call on you to join me in the completion of that formidable task. I call on you, my fellow citizens, to join me in renewing our resolve to restore our country and lead it to its grand destiny. I call on you today to share a healthy pride in what we have done, but a still fiercer resolve to do all that must yet be done so that all Liberians can thrive in freedom, equality

and friendship. I call you, my compatriots, to a new age of patriotism.

I am asking you to join me in a rededication to the enduring values set out in our constitution and consistent with our deepest gratitude for the gifts the Almighty has conferred on us as individuals and on our country. It is a rediscovery of what it means to be a Liberian – a proud citizen of a country that has suffered from wars, but now a dignified African nation with a simple dream of Liberty. The patriotism and resolve we summon today honours that dream.

Patriotism does not mean blind loyalty to power. Indeed, sometimes the highest demonstration of patriotism may well be seen when citizens peacefully and respectfully express their opposition to particular policies proposed by those elected to govern them.

Patriots freely and openly, and even passionately, disagree about what is best

A man casts his vote at a polling station during Liberia's presidential election in November 2011



for the nation they love. Patriots compete for the support, and for the votes, of their fellow citizens. Patriots acknowledge that those who may not embrace their views are nonetheless acting out of their own understanding of what is best for their country.

Equality of opportunity

Patriots believe that equality of opportunity applies to all citizens, regardless of tribe or ethnicity, regardless of geographic or economic status, and regardless of sex. My administration remains particularly committed to achieving equality for women and girls in all areas of life: education, business, and in the family itself.

Patriots believe deeply in democratic processes and institutions, and when those processes and institutions waver or fail, patriots resolve to repair them. They believe in a democracy of policies not

personality, merit not money, action not words. They believe in the sacred right to free expression and the responsibility to exercise that right with care.

Restoration and the future

My fellow Liberians, we know all too well what can happen when the tenets of democracy and freedom are not jealously and vigorously defended, when the true love of country is abandoned for narrow interest. We have suffered the years of deprivation and terror, during which democratic principles were exiled from our shores. We have looked into the vacant eyes of a generation of young Liberians whose hope for the future was stolen.

We all, together, will never allow those mistakes to be repeated. We will never again shed the mantle of democracy, of freedom, of national unity, of patriotism.

Let us go forth from this Inauguration Day to roll up our sleeves, to make the sacrifices necessary for our continued growth and development: economic, educational, moral and spiritual. Let us resolve that our pride in our Liberian nation, and in our tradition and heritage, will be manifested in a new commitment to the democratic processes that we mark on this solemn occasion.

I invite you to join me in the next steps towards restoration and the progress of our beloved Liberia. The future that has beckoned us is finally here. Let us walk along this road together, our steps enlightened by our Creator, and grateful to Him and the blessings He has bestowed upon us.

My compatriots, my brothers, my sisters, my daughters, my sons: I call on each of you to join me today, and together let us forge our future in a spirit of pride, purpose and unity. ■

Believe in Liberia: the reasons why we can achieve more together

Alexey Borisov, CEO, the Putu Iron-Ore Project, Severstal

Facing new horizons

In less than a decade Liberia has become one of the leading and most attractive countries for foreign investments in Africa. When the devastating civil war ended in 2003, such a situation seemed almost impossible. But this “Lilliputian nation with a giant history” – as it was called by the President of Liberia Ellen Johnson Sirleaf – led by its government, has made it a reality. Today, in common with the rest of the world, Liberia faces new horizons and challenges: instability in global economic growth, globalisation, increasing business competition, the digital revolution and much more. We believe that the people of Liberia will successfully meet these challenges.

Our faith in the future of the country and its people is one of the major reasons why Severstal has come to Liberia. Our investment in the country is also an important part of our strategy. Severstal's operations date back to 1955 when our first batch of steel was produced at Cherepovets Steel Mill in Russia. Since becoming a private company in 1993, Severstal has been actively growing and expanding globally, and today Severstal is one of the world's leading vertically integrated steel and steel-related mining companies. We have an international footprint, with operations in Russia, the US, Ukraine, Latvia, Poland, Italy and Brazil, as well as in Liberia.

Severstal's strategy is focused on steel products and steel-related mining and we plan to significantly boost the company's total production of iron ore and coking coal, as we believe these markets have high-growth potential. As part of this strategy, in December 2008, Severstal bought a controlling (61.5 per cent) stake in the Putu Iron Ore Project in Liberia and, up until April 2012, developed the project in a partnership with Afferro Mining Inc.

Since 2008, Severstal itself invested approximately \$94 million to develop Putu. During 2009-11, activities focused on the construction of physical infrastructure (exploration camp, fuel storage facility, access roads) and the establishment of a project team, both of which are required to support an intensive



exploration drilling programme. In April 2012 we bought Afferro's minority stake, taking a 100 per cent interest in the project and strengthening Severstal's position in the global iron ore market. The acquisition was in line with our key strategic goals of being a leading global steel and steel-related mining company with high-quality iron ore and coal assets worldwide.

The next key stages of the project are the completion of the pre-feasibility study by September 2012 and then the feasibility study by March 2014. The construction phase is planned to begin in April 2014 and will take about three years. During this phase, the company will construct the mine, processing plant, railway, port facility, and support infrastructure, based on the engineering designs developed during the feasibility-study phase. Total construction costs are estimated at about \$4 billion, subject to the results of the definitive feasibility-study.

Our faith in the future of the country and its people is one of the major reasons why Severstal has come to Liberia

The overall plan for the Putu project is to build a facility with the capacity to produce 20-25 million tonnes per year of magnetite iron ore concentrate. This is a high-quality raw material for iron and steel making, although it does require intermediate processing into pellets, or sinter, before it can be used by most iron and steel plants. The Putu project is the cornerstone of Severstal's strategy to develop a portfolio of iron-ore mining assets, producing 30-50 million tonnes per year in the long term, and providing raw materials, not only for Severstal's plants in Europe and the US, but also for third-party steel plants. By developing Putu the company has a chance to become a significant player in the seaborne iron-ore market.

Creating value is part of the strategy

Severstal's mission is to be a leader in value creation across all the regions where it operates. We have more than a decade of experience operating in different countries and our key priority





is to be a responsible corporate partner for local governments and communities. We believe the Putu project will generate significant social and economic benefits for Liberia. This positive impact will include the creation of about 3,000 direct jobs and a further 15,000 to 20,000 indirect jobs at the operation stage – a critical benefit given that current unemployment levels in Liberia are in excess of 80 per cent.

However, the positive impact of the project will emerge even before production begins. Severstal has agreed to contribute significant sums of money during the pre-construction phases towards education (\$200,000–\$350,000 per year), community projects (\$500,000–\$3 million per year) and road construction.

In addition, Severstal has agreed to pay the Government of Liberia a signature bonus totalling \$10 million with staged payments between 2010-14. As well as these pre-production financial contributions, the company also undertakes training of Liberian nationals at all levels to assume roles within the company, and will ensure its best efforts to support local providers of goods and services.

Generating benefits for the community

Severstal already employs about 300 Liberians directly, and about 250 through our sub-contractors. Besides the Mineral Development Agreement social obligations the company undertakes “in-house” social activities, including education, refurbishing roads, improving the water supply and enhancing standards of health and medicine.

The development of rail, road and power infrastructure during the construction phase will generate significant benefits for Liberia and for Grand Gedeh County in particular. Severstal will pave the 185km road between Greenville and Zwedru between 2013-17 at an estimated total cost well in excess of \$200 million. The company will also build the mine power plant with sufficient capacity to supply electricity to population centres within a 10km

radius (free to public users such as schools, and at subsidised prices to individuals), design the railway and port facility in such a way as to facilitate expansion for use by another bulk industrial user, and make up to one million tonnes per year of capacity available at the port facility for third-party use.

During the production phase, a 20-25 million tonnes per year iron-ore operation at Putu Range would generate approximately \$100 million per year of royalties, about \$300 million per year of corporate income taxes, and about \$25 million per year of dividend withholding taxes. These figures should be viewed in the context of Liberia's 2011 GDP of \$1,760 million.

We believe that all these actions, if successful, can bring significant benefits to both parties and lead them to a new growth stage. Together, we can achieve more.

About the Putu Range iron-ore project

The Putu Range iron-ore project is located in the Grand Gedeh County of south-east Liberia, approximately 460km from Monrovia (via Ganta) and 130km from the port of Greenville. The nearest major population centre is Zwedru, the regional capital, which lies 62km away. Access by road from Monrovia takes 12-16 hours, depending on road conditions. The project is managed by Putu Iron Ore Mining Inc, an indirect subsidiary of Severstal Resources, the mining division of OAO Severstal.



www.severstal.com

Strengthening political governance for security and stability in Africa

The African Union aims to capitalise on the opportunities presented by the Arab Spring to strengthen the instruments of democracy in North Africa and in the continent as a whole

By Dr Jean Ping, chairperson, African Union Commission

Fifteen months ago, a revolution started here that was not only to change the face of Tunisia, but also those of several other countries in the region.

Events here led to what some have called the 'Arab Spring' and others have termed the 'People's Spring', referring to the revolution that broke out in Paris on 22 February 1848, before affecting other European monarchies. It is for analysts and other knowledgeable observers to judge the relevance of these terms, the accuracy of the analogies and the comparisons that have been drawn.

Allow me, in a much more modest respect, to take this opportunity to once again pay tribute to the Tunisian people, for their courage and determination in the struggle that was and remains their own – that of freedom and dignity. Is it necessary to say that this struggle is ongoing, never definitively won, still unfinished? By their very nature, democratic achievements are always fragile. Preserving and consolidating them requires constant vigilance, a form of revolutionary romanticism that inspires dreams of a better life and helps maintain the commitment necessary to avoid setbacks, reversals and co-optation.

The Maghreb – a new direction

I welcome President Moncef Marzouki of Tunisia. In him I see a political leader who presides over the destiny of his country at a crucial stage in its history, but who is above all a tireless campaigner for human rights, a Pan-African who took the opportunity at the last African Union (AU) Summit to strongly reaffirm Tunisia's commitment to the ideals of our union. He is the advocate of Greater Maghreb unity and one of his first diplomatic initiatives was to give impetus to the revival of the undoubtedly urgent Maghreb project.

For President Ahmed Ben Bella, his vision meant that the liberation of Algeria could not be complete until the whole continent was free from the yoke of foreign and racial domination. As a participant in the Founding Summit of the Organization of African Unity (OAU) in Addis Ababa in May 1963, he urged his African peers to "die a little, or even completely", to fulfil the task of decolonisation and win the struggle against apartheid and racial discrimination.

Obligation to support African aspiration

In line with his Pan-African commitment, President Ben Bella agreed, in 2007, at the request of Alpha Oumar Konaré, former chair of the commission, to lead the AU's Panel of the Wise. In his message during the inauguration ceremony of the panel in Addis Ababa on 18 December 2007, he said: "On behalf of my companions, I would like to declare that we see this mission as a responsibility and an obligation, and we intend to discharge it, with all our energy, in support of the aspirations of all the African peoples to peace, security and stability."

Consequently, despite his advanced age and declining health, former president Ben Bella spared neither his efforts nor his energy to fulfil this new responsibility. In this capacity, he participated in several meetings of the panel, particularly in Addis Ababa, where he returned in 2008 for the first time since the OAU Summit of May 1963. Under his authority the Panel of the Wise undertook several missions to countries and regions affected by conflicts and tensions, and worked to facilitate conflict prevention through dialogue.

Our workshop is part of the discussions begun, at the request of the AU's relevant bodies, by the Panel of the Wise on the Strengthening of Political Governance for



The African Union headquarters in Addis Ababa, Ethiopia. The organisation hopes that the ideals of the Arab Spring will renew Africans' drive for able governance



Peace, Security and Stability in Africa. It is part of the AU's effort to take the opportunities arising from the revolutions that took place in North Africa to give new impetus to the democratic project, which is at the heart of the objectives of our union.

The aim is not necessarily to develop new instruments, but to apply existing ones. Over the past two decades, in the framework of the AU, African states have made important commitments in democracy, governance and human rights. Progress has undeniably been made, yet we must also admit that there is still a long way to go. It is in this context that we need to mobilise political determination and to agree on appropriate strategies to put into practice the commitments made and the hopes to which they give rise.

Greater democracy to prevent crises

This is an urgent undertaking. Indeed, political systems that are more democratic, respectful of human rights and transparent in the management of public affairs will greatly contribute to the prevention of crises and conflict on the continent. Very often, conflict arises from deficient political and economic governance, and as long as these remain foreign players will be in a position to arbitrate our internal disputes.

It was the duty of the OAU's founding fathers to meet the challenges of anti-colonial struggle. Likewise, it is the duty of the present generation to meet the demands of democracy. These two struggles are intimately and inextricably linked. The battle for democracy is a natural extension of the struggle for independence. Both are based on the same aspiration for freedom and dignity.

It is in this way that we can ensure continuity between the struggles of yesterday and today, between the generation of Ben Bella and that of Merzouki. It is in this way that we can carry the banner of democracy and freedom further and raise it higher. It is in this way that we can ensure the vitality of the African people and create conditions that will enable the continent to take full advantage of its enormous potential and assert itself on the international arena. ■

Unofficial translation of an address given by Dr Jean Ping in Tunisia, on 27-29 April 2012, on the theme of 'Strengthening political governance for peace, security and stability in Africa'

Samsung Africa's world-first Solar Powered Internet School

An innovative, technology-based model that provides children in rural Africa with access to a high-tech learning environment and a world-class education



By Ntutule Tshenye, Corporate Citizenship, Samsung Africa

As Samsung pursues an aggressive growth strategy in the African consumer market, it is also aiming at an ambitious goal: to directly impact the lives of five million Africans by 2015. To do this, we are delivering on a practical strategy for corporate social responsibility (CSR) in African communities. We believe that we will have the biggest impact by fusing our expertise in designing products and programmes that are 'built for Africa', with our desire to improve quality of life in the communities where our customers live.

We are focused particularly on enabling quality education and improving rural access and connectivity.

Rural challenges to connectivity

While many areas in Africa are developing at a rapid pace, much of the continent is still struggling with infrastructure problems that are no longer heard of in the developed world, such as electrification, which remains one of Africa's largest economic challenges. On average, less than 25 per cent of rural areas on the continent benefit from electricity, resulting in isolated communities with limited access to education and connectivity. We believe that in our endeavours to improve education in Africa, we cannot overlook the areas that most require support:

the rural areas that make up the vast stretches between one city centre and the next. To effectively address the challenges that exist in these areas, unique solutions tailored to the conditions of the continent need to be developed.

A world first

In October 2011, Samsung Africa launched a world-first innovation aimed at tackling the very heart of the problem of rural electrification: the Solar Powered Internet School model. It entails an exclusively solar-powered, mobile and completely independent classroom that occupies a 40-foot shipping container, for easy transportation using a truck to the remotest areas on the continent, and designed for use in areas with limited or no access to electricity.

Technology for a world-class education

Fold-away solar panels provide enough energy to power the classroom's equipment for up to nine hours a day, and for up to three days without any sunlight at all on fully charged batteries. The classrooms can comfortably accommodate 21 learners, and include several layers of insulation and a ventilation system to ensure a temperate environment is maintained. Each classroom is fitted with a 65-inch electronic e-board and different Samsung notebooks and netbooks, including the world's first solar-powered netbooks and Galaxy Tablets for student and teacher interface – all of which are optimised for use in a solar-powered environment.

Winner of the African Energy Award 2012

In March 2012, we were honoured to receive 'The Africa Energy Award' – an accolade that celebrates the continued growth and success of energy projects in Africa, focusing on the exceptional





performers within the industry. The awards are widely regarded as a recognisable standard of industry excellence and innovation.

The proof-of-concept model has been tested in a variety of different environments, including Boksburg and Qunu in South Africa, and in Zimbabwe. It is currently situated at a secondary school in Tembisa, near Johannesburg. This pilot phase has proved highly successful and has tested the viability of the Solar Powered Internet School model as a learning and teaching environment, has shown the content and curriculum it contains to be applicable, and has given us a tried-and-tested framework for the professional development of educators and the integration of ICTs into the classrooms.

We have recently completed the second model, currently being transported to Nigeria, and are now working on the roll-out of three more centres. In this next roll-out phase, we are driving in-country development of the schools across Africa, which will also have the benefit of employment creation.

Vision to reach 2.5 million learners by 2015

Our short-term goal is to roll out enough schools so as to reach 2.5 million people by 2015. To do this, we are working to build partnerships with governments and the private sector across Africa. In the past few months, we have engaged dozens of Education Ministers (and the African Development Bank) at the ICTs in Education Summit that took place in Zimbabwe, and addressed education decision-makers at the Association for the Development of Education in Africa (ADEA) in February 2012, where Ministers of Education expressed strong interest in rolling out these mobile classrooms in their countries.

But to ensure that we are able to scale the program sufficiently, we need to gain further support of public- and private-sector partners. We have recently been in discussions with the African Development Bank's Southern Africa Regional Office (SARC) in Pretoria, who have shown significant interest in initially supporting 10 countries in their roll-out of the classrooms if they are approached by the member countries. While this remains work in progress, we are both excited about the possibilities and ultimate benefits to the African education fraternity

To ensure that we are able to scale the programme sufficiently, we are calling on more partners, private, corporate and funding, to come on board and help bring access to power, connectivity and the 21st-century classroom to millions of African learners.



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Working together to assist Africa's development efforts

The world's most resource-rich continent has the potential to bridge the development gap, but the role of more advanced economies will be crucial

By Donald Kaberuka, president, African Development Bank Group

Africa is going through its most dynamic period of development in a generation. Despite successive shocks from the global financial crisis and high food and oil prices, it is expecting growth rates of above six per cent in the coming years, making Africa the fastest-growing developing region in the world.

A number of factors are combining to produce this new dynamism. After a decade of hard work on reform, African states now offer more stable macroeconomic conditions and a better business environment. High commodity prices have been a boon for the resource-rich continent. Emerging partners, particularly China and India, are becoming increasingly important investors, helping to overcome Africa's infrastructure gaps. Moreover, Africa's growing urban population is becoming an increasingly attractive consumer market in its own right, with telecommunications, construction, retail and banking all surging ahead.

Tackling entrenched poverty

However, Africa's growth is not delivering the impact on poverty that its people need. It is enclaved in nature, concentrated in a few sectors and geographical areas, while leaving most of the population poor. It is driven by capital-intensive industries such as mining and services, in contrast to the labour-intensive manufacturing that has lifted millions of Asians out of poverty.

While prosperity in the cities is growing, rural areas have been left behind, held back by poor infrastructure connections. Africa's fragmentation into more than 50 national markets works against balanced growth.

The recent upheavals in Tunisia, Egypt and Libya are a sharp warning that inequality in

Africa also has an important intergenerational dimension. With more than two-thirds of its population under 25 years of age, sub-Saharan Africa is already the youngest region in the world. And this 'youth bulge' is increasing at an alarming rate – by 2045, 40 per cent of the population will be between 15 and 24 years old. Across the continent, these young people are being excluded from the formal economy. Literacy rates in Africa are rising rapidly and will be on a par with those of India within a decade. But even those who succeed within the education system have little prospect of employment. This is leading to a dangerous clash between expectations and reality. Young Africans are all too aware of how their counterparts on other continents are living,

economic integration. It will have a strong focus on education and training, to enable young Africans to acquire the skills they need for the labour market. It will intensify efforts to build more effective African states, capable of promoting private-sector-led growth and providing basic services to their populations. It will work with its member states to mobilise new sources of development finance, including through more effective revenue raising and public-private partnerships.

A continent rich in natural resources

A key issue will be the management of natural resource revenues. Africa is the most resource-rich continent on the planet, and many African countries will have new sources of natural wealth opening up in the coming years. This is a key opportunity for Africa to bridge the development gap. But natural resources can also drive corruption and conflict. A key priority, therefore, is to help put in place effective governance arrangements, such as sovereign wealth funds, to ensure that natural resource revenues are a blessing, rather than a curse.

Climate change is a key concern for Africa, which is disproportionately vulnerable to its effects. Climate change has the potential to slow down or even reverse the course of Africa's development. The African Development Bank has been working hard in international forums, including the United Nations Climate Change Conference in Durban in 2011, to mobilise the funding Africa needs for adaptation.

So far, Africa has been poorly served by existing financing mechanisms, receiving only 12 per cent of all global climate funds disbursed over the past four years. At the request of African countries, the bank established the Africa Green Fund to help promote a climate-resilient and low-carbon growth path for the continent.

However, the exclusion of agriculture and food security from international debates on climate change has been disappointing. With 70 per cent of Africans dependent on small-scale agriculture, food security must be a central issue in future policy debates.

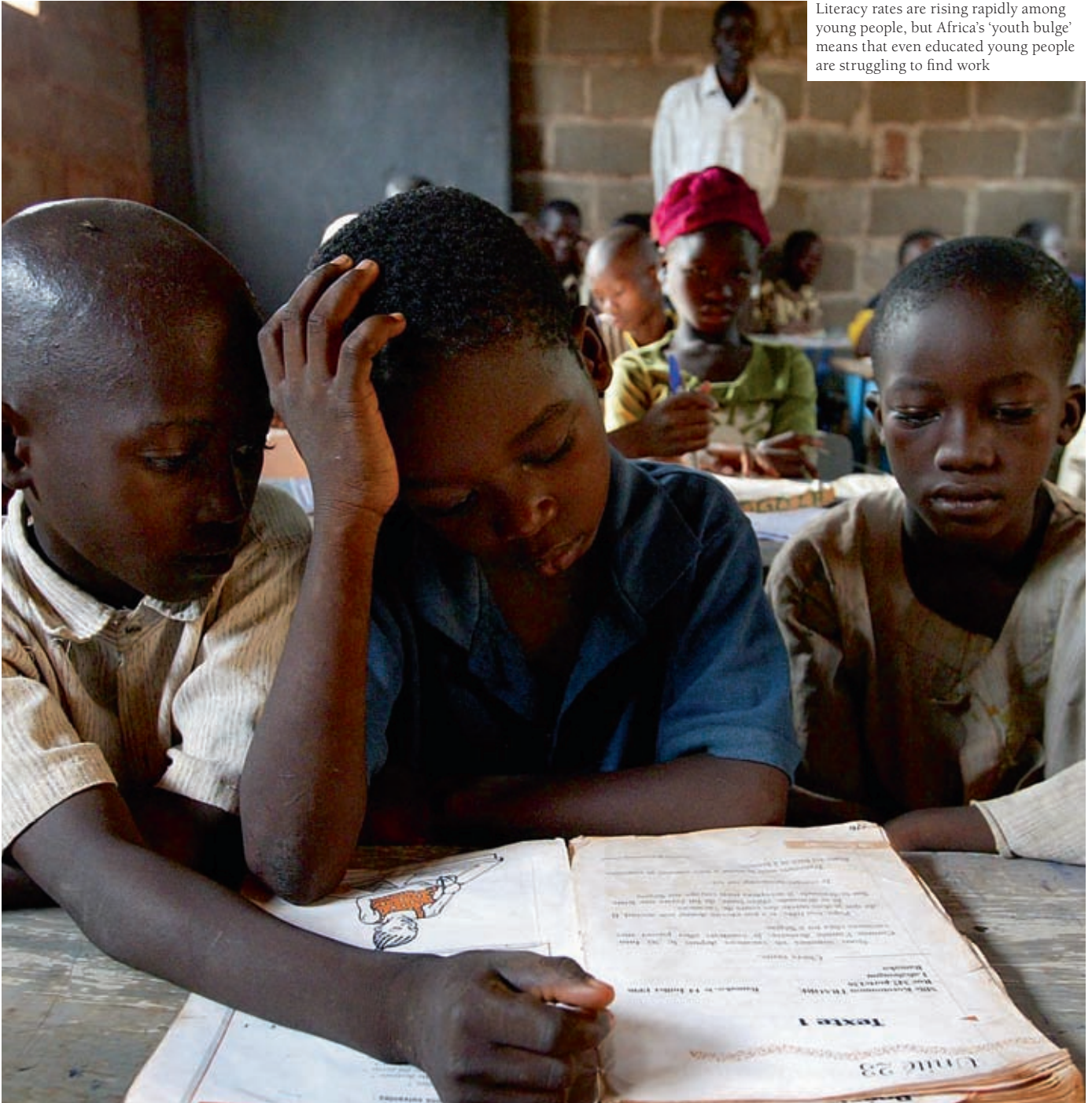
Africa will continue to rely on its international partnerships – both traditional

The cornerstone of the African Development Bank's strategy is promoting inclusive growth. Strong, broad-based and equitable growth is required to lift more Africans out of poverty

leading to political pressures that Africa's young democracies may struggle to contain.

For all these reasons, the cornerstone of the strategy of the African Development Bank is to promote inclusive growth. Strong, broad-based and equitable growth is required to lift more Africans out of poverty. To this end, the bank will continue to leverage its strong relationship with international financial markets to mobilise development resources for Africa. The lion's share of these resources will go towards infrastructure development, to boost rural productivity and allow rural areas to benefit from growth in the urban centres. The bank will help to build up the hard and soft infrastructure needed for regional

Literacy rates are rising rapidly among young people, but Africa's 'youth bulge' means that even educated young people are struggling to find work



donors and new partners – to meet its development challenges. It remains highly vulnerable to the effects of global economic crises. Every one per cent drop in economic growth in the countries that belong to the Organisation for Economic Co-operation and Development (OECD) translates into a 10 per cent decrease in demand for Africa's exports. Europe's financial woes may also drive up the cost of borrowing, creating difficulties for emerging market countries such as South Africa and Egypt.

The first concern, therefore for the G8's Camp David Summit is a resolution to the European financial crisis. The world is

looking to European leaders to make a clear political commitment to helping the countries that are struggling with sovereign debt and to safeguarding the stability of the eurozone as a whole.

There have been too many half measures and not enough decisive action in Europe. While the worst-affected countries need to tighten their fiscal position, leading European economies such as Germany should refrain from following suit, focusing instead on growth and the creation of jobs.

The African Development Bank would also like the leaders of the BRICS countries (Brazil, Russia, India, China and South Africa)

to accept their share of responsibility to match their increasing presence in the global economic arena. Their fortunes are tied so closely to those of the OECD countries that they will need to work together to address global economic challenges.

They must intensify their engagement in Africa, in particular by continuing to expand their investments. This is an excellent moment for investing some of the currency resources they have built up over the years.

Finally, all sides must resist the temptation to slide back into protectionism. This is, in fact, also an excellent moment to press ahead with measures to further liberalise trade. ■



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Surety bonds are risk transfer instruments that protect construction buyers from the risk of contractor default. They are used to protect dollars carefully allocated to build and improve infrastructure and other public works, providing the best protection to governments, taxpayers and private investors. Surety bonds are preferred by contractors around the world and less expensive than other security.

Bid bonds protect against abnormally low bids and ensure that the contractor will enter into the contract and provide the required performance bond. Performance bonds ensure against financial loss if the contractor fails to complete the contract in accordance with its terms.

Whether the project is a standard public works project or a public-private partnership (P3), an entity that requires surety bonds gets both an independent analysis of the contractor and a guaranty of performance from a well regulated, well financed company. Surety bonds can be required for the entire project or only the construction piece.

Performance bonds come in many shapes and sizes. Each country has its own surety bonding practices and forms. In each instance, the owner receives the same benefits: prequalification and protection.

Prequalification – intensive, comprehensive and ongoing

Sureties use sophisticated credit modelling systems in their underwriting and risk assessment. They conduct detailed analysis of interrelated factors before deciding whether to extend surety support.

- **Intensive:** Surety companies conduct in-depth examination of a contractor's operation: financial, work programme, experience, performance history and succession plans;
- **Comprehensive:** A surety examines the entire organisation. This includes reviews of related companies, joint ventures and properties of the shareholders. This often allows the surety to become aware of problems beyond the contractor and invisible to the public entity and other construction purchasers;
- **Ongoing:** A surety company does not base its decisions on an 'operational snapshot' taken annually. It monitors a contractor's progress throughout the year, not on one job but on all work. A surety often will learn about potential problems and be able to prevent any impact on a project.

Protection – what if there is a default?

If the contractor does run into problems on the project, often the surety will assist its contractor to prevent default. If default occurs, the surety works with the owner to determine the best way to keep the project moving – perhaps a completing contractor, financing the current contractor, paying the owner, or other options.

In construction, time is money. Having a surety bond where the surety can investigate and quickly handle the default, and keep the project moving, is in the best interest of all parties. The government wants a new road available to



the public and subcontractors and suppliers paid. Any other form of security is insufficient.

The International Chamber of Commerce Uniform Rules for Contract Bonds & Model Forms provide guidance and forms to be used worldwide to guarantee projects are completed in accordance with the contract and claims are handled expeditiously. The United Nations Commission on International Trade Law (UNCITRAL) has endorsed those rules.

If the contractor runs into problems, often the surety will assist to prevent default. If default occurs, the surety works with the owner to keep the project moving

In 2000, UNCITRAL adopted the Legislative Guide on Privately Financed Projects and, in 2003, adopted Model Legislative Provisions on Privately Financed Infrastructure Projects (Official Records A/58/17). These documents include provisions recommending and explaining performance guarantees. While governments sometimes need or choose the participation of private entities to finance infrastructure or other public projects, they also continue to need the protection provided by surety bonds. Surety bonds can play a vital role in ensuring that these projects are completed on time, without the need for additional funding.

Protect your project; protect yourself. Require surety bonds. For more information, go to www.sio.org or www.suretyinternational.org

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Fostering growth through innovation

The OECD's innovation and green growth strategies are helping countries to boost innovation, build a sustainable recovery and move on to the next phase

By Angel Gurría, secretary-general, Organisation for Economic Co-operation and Development (OECD)

“Times of innovation... are times of effort and sacrifice, of work for the future, while the harvest comes after.

The harvest is gathered under recessive symptoms and with more anxiety than rejoicing.” (Joseph Schumpeter, *Business Cycles: a Theoretical, Historical, and Statistical Analysis of the Capitalist Process*)

This appraisal, by one of the 20th century's greatest economists, of the circumstances under which innovation is taking place – albeit perhaps excessively dark and disenchanted – captures the essence of innovation. It is ‘a work for the future’, a driving force behind economic activities and welfare creation. For this very reason, the release in May 2010 of the Innovation Strategy of the Organisation for Economic Co-operation and Development (OECD), mandated after three years of hard work, was an important landmark. The OECD was proud to present a policy tool that would help countries bolster innovation, build a sustainable and jobs-rich recovery, and move on to the next phase of human progress: the era of green growth. Building on this momentum, the OECD Green Growth Strategy was unveiled one year later. This was a major and complementary contribution, as it addressed the specific global challenges that arise from a transition to a low-carbon economy, and from green innovation in particular.

Rebooting the growth model

OECD countries are at a critical economic and social juncture. Most of the fiscal and monetary levers available to revive the economy have been exhausted, and the scars of the crisis – starting with unemployment and inequalities – are still deep and fresh.

In this context, governments have no choice but to swiftly implement far-reaching structural reforms to support growth. Governments also need to uphold political and social stability by doing everything possible to bring down record unemployment and to reduce inequalities. But no one can afford to reignite growth at any price. Industrial reactivation must be compatible with the reduction of carbon dioxide emissions and a transition to low-carbon economic development. Governments are facing the daunting challenge of going structural, going social and going green simultaneously.

This imperative makes the case for a more intelligent type of growth, one that is welfare-enhancing, inclusive and sustainable, driven by new ideas, new technologies, new entrepreneurs, new business models and new social organisations. The world economy needs traditional ‘Schumpeterian’ innovation, as well as social innovation.

Securing strong, fair and clean growth

The OECD has launched an initiative on ‘New Sources of Growth’ to improve the measurement of intangible assets and to analyse their contribution to growth and their relationship to new business models. Investment in intangible assets, such as computerised information, intellectual property or economic competencies, offers a promising avenue forward. Research shows rapid expansion of investment in intangible assets by companies in the United States, Japan and Europe, with significant impacts on productivity. Such investment accounted for up to one percentage point – around one-quarter – of labour productivity growth in Austria, Finland, Sweden, the United Kingdom and the US between 1995 and 2006. Innovation can thus be a powerful instrument to restore the growth potential of OECD

economies, which has been seriously dented by the crisis. According to OECD estimates, the potential output of G7 countries may have been reduced substantially.

Innovation is also critical in moving towards greener growth and meeting today's social challenges. Green growth requires radical changes in the way people produce and consume. Beyond individual technological innovations, such as the development of renewable energy technologies, a systemic approach is needed. In the case of energy management, green growth requires wholesale changes in the way energy is produced and distributed and transportation networks are organised. In other words, system innovation is required.

Another area that poses new challenges is demographic shifts and population ageing. Developments in nanotechnology

Green growth needs wholesale changes in the way energy is produced and distributed

and biomedicine have the potential to stimulate significant waves of innovation in treating chronic conditions associated with ageing. Innovations are also needed for greater efficiencies in the provision of health and social services, while information and communications technologies play an important role in helping elderly individuals improve their quality of life, live longer and independently, and counteract the lowering of physical capabilities that comes with old age.

Rethinking innovation policies

To turn innovation into a catalyst for strong, green and inclusive growth, a better understanding of its nature and functioning is needed – who the actors are in innovation, what it consists of, where it occurs, and how it is performed. In addition, policies to nurture and guide innovation must be rethought.

One way is to reconsider the role of universities and public research organisations in today's economies. As essential nodes in the innovation system, they should be granted more autonomy and independence,



and encouraged to compete to become catalysts for world-class innovation.

Entrepreneurship must be promoted, and the creativity of young innovative companies supported. These so-called 'gazelles' tend to be the source of radically new 'disruptive innovations', but can generate large productivity and employment gains. According to new data from the US, companies under five years old accounted for almost all job growth in the private business sector over the past 25 years.

Usually, innovation comes about through interactions among these actors,

underpinned by venture capital and incubators. Therefore, innovation should be considered an ecosystem: innovation policies must have a broader view than simply supporting science and technology. Countries need holistic government innovation strategies capable of aligning the different ministries, policies and reforms around a nationwide 'innovation crusade'.

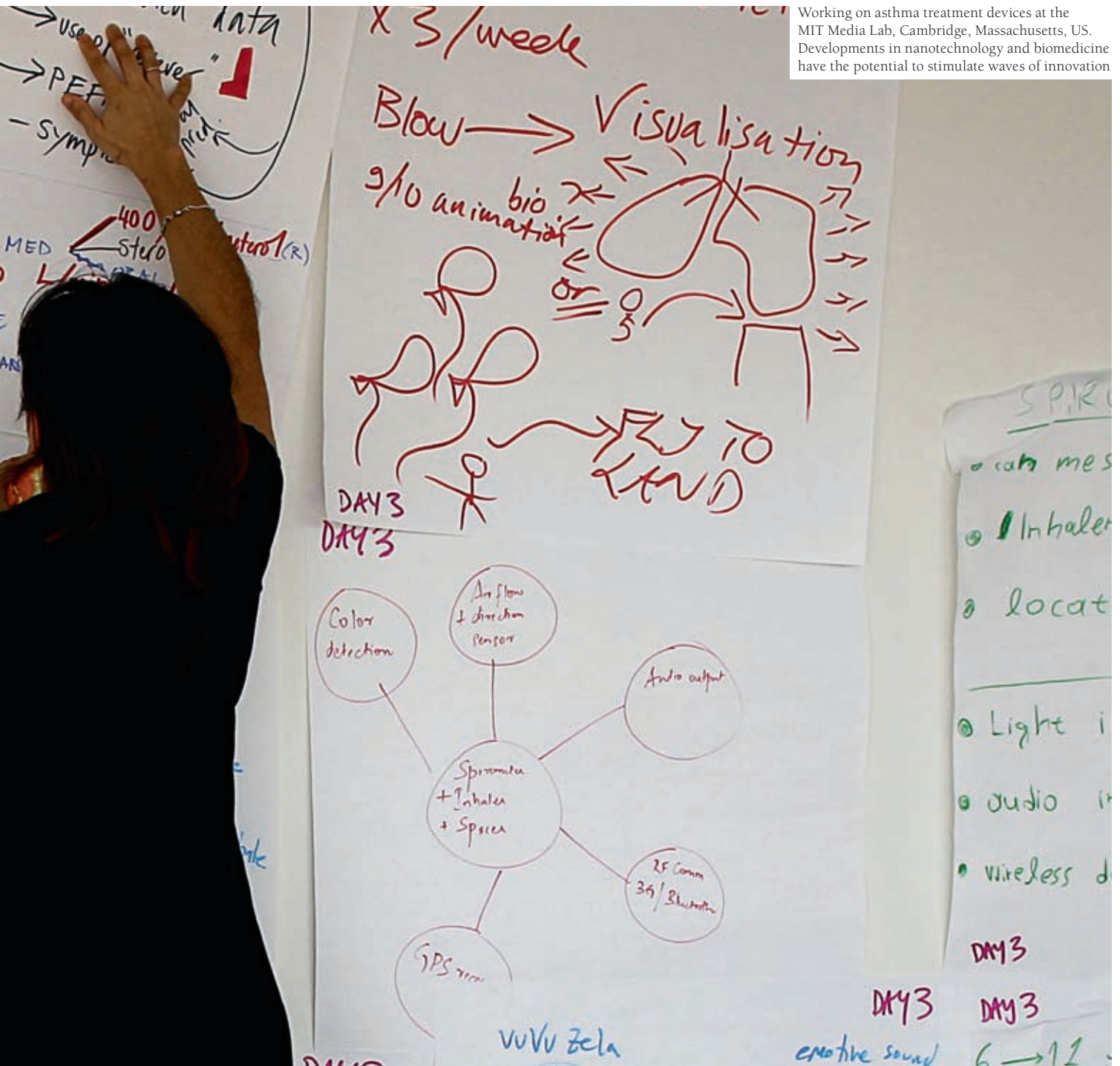
Addressing social challenges through innovation also requires a system much more open and receptive to social influences. There is a need for greater involvement of stakeholders – social entrepreneurs, non-profit

foundations and patient groups, to name a few – in the development of science, technology and innovation policies.

Enhancing international cooperation

To address these global challenges, scientific and technological progress must gain speed. While strong innovation at the national level is key, there is also an urgent need to address these common challenges collectively through international cooperation. However, existing policy frameworks and governance mechanisms for international cooperation fall short of adequately supporting broad-based

Working on asthma treatment devices at the MIT Media Lab, Cambridge, Massachusetts, US. Developments in nanotechnology and biomedicine have the potential to stimulate waves of innovation



collaborative action at the scale and intensity required to tackle global challenges.

While public policies aimed at fostering innovation must be rethought, international cooperation needs to be enhanced. Indeed, such coordination can help to share the costs of public investment, and can also help to improve access to knowledge and foster the transfer of technology across countries. This issue is particularly important for developing countries.

To make international cooperation effective, the governance structure must be that of a 'learning system' tailored to the needs of a

specific collaboration, with room for active and responsive adaptation. It must establish and maintain linkages among local, regional, national and international levels to avoid duplication and foster transparency among stakeholders. Outreach from the research community to other stakeholders should be a priority. Knowledge-sharing and intellectual property provisions should be adapted to each phase of the innovation life cycle. Funding and spending mechanisms should contain contingency provisions and a means of guaranteeing appropriate financing for multi-year research projects. For most global

challenges, research contributions are needed from a wide array of countries, at all levels of science and technology capacities. Additionally, capacity-building should be an element of joint efforts to address these challenges.

The leaders of the G8 countries play a crucial role. They can emphasise that international cooperation is necessary to promote innovation, and lead by example on information-sharing, for instance, in the realm of green growth innovation. In other words, the G8 leaders have a responsibility to pave the way for international cooperation for innovation. ■

Entering the 'Human Age': skills, innovation and productivity as key drivers of job growth



**David Arkless, President –
Corporate and Government Affairs,
ManpowerGroup**

The inescapable pressure to do more with less during the global recession has awakened employers to the true power of human potential. Unleashing that potential is the ultimate measure of success for organisations and individuals alike, now that the world has entered the 'Human Age'. The need, indeed the opportunity, has rarely been greater for government and business leaders to work together in order to meet the unique challenges presented by this new era.

The economic crisis that began in 2007 has fundamentally changed the employment landscape forever. Consequently, reviving job growth is an immediate challenge for countries around the world. With the private sector being the main generator of job growth in the years ahead, companies need to be agile and flexible enough to adapt to the unprecedented changes facing them, from increased competition and demographic shifts, to rapid technological advancements.

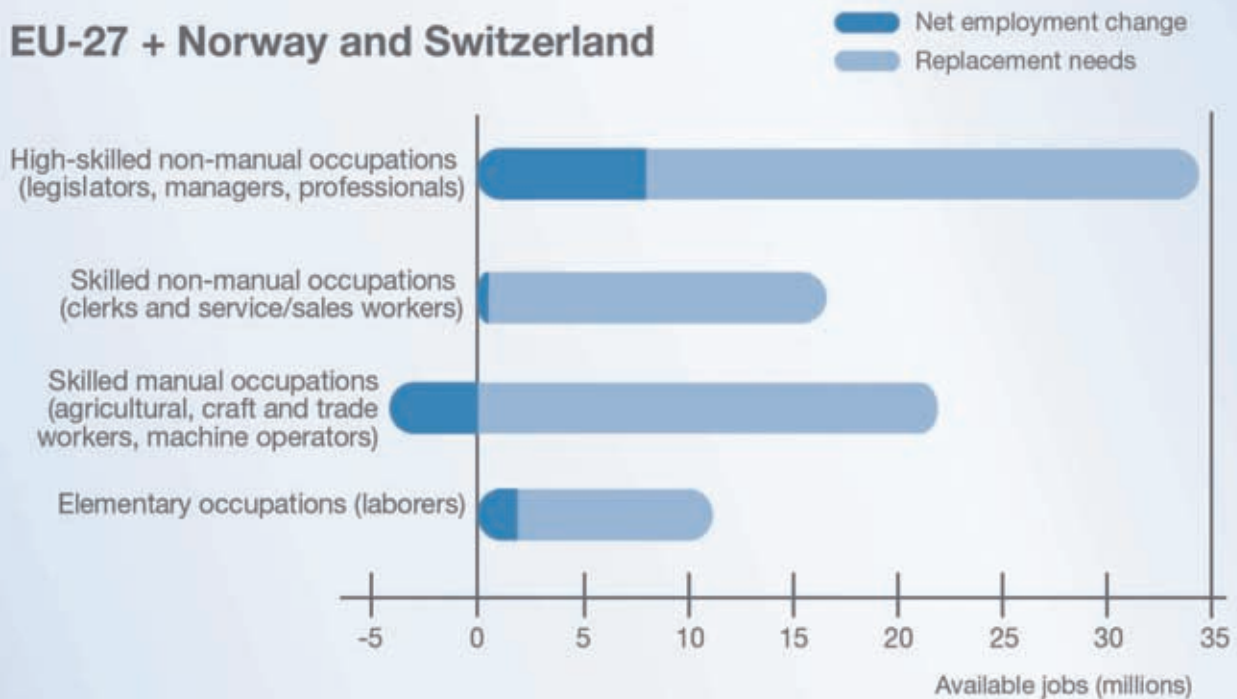
Ironically, however, just as talent and skills could not be more important, they are no longer available in either the right quantity and quality. This explains the apparent paradox of high levels of unemployment juxtaposed with so many unfilled job vacancies. Indeed, one-in-three employers worldwide is unable to fill key positions, according to ManpowerGroup's sixth annual *Talent Shortage Survey*¹. These results suggest that the talent mismatch – the inability to find the right skills in the right

Chart 1: Skills Mismatches Increasing in Many Major Economies



Chart 2: EU Projects Skills Shortages Will Not Be Confined to High-Skilled Occupations

EU-27 + Norway and Switzerland



place at the right time – is a growing threat to all employers (see Chart 1, opposite). Some 52 percent of employers in the US are currently struggling to fill mission-critical jobs, while 40 per cent of German employers have been reporting similar frustrations.

Simultaneously, employers are seeking evermore specific skill sets and combinations of skills – not just technical capabilities alone, but in combination with critical thinking skills or other qualities that are needed to help drive the organisation forward.

As one EU projection illustrates (in Chart 2, above), the lack of available talent will not be confined only to high-skilled occupations (such as managers and professionals)², but also to skilled non-manual occupations (clerks and service/sales workers) and skilled manual occupations (agricultural, craft and trade workers, and machine operators).

In the emerging power centres across the world, job growth is not such an immediate problem per se. Yet, by probing beneath the surface, it is apparent there are forces at work threatening job growth. Strong growth centred on the developing economies has meant that demand for specific skills and behaviours far outstrips supply and training capacity. Sourcing highly skilled individuals is becoming increasingly difficult, creating a mismatch between the talent that is available and the talent needed by employers.

An era of unparalleled talent scarcity, ageing workforces, outdated education systems and skills mismatches is, at the same time, an era in which human potential itself will be the catalyst for change, as well as the global driving force economically, politically and socially. If left unaddressed, talent scarcity will put a brake on economic and business growth and job creation.

For companies to succeed in the ‘Human Age’, their ability to harness human potential will be the most important determinant of future business success and growth. Essentially, this requires business and government leaders to re-examine how they unleash human potential in an increasingly volatile and complex world.

There are, therefore, three focuses for businesses: first, to ensure they have a talent strategy in place that is aligned with business strategy; second to attract and retain talent; third, to help their people reach their potential to ensure individual fulfilment that ultimately leads to business success.

Companies must become more agile in how they attract, train and develop their employees, rethinking their people practices and work models, to ensure they have the best environment to unlock the creativity, innovation, empathy, passion and intellectual curiosity that is at the heart of what it means to be human.

Employers facing ongoing, systemic talent shortages must alter their mindsets to consider candidates who, although they may not meet all of the job specifications, can be trained to do so in a timely and cost-effective way. Training is vital. A commitment to reskilling and upskilling employees, new hires and even candidates will become a key step in building a skills strategy that not only keeps up with business strategy, but accelerates it.

Such a commitment will expand the available pools of talent, create jobs and ensure their workforces continue to be appropriately skilled, and keep employees engaged in their work. It is a worthy agenda for leaders of business and government to work together and to ensure continued economic growth.

1. 2011 Talent Shortage Survey, ManpowerGroup, May 2011
2. EU Job Opportunities by Occupational Groups, 2010-20



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The G8's strategy for global economic growth

The leaders of the world's leading economies will be coming together to discuss policy initiatives to tackle concerns as varied as government debt, rising unemployment and the price of crude oil

By Robert Fauver, former G7/G8 sherpa, United States

Continuing in what appears to be something of an unfortunate tradition, the G8 is meeting at a time of uncertainty in the economic outlook for the industrial countries and, indeed, for the world economy as a whole. The outlook for real growth in the industrial world has weakened over the past six months – particularly during the early months of 2012 – due to several different factors.

The first is the continued uncertainty in financial markets about the ability of the European Union to fund the Greek debt crisis sufficiently; and the second is continued uncertainty over the effects of the adjustment efforts inside Europe on the EU's real economies. Furthermore, markets continue to be troubled by the inability of the United States administration and Congress to address the large and continuing budget deficit as well as the rising level of national debt as a share of gross domestic product (GDP).

In addition to a slowdown in the industrial world – and a possible return to recession in Europe, since most analysts believe the eurozone experienced negative real growth in the first quarter of 2012 – real growth in the emerging market and developing economies is slowing significantly. While their real growth will be in excess of five per cent, they are accustomed to stronger real growth rates.

In the largest of the emerging market economies – India and China – growth

is likely to be around eight per cent, substantially slower than the double-digit growth rates of recent years. Part of this slowdown is the result of policy action in China leading to a shift from export-led growth towards more domestically generated demand. But it is also a direct result of the industrial world slowdown in real growth and its related effects on the demand for exports from the emerging economies.

Stubbornly high unemployment levels, both in Europe and the US, plague government officials. In Europe, the unemployment rate rose to 10.8 per cent from 10.7 per cent in January – and was the highest since June 1997. More troubling was the continued rise in youth unemployment, which exceeded 21 per cent, reaching 50 per cent in Spain. In comparison, in the US the youth unemployment rate is roughly 16.5 per cent. Clearly the G8 leaders at the Camp David Summit will discuss various methods and policies aimed at reducing this major problem.

Finding a common strategy

It is imperative for the G8 to focus on designing a strategy for addressing the real growth and unemployment problems. It is time to determine shared and complementary responsibilities for restoring sustained real growth in the G8's national economies. Of critical importance is restoring both financial market and consumer confidence in the determination of governments to reduce national debt burdens.

The leaders must agree to a joint and coordinated strategy for reducing government deficits and debt in order to restore confidence to the markets. But the strategy must focus on the medium term, and not simply the short term. Consistent year-by-year reductions in government spending need to be coupled with enhanced tax revenues approaches in order to



display a serious commitment to deficit and debt reduction. Should governments fail to devise a confidence-building strategy, then financial markets are likely to again threaten the financial system and the possibility of a renewed deep recession will return. In the absence of a publicised shared strategy, G8 leaders will continue to face very sceptical markets and continued turmoil.

But the leaders need to announce policies that go beyond the national debt issues. They must address the structural problems in each of their countries that have prevented labour markets from functioning efficiently.

Rigidities in hiring and firing practices, social safety nets and long-term unemployment support are among the issues to be looked at. Without removing these structural problems, whatever recovery finally comes on stream will not be very effective in reducing unacceptably high unemployment rates, especially among young people.

It is imperative for the G8 to focus on designing a strategy for addressing the real growth and unemployment problems



China's growth is set to slow as the country's government pushes for more domestically generated demand and the global slowdown affects its economy

Another issue that demands attention is energy policy. Recent increases in crude oil prices have hurt the recovery process across the industrial world. Most analysts believe that a major portion of the crude oil price rise has been due to speculation in future markets. Concern about the confrontation between Iran and the West has led to speculation that crude oil prices will increase even further.

In the United States, the administration's decision to prevent the Keystone oil pipeline from Canada being built has added to the concern of US oil investors. In addition, China's rise to become a major importer of crude and refined oil has added demand to global markets, despite the drop-off in demand in Europe and the United States.

A joint approach to energy issues

The G8 leaders may decide to pursue a joint strategy of releasing national strategic oil reserves as a political effort to reduce the price

of oil and gasoline. But most analysts have argued historically that strategic oil-reserve releases only affect markets in the short run, and then are most effective in the case of a major supply interruption – which is not the current case. Thus, the leaders need to develop a longer-term joint strategy for addressing the volatility in oil markets.

They might focus on policy initiatives aimed at limiting speculation by raising margin requirements or limiting access to the futures market to firms, such as oil companies and airlines, with legitimate demands for assuring the future price of oil. Leaders could also add their support to new exploration and production of oil and gas resources in the G8 members themselves .

In terms of the G8 countries themselves, the outlook calls for a differentiated, but coordinated, strategy. The US needs to engage in deficit reduction that extends over the medium term and addresses rising entitlement

programmes. Canada, however, has made impressive progress in reducing its federal budget deficit over the past decade or so and has substantial room for a temporary increase in the federal deficit to stimulate demand. But as authorities design a stimulus plan, care must also be taken to prevent a loss of public confidence that has been well earned.

For Europe, the most two most important issues are confidence in the mid-term strategy of budget and debt reduction and restoring employment growth. Both require spending restraint and enhanced revenue programmes that do not hinder investment plans. Japan needs to focus on its budget deficit and enhancing tax revenues. An increase in the consumption tax is required.

Most importantly, at the Camp David Summit the G8 leaders need to restore the confidence of consumers and investors, who must believe that serious policy adjustments are being undertaken. ■

Toward a balanced global economy... in 2020

The US, the euro area and China each have a responsibility to redress the asymmetry of the global economy to prevent a rerun of the 2008 crisis



By Eric Chaney,
Chief economist, AXA

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Is the world safer now than it was when the worldwide financial crisis wreaked havoc on the global economy back in 2008? It is hard to say. A lot has been done: policymakers, regulators and supervisors have undertaken in-depth reforms with regard to the regulation of financial companies and financial markets. *Macro-prudential regulation*, a term which, not that long ago, was familiar only to a small number of academics, has since become a buzzword in policymaking circles.

On the positive side, financial regulation and political efforts to reshape growth models, that, for example, seek to encourage higher savings in the United States and strengthen consumer demand in China, should be acknowledged. Equally, the acid test of the twin sovereign and banking crises in the euro area has forced European leaders to embrace ambitious reform agendas for their own economies and to reinforce the governance of the euro.

Yet, the fruits born from these politically and socially costly reform efforts could prove more sour than sweet if the asymmetry of the global monetary system is not addressed. Why? Because this asymmetry is the very source of global imbalances that underpinned the excesses of the previous cycle. If policymakers continue to overlook this critical dimension, the global recovery might turn into a sequence of stop-and-go cycles fuelled by otherwise well-intentioned macroeconomic policies. The US, the euro area and China each have a role to play to reduce this asymmetry and, ultimately, reach a more stable equilibrium.

Setting the scene: heads I win, tails you lose

More than half of the global economy is, directly or indirectly, influenced by US monetary policy. A large part of continental Asia, Latin America and the Middle East belongs to a de facto dollar zone. *Nolens volens*, these economies are importing key features of their monetary policy stance from the US Federal Reserve which is, of course, driven by domestic considerations.

The painful deleveraging process of the US consumer sector, likely followed by an equally painful deleveraging by the government, will weigh on domestic demand for an extended period of time. Consequently, the Federal Reserve is likely to maintain an expansionary monetary policy for many years: emerging economies importing this monetary policy are more likely to overheat. Since these economies are commodity-hungry, the unwanted monetary transmission will, in all likelihood,

fuel large increases in commodity prices, which, in turn, may cause further global downturns in the future.

Note that the opposite would happen if the US, for any reason, were overheating: the transmission of her monetary policy to a large part of the world would artificially depress global demand. In short, the asymmetry of the global monetary system is a permanent source of macroeconomic instability.

How to reduce the structural instability of the global economy?

First, it would be a huge step forwards if world political leaders were to face reality and acknowledge that the asymmetry of the global monetary system is a permanent source of risk.

The next logical step would be enhanced cooperation between the most influential banks of the world – the US Federal Reserve, the European Central Bank, the People's Bank of China, the Bank of Japan and the Bank of England. This could reduce global volatility by identifying and evaluating global inflation and deflation risks before they actually came to life.

There is, by definition, a limit to monetary cooperation: central banks must fulfil their essentially domestic mission and maintain their independence. Yet, the global nature taken on by inflation¹ cannot be tossed aside. Because inflation is more global than local, central banks in charge of domestic price stability would indeed take advantage of this enhanced cooperation. One might object that they are already cooperating under the umbrella of the Bank of International Settlements. Yet, the previous cycle saw the building of the largest global credit bubble ever², despite stark warnings from the BIS itself³.

Let us face it: the reluctance of central banks to coordinate their monetary policies was and remains a counterproductive attitude. A recommendation to consider global inflation or deflation factors under the auspices of the BIS, if coming from the highest political level, would do no harm.

Although useful, these two steps would only begin to scratch the surface of what is actually quite an in-depth, firmly grounded issue; namely, the asymmetry of a US dollar-based global monetary system. Only a long-term vision shared by the leaders of the three largest economic regions could restore equilibrium in the global economy. While moving towards a more balanced global monetary architecture would benefit all, each of the leading economies – the US, the euro area and China, would be obliged to make concessions.

Euro area – issuing Eurobonds

The most decisive contribution of the euro area to global stability should be to restore its own long-term sustainability. Making the code of good fiscal conduct more credible and setting up a permanent emergency fund are critical, albeit insufficient, steps in that direction.

There is indeed a more subtle point: one of the main reasons the global monetary system is largely anchored to the US dollar is the prominent role played by US Treasury

bonds. Export-orientated emerging economies need to invest their rapidly growing foreign exchange reserves in safe and liquid assets. Aside from US Treasuries, the global supply of such assets is scarce⁴. Therefore, emerging economies are naturally attracted to the de facto US dollar zone. Thanks to its size, the euro area should be the second natural supplier of safe and liquid government bonds. It is not because its sovereign markets are fragmented. Worse, the euro crisis has stripped almost all euro government bonds – except those of the Germans – of their ‘risk-free asset’ status.

It is, therefore, urgent for the most fiscally responsible euro area countries to reintroduce risk-free assets by issuing joint Eurobonds⁵. By doing so, they would kill two birds with one stone: they would restore the stability of the euro financial system and create a second pool of safe and liquid assets. As always, there is a flip side: if these bonds are to be made as safe as German Bunds are today, participants in the Eurobond system would need to concede more of their fiscal sovereignty.

China – moving towards convertibility

China has a growing responsibility in the global financial system, not only because of its size and its fast growth rate, but also because it is becoming a financial giant. Yet, it has not yet built the financial markets that its extraordinary development would require to make it sustainable. Indeed, as the Chinese economy becomes ever more complex and driven by decisions taken by private economic agents, be they consumers or entrepreneurs, its policymakers need the full spectrum of economic policy instruments.

Currently, Chinese monetary policy is mostly based on non-monetary instruments, such as official deposit/lending rates or reserve requirement ratios imposed on commercial banks. These relatively coarse instruments will prove more and more inefficient, in comparison with a full-fledged monetary policy based on interest rate settings through open-market operations. Yet, to get there, China will need to strengthen its capital markets, especially for debt instruments, and eventually open its capital account and make its currency fully convertible. In doing so, China would progressively become the third supplier of safe and liquid assets, which undoubtedly would quickly become very popular among the central banks of China’s main trading partners in Asia and beyond. Just like for Europe, China would kill two birds with one stone: making its own economy more robust and contributing to global financial stability.

US – doing nothing but accept a partial loss of seigniorage

The paradox here is that the US does not need to do much to help the world becoming a safer place, provided that the euro area and China do their homework. So long as US policymakers focus on keeping their own economy on an even keel, they will provide the global economy with its most valuable jewel: an open, innovative and prosperous leading economy.

Yet, the issuance of Eurobonds and the internationalisation of Chinese government debt would come at a cost to the US economy. Researchers at the Universities of Berkeley and Princeton⁶ have calculated that US foreign investments generated an average annual excess return of 2.1 per cent in comparison with investments by foreigners in the US during the period 1952-2004. Since 1973 and the collapse of the Bretton Woods monetary system, this ‘exorbitant privilege’ has averaged 3.3 per cent, allowing the US to finance its current account deficit on the cheap side. The reason for this asymmetry, also known as the seigniorage power of the US dollar, is precisely that foreign investors, such as central banks, are chasing safe



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and liquid assets, such as US Treasury bills, at the expense of yields. If these institutional investors had access to a wider supply of international safe and liquid assets, such as Eurobonds and Chinese sovereign debt, the share of US Treasuries in their portfolios would decline, thus reducing the excess return of US foreign assets versus external liabilities and eventually raising long-term US interest rates. It should be noted that these kinds of tectonic changes would occur only incrementally and over an extended period of time.

At this juncture, China cannot open its capital account because its domestic capital markets are not yet robust enough, the euro area cannot issue Eurobonds because governance issues are still being hotly debated, and the US cannot afford a significant rise in long-term interest rates. Should we conclude that the path towards a safer world is impracticable? Not if there is a clear long-term vision shared by world leaders.

Building a more balanced global monetary order, based on three, not one, main currency areas by 2020 is achievable. The financial markets would certainly reward such vision.

Footnotes

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- 5 Since the word ‘eurobond’ seems to have become deeply unpopular in euro area countries, generating large current account surpluses, euro area leaders may opt for ‘Euro redemption bonds’, as proposed by the German Council of Economic Experts
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America forges ahead in the new global economy

The world's largest economy is growing again as cyclical sectors recover, debts fall and technological innovation boosts domestic energy production

By David Hale, chair, David Hale Global Economics, and co-editor of *What's Next? Unconventional Wisdom on the Future of the World Economy*

The US economy is again the G7 growth locomotive. It grew at a 3.0 per cent annual rate during the fourth quarter of 2011 and is likely to expand by 2.5-3.0 per cent during 2012. Europe is experiencing a recession. Japan's earthquake reconstruction should produce a growth rate in the range of 1.5 per cent to 2.0 per cent. As a result of the US upturn, Canada should also have a growth rate of 2.5 per cent or more.

Five factors are driving the improvement in the US economy:

First, some of the economy's most cyclical sectors, such as housing and commercial real-estate construction, are just starting to recover. They lost two million jobs during the recession and could create several hundred thousand jobs if their recovery is sustained.

Second, the US Federal Reserve is pursuing a highly accommodative monetary policy. It has pledged to keep short-term lending rates close to zero until 2014. It is redeploying its portfolio of treasury securities, from short maturity instruments to long-term bonds.

Recovery in corporate profits

The next factor is that the corporate sector has enjoyed a dramatic recovery in profits since 2009. The profit share of gross domestic product (GDP) is at a 60-year high and corporations now have \$2.2 trillion of excess cash on their balance sheets.

The robust growth of profits has encouraged business spending on new equipment, but the ratio of investment to cash flow is still only 87 per cent, so there is ample potential for further growth. The ratio of capital spending to cash flow before the 2008 recession was 130 per cent.

Fourth, the household sector has been deleveraging. It has reduced its debt by more than \$1 trillion. The low level of interest rates,

coupled with this deleveraging, has reduced household interest payments by \$270 billion from the 2007 peak. The household debt servicing ratio has fallen to 5.8 per cent from more than 9.0 per cent five years ago. The decline in interest payments has freed up more income for consumption.

Finally, there has been a major recovery in the banking sector. During 2007 and 2008, US banks lost more than \$1 trillion. They are now earning just under one per cent on their assets and have boosted their equity-to-asset ratio above 11 per cent from just over 9.0 per cent three years ago.

Their profits in 2011 were \$119.5 billion, compared to a previous peak of \$145.2 billion,

The coming changes in North American energy output will have profound geopolitical consequences. The US will no longer need to import oil

in 2006. The recovery in bank profitability has led to a relaxation of lending standards for households and business.

The weakest sector of the US economy continues to be state and local governments, which have lost nearly 650,000 jobs since 2008. They received a great deal of federal assistance during 2009, 2010 and early 2011, but these funds have now largely run out. As these areas of the public sector will continue to run a fiscal deficit of \$49 billion this year, they will continue to trim spending.

The major short-term risk in the US economy is rising gasoline prices. They have increased by more than \$0.60 per gallon

since the December price trough, resulting in a de facto \$60 billion tax increase on the household sector. If they continue to rise, it could dampen the recovery occurring in consumer spending, as happened during the second quarter of 2011.

The intermediate-term risk in the outlook is federal fiscal policy. The income and payroll tax cuts enacted during the past two years are scheduled to expire at the end of 2012. Unless Congress acts, there could be tax hikes in early 2013 equal to 4.0 per cent of gross domestic product (GDP), which could drive the economy's growth rate back to zero. It will be unclear how Congress intends to resolve this problem until after the presidential election in November 2012.

US oil production continues to rise

The most positive new factor in the US economy is rapidly growing energy output resulting from new fracking technology. Natural gas production has increased from just over 18 trillion cubic feet in 2005 to 23 trillion cubic feet, and could rise to more than 26 trillion cubic feet by 2035.

US oil output has increased by one million barrels per day (mb/d) during the past three years, and has the potential to increase much more as a result of shale oil development.

As a result of growing oil sands output in Canada, a potential liberalisation of Mexico's oil investment policies and rising US output, Citibank estimates that total North American oil production could rise from 15.4 mb/d in 2011 to 26.6 mb/d in 2020.

The coming gains in oil production could increase US GDP by nearly 3.0 per cent and employment by 3.6 million jobs. There will also be a decline in the US current account by anywhere from 1.2 per cent to 2.4 per cent of gross domestic product. The deficit is currently 3.0 per cent of GDP.

Barack Obama had planned to boost investment in alternative energy technologies, such as solar power, but they are suffering from competition with low-cost natural gas and a surge of Chinese imports. The US recently tried to protect the domestic solar power sector by imposing tariffs on Chinese imports. China has spent billions of dollars in trying to become the dominant global supplier of solar power technology.

The coming changes in North American energy output will have profound geopolitical



The US economy experienced a return to steady growth in 2011 that is expected to continue throughout this year, despite a number of challenges on the horizon

consequences. The US will no longer need to import oil from the Middle East. The price of oil could decline despite steadily growing demand from China. There will also be great potential to increase production of shale oil in China, Argentina, South Africa and Australia.

The G8 countries will be relieved that the US economy is regaining momentum at a time when Europe is confronting recession and China is showing signs of slowing down.

It will help to offset the fiscal drag now prevalent in other G7 countries and help to sustain the growth rate of the global economy in the range of 3.0 per cent to 4.0 per cent.

The G8 should try to lessen the risk of renewed US weakness during 2013 by encouraging the Obama administration to explore alternatives to the large tax hikes that are now scheduled to occur at year end. The US is having no problem funding its budget

deficits, and significant fiscal drag in the US economy would limit the world economy's growth potential next year.

The US needs a plan to reduce its deficit in a gradual way, rather than abruptly. There have been deep partisan divisions in Washington over how the deficit should be reduced, but both political parties should be able to achieve a compromise aimed at avoiding recession during 2013. ■



Finland

Finland: During my school visits, I spoke with teachers about their preparation and ongoing support. They spoke of their strong academic program combined with extensive clinical experience and ongoing professional development. It was clear that Finland has one of the most comprehensive continuous teacher preparation programs in the world.



United States

United States: The New American Academy in Crown Heights, Brooklyn, New York, is creating a powerful, compelling model of what a public school in the new knowledge economy should be. Built on a foundation of teacher collaboration and professional reflection, the NAA is a wonderful place of learning for kids precisely because of its culture of trust and caring.



South Africa

South Africa: Many school leaders are applying improvement strategies found in high-performing countries. At Manenberg High School in the Cape flats (a partner with Artesia High School in California), school leaders work with teachers, parents and the community to place the school at the center of community activities and services. Manenberg High, which I visited last summer, is a model community school that ranks among the best in the world.



Singapore

Singapore: At an impressive vocational and technical school—The Institute of Technical Education—students not only have an opportunity to learn using the latest training equipment, they also can start their own businesses. The head of nursing training explains to me the value of the artificial patient in training healthcare technicians. It can simulate hundreds of symptoms and gives students an opportunity to apply their training in a clinical setting.



China

Shanghai: At the No.2 Middle School at East China Normal University, students showed me how they apply scientific principles in the laboratory. In this experiment, students are using mealworms to help solve one of the world's most pressing issues: how to dispose of plastic containers in an environmentally friendly way.



Canada

Ontario: Talking with education leaders, I learned that labor/management collaboration was an essential component of their successful reform efforts. Working together, labor leaders, government officials, and school administrators developed and implemented a wide-ranging strategy to improve Ontario's schools. In just 10 years, Ontario rose to the top of the PISA league tables and has one of the smallest achievement gaps in the world.

An Open Letter to the G8 Community: Opportunity Through Education



A Union of Professionals

To the G8 Community:

The global economic downturn has been long, deep and damaging. A robust recovery with broadly shared benefits is possible only if educational opportunities are available to all children and nations around the globe. Education must be part of any and all economic policies furthered by the G8 in response to economic conditions.

Education can help enhance and equalize economic opportunity for individuals. And nations that invest in developing a well-educated populace reap significant economic and societal benefits. We live in a global village in which countries' economic prospects are closely connected.

The American Federation of Teachers has done its homework and studied the education systems around the world to identify effective policies and practices. The top-performing countries on most international comparisons—Finland, Singapore and South Korea—emphasize collaboration, capacity building, teacher preparation, mentoring, and developing teachers' skills throughout their careers. Each has a well-rounded curriculum that teachers can tailor, and responsibility for student outcomes is shared. In Finland, which I recently visited, teacher training is rigorous and extensive—with carefully designed clinical experience. Teachers in these countries are esteemed; they are expected to make teaching their profession; and teachers and their unions are key partners.

High-achieving countries provide a more equitable education for all students and offset the effects of poverty through wraparound services that support students and their families. South Korea, for example, provides increased pay and smaller class sizes for special populations; and teachers working in hard-to-staff schools are given more time for collaboration.

Shanghai, which tops international comparisons, emphasizes support for struggling teachers and schools. The city pairs higher-performing schools with lower-performing schools to enhance student outcomes for all children.

Here in the United States, there are numerous effective educational programs and practices that should be replicated more widely.

- In **Cincinnati, Ohio**, every public school has been transformed into a community school where students and their families can access services such as medical and dental care, nutrition counseling and resources that help adults earn a general education diploma. High school graduation rates have soared, and the achievement gap has narrowed.
- In **New Haven, Connecticut**, the teachers union and management are working together to help teachers develop their skills throughout their careers. First-year results of the district's evaluation system, which focuses both on teacher practice and student learning, show a positive effect on teacher quality.
- In **Crown Heights, Brooklyn, New York**, not far from where I once taught, there is a powerful model of what a public school in today's knowledge economy should be. Teachers at the New American Academy start each day by meeting with colleagues for 90 minutes to reflect on the previous day's lessons, plan the day ahead and discuss individual students' needs—a practice I have observed in high-achieving countries, but one that is all too rare in the United States.

The American ideal of the belief in opportunity for all and that by working hard and being treated fairly, each generation can do better than the last has long served as a beacon for much of the world. But long-standing inequalities in America and around the world have been exposed, and the global recession has deepened the chasm. More children around the world are falling into poverty, and achievement gaps are growing between disadvantaged students and their more-advantaged peers. As the United States and our sister nations strive to stabilize our economies, we must remain focused on our education systems, for neither can be strong if the other is weak.



A handwritten signature in black ink that reads "Randi Weingarten".

Randi Weingarten
President, American Federation of Teachers

Generating green growth and jobs in G8 countries

The Camp David Summit offers an ideal opportunity for the leading economies to consider international strategies on renewable energy and sustainable jobs

By Steve Charnovitz, George Washington University Law School

The commitment in the G8's Deauville declaration for green growth should be implemented, with new measures to achieve the interconnected goals of economic growth and environmental sustainability. Sound environmental policy does not require countries to forego real economic growth – rather, the opposite is true: without proper attention to ecosystem health and environmental performance, ostensible improvements in economic growth may prove illusory or unsustainable.

A forum for international cooperation

G8 leaders at their Camp David Summit should consider several initiatives requiring international cooperation.

First, in order to head off international trade disputes and wasteful government spending, the G8 should agree to refrain from subsidies that seek to pick renewable energy technology winners. Instead, governments should pledge to ramp up and coordinate greater support for basic scientific research.

Second, if the overall Doha Development Agenda of the World Trade Organization (WTO) cannot be consummated because of political disagreements, governments should rescue Doha's environmental chapter for early implementation. Third, governments should reduce any barriers to private-sector investment in clean energy infrastructure.

Fourth, governments should introduce better labour market policies to undergird the development of more green jobs. Fifth, G8 members should call for the forthcoming United Nations Conference on Sustainable Development (Rio+20) to take definitive action to address the underperformance of current institutions of environmental governance.

Although subsidies can be an appropriate policy tool to address environmental market

failures, some G8 governments are misusing subsidies for protectionist purposes by linking the grant to a domestic content requirement. This type of subsidy violates WTO rules and prior G8 commitments against protectionism. Energy subsidies can also lead to domestic and international criticism when they are specific to a particular recipient or are awarded to fossil fuels.

Unfortunately, WTO rules on clean energy subsidies are imperfect and need refinement to take better account of the public interest in permitting appropriate subsidies and avoiding countervailing duties that add to consumer costs (such as trade remedies against solar components). One solution is

International action is needed to ascertain best practices for training workers and reducing regulatory impediments to the creation of green jobs

for G8 governments to ask the Organisation for Economic Co-operation and Development (OECD) to develop options for improving the international law of energy subsidies.

Over the past several years, WTO director general Pascal Lamy has highlighted the benefits of what he calls the 'environmental chapter' in the Doha Round.

This includes commitments to reduce barriers to trade in environmental goods and services, an agreement to reduce certain agricultural subsidies and new rules to curb fishing subsidies. The G8 summit should also ask the WTO to reach an early harvest agreement on Doha's environmental chapter

without waiting for other parts of the Doha Round to be completed.

Lowering the costs of renewable energy development and delivery requires huge investments in infrastructure and technology. Fiscally challenged governments will be unable to provide the needed level of financing – nor should they, because public funding will often be poorly administered. Instead, governments should reduce barriers to new investments by the private sector, pension funds and foreign sovereign wealth funds. G8 governments should also seek legal solutions to facilitate investments from non-traditional sources, such as Islamic financing.

Environmental best practice

Although no one disagrees with the goal of creating more green jobs, there is no consensus on what actually constitutes a green job. Some analysts might argue that sectors such as natural gas or first-generation biofuels produce green jobs.

Others may disagree and point to the environmental harms from natural gas and ethanol production. The important point, however, is that there is no need for governments to settle immediately on a unified definition of a green job.

Instead, international action is needed to ascertain best practices for training workers and reducing regulatory impediments to the creation of green jobs, however defined, within a particular labour market. To that end, the G8 should ask the International Labour Organization (ILO) to expand its ongoing efforts on green jobs into a programme of global capacity building.

In addition to workers and employers, the ILO should also invite environmental non-governmental organisations to participate.

Although the preparatory process for Rio+20 is considering improvements in the institutional framework for sustainable development, preliminary indications suggest that governments are not thinking boldly.

The G8 should firmly endorse major institutional change such as transforming the United Nations Environment Programme into a specialised UN agency with participatory opportunities for industry and civil society. The need for better institutions to oversee stewardship of the planet's ecosystems has been recognised for many decades. Yet only a few governments, such as France



International green policies will need to address broader issues related to climate change and the environmental impact of national energy policies

administration, have exercised leadership in pressing for new organisations.

A green growth strategy also needs to include policies for preventing adverse climate change. Two by-products of the financial crisis and the ensuing global recession have been a reduction in greenhouse gas emissions in some countries and a slowing down of the rate of increase in others. These provided an unexpected dividend for the planet's atmosphere, but at an enormous cost in

jobs and social well-being. As this climate policy reprieve comes to an end, the G8 should take steps to agree on coordinated steps to reduce carbon intensity.

One good start would be to gain agreement among the major economies for the gradual introduction of a carbon tax on energy producers, starting at \$5 per ton and rising each year to \$100 per ton. As Daniel C Esty and I pointed out in the March 2012 issue of the *Harvard Business Review*, such a

tax would send a signal to companies and consumers to reduce their use of carbon energy while also signalling the market regarding the need for greater innovation in clean energy. Although many governments recognise the value of such a tax, no government wants to move first out of a fear of hurting its own industries in international competition. The way forward is for G8 governments to act in concert to adopt such a tax for the benefit of the global 'economy'. ■

Colombia's internationalisation and its free trade agreements

Colombia is focusing its economic efforts on entering the global marketplace, and role of bilateral trade agreements – particularly with the United States – offer excellent opportunities for the country to realise its economic potential

The Colombian government, seeking to promote economic growth and job creation, has been working on the effective admittance of the country's economy into the international market. This decision is consistent with growing globalisation, where an increasing number of goods are manufactured within global value chains.

Consequently, the government has been developing an ambitious commercial agenda where Free Trade Agreements (FTA) and International Investment Agreements (IIA) are used as instruments to make entry into the global economy more effective. FTA and IIA not only eliminate tariff and non-tariff barriers, but also achieve greater access to the trade of services. Transparent and stable rules are negotiated in commercial agreements, strengthening flows of trade and investment.

Negotiating trade agreements worldwide

Within the policy's development, FTAs have been negotiated with almost all Latin American countries, with the United States and Canada, with the European Union and the European Free Trade Association countries. FTAs with Latin America are in force, as is the FTA with Canada, Switzerland and Liechtenstein. The FTA with the United States is scheduled to come into force on 15 May and the agreement with the European Union is expected to come into force in the near future.

Other FTAs are being negotiated with Panama, South Korea, Turkey and Israel. The country is expected to begin negotiations with Japan, China and Costa Rica, among others. In addition, Colombia is working on the Pacific Alliance with Peru, Chile and Mexico in order to deepen current agreements and strengthen relations with Asia Pacific. Most FTAs include a chapter on investment in order to protect investors and increase the effect of foreign direct investment flows.

Bilateral IIAs have been negotiated with another group of countries as a step towards achieving greater commercial exchanges in the context of global value chains, as well as building a legal framework that offers incentives for investors to invest in the country. This is why eight bilateral IIAs have been negotiated with countries such as China, India and Japan, of which three are already in force.

Proof of the success of these steps, both in the levels of trade in goods and the amount of foreign direct investment (FDI), can be seen by figures from 2011, which show a more than fourfold rise from only 10 years ago. Last year our exports in goods grew by 43 per cent with respect to 2010, reaching nearly \$57 billion, and we received more than \$13 billion in FDI. On these criteria, this makes us as the most dynamic economy in the region.

The FTA with the United States plays an important role in the policy of internationalisation of the Colombian economy. First, it is the world's largest economy: it is the first global importer,

the first capital exporting country, the first importer of services and has a population of more than 300 million, with one of the highest per-capita incomes in the world.

Second, it is Colombia's main commercial partner, with a 38.1 per cent share in the country's exports destinations, and 24.9 per cent as import supplier. The United States is not only the main buyer of Colombian mining energy products, but also of all other products, with a 22 per cent share in 2011.

Third, it is a world leader in technology development and around which several global value chains are created. Given that the Colombian government looks to include its productive apparatus in such chains, it is important to have the permanent preferential access provided by the FTA.

The different exercises and simulations carried out in the country, both at the initiative of the government and the private

Last year our exports in goods grew by 43 per cent with respect to 2010, reaching nearly \$57 billion, and we received more than \$13 billion in FDI

sector, show that the FTA will have positive effects on the Colombian economy. According to the results of the general equilibrium models, an increase in annual gross domestic product growth between 0.5-1.0 per cent, consumer surplus improvement by more than 1.0 per cent and employment growth between 300,000 and 500,000 stable jobs can be expected.

However, exploiting the advantages derived from the FTA is a challenge for the country and for the business community. Realising the full potential of the FTA implies maintaining stable and credible macroeconomic policies, achieving significant progress in competitiveness, regulatory modernisation, the strengthening of institutions and the diversification of exportable supply, among other factors.

The role of the private sector and government agencies

To that end, the government has been working with the private sector and academia under the framework of public-private alliances that will allow these goals to be achieved.

Several government programmes are also moving towards the same goal. Proexport Colombia, a body in charge of the promotion of exports, the encouragement of inbound international tourism and the attraction of foreign direct investment, has made outstanding efforts. It has 28 commercial offices worldwide, eight of which are in the United States. This



international presence has become stronger as the organisation has sought to take greater advantage of the FTAs.

In developing its activities, Proexport assesses the potential of productive sectors in markets where Colombia has commercial agreements, and with market intelligence programmes facilitates effective access for entrepreneurs. It supports the presence of Colombian businessmen at the relevant international fairs; it brings potential buyers to the country; and promotes the meeting of buyers and sellers through a system of business matching.

Proexport also works on attracting foreign direct investment for all sectors and regions of the country, with special emphasis on those involved in the Productive Transformation Program (PTP). The PTP currently accompanies 16¹ productive sectors of the country in the preparation of exportable supplies of high added value, helping them to become stronger competitors in international markets.

Strengthening production chains

To achieve this, the PTP and the sectors undertake business plans that strengthen the production chains, improve human capital in their businesses, create conditions to facilitate access to foreign markets, and incorporate sustainability as a differentiating – and high added value – factor in their processes and products.

The above, added to the fact that several sectors of the PTP produce goods and services with the high potential – both

present and projected – to take advantage of global demand, means that their contribution to the diversification of exports is of great importance.

With these set of policies and instruments, including the important milestone of the FTA with the United States coming into effect, Colombia is working towards its effective entry into an increasingly globalised and interconnected world.

Footnote

- 1 Nature tourism; dairy; fruit and vegetable; metallurgical, iron and steel and shipyard; business processes outsourcing BPO&O; software and information technologies; health tourism; electrical power, related goods and services; editorial and graphic communication industry; fashion system; vehicles and auto parts industry; cosmetics and personal care products; chocolate, confectionary and raw materials; beef; and palm oils, vegetable grease and biofuels
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G8 Research Group

In the rapidly globalizing world of the 21st century, the Group of Eight major market democracies serves as an effective centre of global governance. G8 members – the United States, Japan, Germany, Britain, France, Italy, Canada and Russia, plus the European Union – contain many of the world’s critical capabilities and are committed to democratic values. At its annual summit and through a growing web of G8-centred institutions at the ministerial, official and multi-stakeholder levels, the G8 does much to meet global challenges, especially in the fields of economics, development and security.

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The online G8 Information Centre (www.g8.utoronto.ca) contains the world’s most comprehensive and authoritative collection of information and analysis on the G8. The G8 Research Group assembles, verifies and posts documents from the meetings leading up to and at each summit, the available official documentation of all past summits and ministerial meetings (in several G8 languages), scholarly writings and policy analyses, research studies, scholarship information, links to related sites and the “briefing books” for each summit published by Newsdesk.

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The contribution of the private sector to education

For the private sector to play a helpful role in education, it must target disadvantaged communities and give schools autonomy

By Harry Anthony Patrinos, lead education economist, World Bank

Education is central to the long-term development of human capital and to economic growth. Schooling empowers people and strengthens nations. It affirms human dignity and provides individuals with capabilities to compete in the global economy. Good-quality education is among the most powerful instruments known to reduce poverty and inequality and to foster dynamic and competitive economies over the long term. In today's global economy, a high-quality education is

critically important for creating, applying and disseminating knowledge.

The Millennium Development Goals (MDGs) recognise the essential role that education plays. Two of the eight MDGs focus on education – namely, universal primary completion and gender parity in primary and secondary schooling. However, despite great progress in many countries, certain countries will not meet the MDG targets by 2015 or even 2030, given the current pace of progress. Enrolment rates are too low, drop-out rates too high and

educational quality too inconsistent across and within countries.

Many education systems in low-income countries are in crisis. According to UNESCO's 2010 *Education for All* report, while primary school enrolment increased over the past decade, a quarter of sub-Saharan Africa's primary-age children remain out of school. This picture is even bleaker when the poor quality of education received by those who are in school is taken into account.

Comparative perspectives

As a result of this continuing crisis, many countries are ill prepared to further their economic and social development. They lack a human resource base endowed with the critical thinking skills, problem-solving abilities and comparative perspectives necessary to compete in, and fully benefit from, today's globalised, knowledge-based economy.

Youth employment is another symptom of this crisis. Accounting for a large proportion of the working-age population, youth in



A volunteer teaches children displaced by floods in Pakistan. The country is offering subsidies to private schools conditional on minimum learning

several countries in sub-Saharan Africa and the Middle East, for example, suffer from very high unemployment rates. That some education systems do not adequately prepare graduates to compete in the global environment is a critical reason for these high unemployment rates. Given that more than three billion young people worldwide are under the age of 24 years, one of the key challenges of the 21st century is addressing the weaknesses of education systems in order to produce employable and employed citizens.

A good public education system means public spending – but not necessarily public provision or state management – with government maintaining the crucial role

of ensuring accountability. In the member countries of the Organisation for Economic Co-operation and Development (OECD), more than 20 per cent of public education expenditure goes to private institutions – communities, non-governmental organisations (NGOs), faith-based organisations, trade unions, private companies, small informal providers and individual practitioners – and about 12 per cent is spent on privately managed institutions.

Achieving better outcomes

But does private participation mean higher-quality education and better exam results? And can it encourage greater equality?

Evidence shows that in the independent school sector, where schools depend on fees, often once family background is controlled for, the actual benefits of private schooling disappear. But in systems where access is not limited by selection or wealth, privately managed schools can contribute to better outcomes.

In the Netherlands, for example, 70 per cent of enrolments are in 'private' schools that receive a fixed amount of government funding per student (with extra funding for disadvantaged students). On average, families tend to be from a lower social class than those of pupils attending 'public' schools, and yet student test scores are higher. The level of



These pupils attend a boarding school in Mogadishu, Somalia, but a quarter of sub-Saharan Africa's primary-age children still do not go to school

choice offered appears to provide incentives for Dutch schools to keep improving. Controlling for selection, rigorous impact evaluations show that the Dutch system promotes academic performance, producing significantly higher achievement scores in publicly subsidised private schools.

Reversing achievement gap

Charter schools in the United States have had a real impact on narrowing achievement gaps. The Harlem Children's Zone combines schooling with community support, such as help with healthcare and meals. According to randomised control trials, the Harlem's Children's Zone could

reverse the black-white achievement gap in maths. Also, KIPP (Knowledge Is Power Program), the largest charter school provider in the US, has been criticised for only improving test scores through selection, but evidence from randomised control trials shows that the largest gains are among young people with special educational needs and limited English proficiency.

A large-scale experiment in Pakistan offers the opportunity to study the quality assurance system for a public-private partnership programme. The Punjab Education Foundation offers public subsidies conditional on minimum learning levels to low-cost private schools. Schools are

cast out of the programme if they fail to achieve a minimum pass rate in two consecutive attempts, making the stakes high for the test. Results from a rigorous impact evaluation show that the threat of programme exit on schools that barely failed the test the first time induces large learning gains. The large change in learning between the first two test rounds is likely to be attributable to this accountability pressure.

In 1999, the city of Bogotá, Colombia, launched the concession school programme, designed to broaden the coverage and quality of basic education. It consists of a contract between a group of private school providers – selected from among the best schools in

In the Netherlands, 70 per cent enrol in 'private' schools that receive a fixed amount of government funding per student – the choice appears to provide incentives for schools to improve

Colombia – and the public education system. The city built modern school buildings in 25 disadvantaged neighbourhoods in which private agents provide education for low-income students. Evaluations of the programme show that: drop-out rates are lower in concession schools than in similar public schools; other public schools near the concession schools have lower drop-out rates in comparison with other public schools outside the area of influence; and test scores from concession schools are higher than scores in similar public schools.

Informed choice

The picture internationally is that involving the private sector can improve school performance – through competition, accountability and autonomy – as well as expand access. However, without strong systems of accountability, private schools with public funding are not likely to produce large gains. The best results come where competition is enhanced through informed choice, disadvantaged areas are targeted and there is plenty of autonomy at the school level.

Any new approach needs to be subjected to rigorous evaluation of its impact. Small-scale pilots are needed initially, with subsequent investment going only to projects that have been proven to work. Moving forward, countries can learn from each other. Being aware of the international landscape, and benchmarking education policies within and across countries, will be important for raising standards and addressing inequality. ■

The views expressed are the author's own



The private-sector contribution to education and employment

The potential of both individuals and economies is met through learning, and businesses are playing a crucial role in helping to improve education systems



**By Stephen Crowne,
Senior Director, Global
Education, Cisco Systems**

Education is one of the keys to ensuring the sustained economic, social and cultural development of nations. Universal education is the bedrock of our modern civilisation, with the power to lift people out of poverty and set them on a path of progress and fulfilment by providing the essential feedstock of knowledge and skills.

We now take it for granted that the State should invest in education for the common good. In most countries the State is also a large-scale direct provider of education. But the private and not-for-profit sectors have always had a very strong interest and commitment to education, and in recent years partnerships between the three sectors have driven improvement in education systems, higher levels of achievement among young people and adults, and more competitive economies.

Cisco is a global corporation with a deep and long-standing commitment to education and the conviction that the private sector must continue to play a central and dynamic role in improving education systems. This is not only right for global development, but also good for business. All sectors need the highly qualified people that education systems around the world provide, as well as healthy ecosystems where entrepreneurship can thrive and where talent can be absorbed into the marketplace.

Expanding opportunities in education

There are now more opportunities than ever before for companies such as Cisco to influence and contribute to progress in education: public/private partnerships addressing the challenges of education infrastructure; projects promoting the effective use of technologies to improve education outcomes; programmes for the training and professional development of educators; initiatives for fostering entrepreneurial thinking among young people; programmes that sponsor students' education through scholarship agreements, and other initiatives that celebrate and reward achievements in education performance.

Cisco is contributing to the thought leadership needed to confront the biggest challenges we face in education: How do we get more for less in straightened economic times? How do we achieve quality, equity, efficiency and secure a firm link between

education and employment? How can we apply innovative approaches – new perspectives, programmes, partnerships, ideas, technology and expertise – on a whole-system basis, to maximise the benefits to citizens?

Over the years, Cisco has made significant and ground-breaking contributions to the education and employment sectors. At the heart of Cisco's Global Public Sector organisation, our Global Education group has been working with governments and other stakeholders around the world to help create a transformation agenda focused on the use of technology to achieve education goals.

We work with education system leaders at national, regional and local levels, helping them to articulate their vision for education and translate that vision into an effective programme enabled by technology. We bring a wide and deep understanding of the global trends impacting on the future of education and the skills required to succeed in the knowledge economy. We want to help system leaders develop new learning models that meet the needs of modern economies and societies and help them share lessons and benefits worldwide.

At the global level, our organisation has been actively participating in multi-stakeholder partnership efforts led by institutions such as UNESCO, the World Economic Forum and the World Bank Institute, helping governments come closer to meeting the Millennium Development Goals¹ and Education for All targets regarding universal access to high-quality education².

“Cisco is committed to being a trusted partner and business adviser to education leaders around the world. We believe that through global collaboration and a focus on innovation, we can help enable the development of high-quality education and job creation for citizens everywhere.”

JOHN CHAMBERS, CHAIRMAN AND CEO, CISCO SYSTEMS

We are also working in partnership on initiatives such as the Global Education Leaders' Program (GELP)³, which is aimed at developing, showcasing and sharing approaches from around the world to radically transform teaching, learning, and assessment so they reflect the needs of 21st-century learners and economies.

Working with 13 jurisdictions, (including some of the highest-performing education systems in the world), through GELP we are building not only a new vision for 21st-century school systems but also a pragmatic set of road maps that will help jurisdictions get there. We have also brought our expertise and capacity for innovation to partnerships across education –



with institutions such as the University of Melbourne, and with international organisations such as the OECD-PISA, and the Inter-American Development Bank. We have led the launch of initiatives such as ATC21S⁴, which is aimed at finding ways for assessing 21st-century skills and encouraging the teaching and adoption of these skills in the classroom.

However, this is not just about helping the best in developed economies get better. We are finding increasing enthusiasm for our holistic approach to system transformation from the leaders of school systems in emerging regions, who regard investment in transformational approaches as vital to ensuring a sustainable path to economic development and growth.

We are firm believers in technology being a fundamental component (but not the only one) of the broader redesign in education; through programmes such as GELP we are making sure that changes in curriculums, assessment, pedagogy, teacher professional development, student-centric learning environments and other areas are also taken into account to achieve sustained systemic change and transformation.

Cisco believes in the central role that the private sector has in helping to strengthen the links between education, employment and enterprise creation. Some of our flagship programmes such as the Cisco Networking Academy⁵ and Cisco Entrepreneur Institute⁶ focus on the development of skills that will not only help students and instructors have increased access to career and economic opportunities, but also help communities and nations around the world harness the power of entrepreneurship for economic and social prosperity.

Keeping up with the pace of change

Other Cisco-led initiatives – such as BIG, the British Innovation Gateway – are also aimed at supporting high-tech growth, innovation and entrepreneurship. Through the creation of the Cisco National Virtual Incubator, we are helping the UK

government bring together start-ups, business people, education hubs, investors, technologists and innovation experts to create new jobs and opportunities that will help the UK achieve its vision of excellence in innovation⁷.

We know that the world is changing at a faster pace than ever before, and that technology provides both challenges and opportunities. The lessons we have learned through decades of engagement in education give us the confidence to continue making significant contributions to the improvement of education and employment opportunities, underpinned by technology. Harnessing the power of technology within a clear and ambitious vision for education, with strong system leadership and with inclusive partnerships that allow for transparency and good governance, will deliver even greater benefits.

Footnotes

- 1 Millennium Development Goals(www.un.org/millenniumgoals/); Education For All (www.unesco.org/new/en/education/themes/leading-the-international-agenda/education-for-all/)
 - 2 http://portal.unesco.org/education/en/ev.php-URL_ID=54285&URL_DO=DO_TOPIC&URL_SECTION=201.html
 - 3 www.cisco.com/web/about/citizenship/socio-economic/GELP.html
 - 4 Assessment and Teaching of 21st Century Skills. <http://atc21s.org/index.php/about/>
 - 5 www.cisco.com/web/learning/netacad/index.html
 - 6 www.ciscoinstitute.net/
 - 7 www.ciscobig.co.uk/; www.youtube.com/watch?v=vUY68k_9RWE
www.youtube.com/watch?v=oL29oVEy6Ko
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Innovation and productivity in an age of austerity: a role for ICTs

Information and communications technologies can help advanced economies caught between budget constraints and the need for productivity growth

By David Crane, journalist

The economic recovery remains a serious challenge for the advanced economies of the G8. Without stronger economic growth, they face high unemployment and much greater reliance on spending cuts rather than on generating revenue to address budget deficits and debt. Moreover, with ageing societies, they need strong productivity growth to provide the wealth required for growing health and pension needs. Yet “for advanced economies, the current recovery is predicted to be the weakest of the postwar era”, according to the 2012 *World Economic Outlook* published by the International Monetary Fund (IMF).

So the advanced economies need to chart a stronger growth path, despite the urgent need for fiscal consolidation. The key is to find ways to boost innovation, since this is the engine of economic growth and strong productivity performance – and to do this while developing medium-term strategies for fiscal sustainability.

Stimulating growth

Yet there is a way to stimulate growth through innovation without undermining future fiscal health. That can be done by advancing the revolution in information and communications technologies (ICTs).

As with electricity a century earlier, ICTs can be found in every part of the economy, from the way businesses are organised, governments deliver services, and the secrets of proteomics and nanotechnology are unveiled to how aircraft and cars are designed and produced, customers and suppliers are connected, and knowledge and information transferred and manipulated. It is a universe of hardware, software and applications, with continuing gains in memory capacity and cost, speed and price of microprocessors, and

a growing role for sensors and displays and for optical and wireless communications. Airline reservation systems, global financial markets and global value chains all depend on ICTs.

But ICTs are not found just in high-tech products such as smartphones or tablets. Electronics represent a major part of the cost of a car today. Household appliances, credit cards, televisions and factory robots all depend on ICTs. According to the Washington-based Information Technology and Innovation Foundation, in the United States between 1995 and 2002, ICTs were responsible for two-thirds of total-factor growth in productivity and almost all the growth in labour productivity.

One way in which advanced economies can leverage public and private resources to foster innovation is to use ICTs to achieve a clean and efficient electricity system, thereby addressing the twin challenges of global energy demand and climate change

Yet despite the spectacular gains of recent decades, many experts believe that there remains enormous potential from ICTs in manufacturing, education, healthcare, clean energy, smart infrastructure, homecare for the elderly and security, as well as in research to deal with future problems in global food supply, water and climate change.

Focus on skills and education

In a 2011 study on the internet’s role in innovation, productivity and wealth creation, the McKinsey Global Institute found the internet had been a critical element of growth and job creation. The report urged policymakers to unleash the internet’s growth

potential by leveraging public investment in the internet, arguing that “countries with the highest public investment in the internet are also those with the largest non-public contribution to GDP [gross domestic product]”. It urged a focus on promoting skills and education, ensuring access to capital, developing digital infrastructure and creating an attractive business environment for innovation and investment.

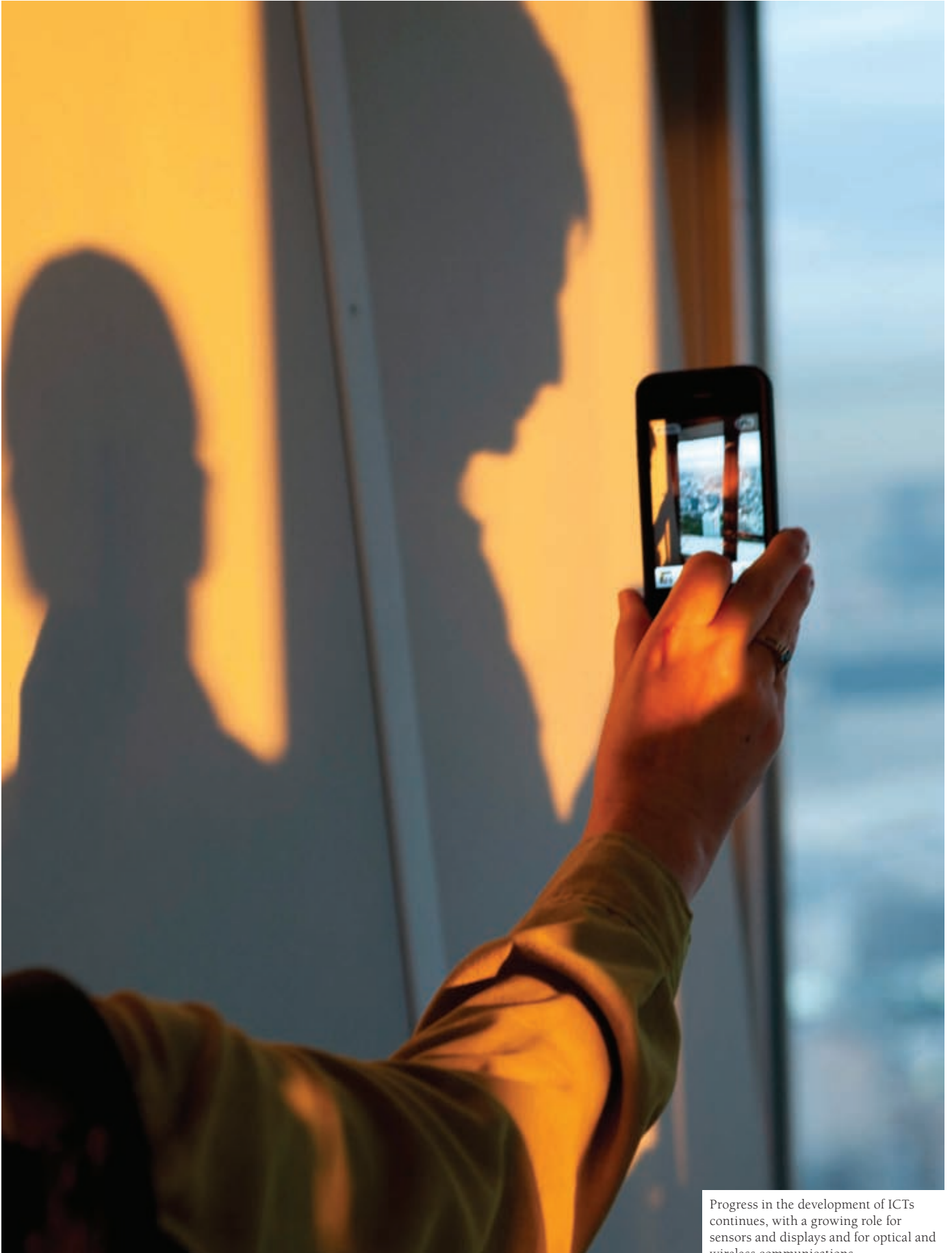
Improved prototyping

Carlos Osorio, of Harvard University’s Berkman Center for Internet and Society, believes ICTs clearly matter for innovation. Writing in the *Global Information Technology Report*, he argues that businesses in the advanced economies use ICTs to “foster their innovation processes by enhancing the acquisition of more and better market data, improving prototyping and test cycles, increasing the power of their networks in order to leverage the resources of their ecosystem, and boosting their capabilities for learning by embracing failure through experimentation”. Osorio cites the development of the electronic spreadsheet, which has permitted inexpensive financial

simulation to make better investment decisions, and the spread of rapid prototyping, which has provided a fast and inexpensive means for innovation in new products.

One way in which advanced economies can leverage public and private resources to foster innovation is to use ICTs to achieve a clean and efficient electricity system, thereby addressing the twin challenges of global energy demand and climate change. Two-thirds of global electricity supply is based on fossil fuels, which are a major source of greenhouse gas emissions.

ICTs for smart grids, including smart meters, offer great potential for driving innovation in the ways electricity is



Progress in the development of ICTs continues, with a growing role for sensors and displays and for optical and wireless communications

produced, managed and consumed, says the Organisation for Economic Co-operation and Development (OECD). A smart grid is defined by the International Energy Agency (IEA) as “an electricity network that uses digital and other advanced technologies to monitor and manage the transport of electricity from all generation sources to meet the varying electricity demands of end users”.

“Smart grids coordinate the needs and capabilities of all generators, grid operators, end users and electricity market stakeholders to operate all parts of the system as efficiently as possible, minimising costs and environmental impacts while maximising system reliability, resilience and stability,” says the IEA.

Smart grid support

By embarking on a major initiative for smart grids, advanced economies could encourage significant job-creating investment and the growth of specialised software, technology

and consultancy firms, the OECD study says.

Policies to marry public funds with private initiatives for growth and job creation through exploiting ICTs could also boost productivity and generate wealth that would help restore balance to public finances. Funds can be found by ring-fencing innovation budgets or through the technique of what the IMF calls “balanced budget fiscal expansion”, which “could support activity and employment while keeping fiscal consolidation plans on track”. One example, which it says has been tested by the US Federal Reserve, the European Central Bank and the Bank of Canada, is a temporary tax hike, with the revenues being used to increase funding for much-needed infrastructure. This, argues the IMF, would lead to increased output and jobs.

Trade policy also matters. An open global trading system is not a zero-sum game. Technology advances in one country are good for all countries. Moreover, the economic growth of emerging market economies such

as China and India benefit businesses in advanced economies. Automotive companies such as BMW and General Motors depend on sales in China to help sustain profitability. High-tech companies such as Apple and Research in Motion depend on parts and components from countries around the world, and on final assembly in low-cost labour locations such as China and Mexico. The integration of production through global value chains means, as the World Trade Organization points out, that many products should be labelled ‘made in the world’ rather than in any particular country.

Prior to the global downturn of 2008-10, advanced economies enjoyed annual growth rates in the range of three per cent; today they are looking at growth forecasts of two per cent or even less. Yet they also face fiscal challenges that austerity alone will not solve. Targeted growth – by exploiting the ICTs revolution for needed public initiatives – represents one way to generate a more sustainable outcome. ■



ICT components from countries around the world are often assembled in low-cost labour locations such as China, but businesses also benefit from sales of the finished product to emerging economies

The importance of innovation in telecommunications



By Kevin Shatzkamer,
Distinguished Engineer



David Ward, Chief Architect,
Cisco Systems

Throughout history, the evolution of telecommunications has been one of transition and invention. Inventions produced innovation in hardware, software, applications and services, while transitions allowed for different adoption curves across socioeconomically, politically, culturally, and environmentally disparate regions of the globe.

As we enter the next phase of re-architecture, the role of telecommunications has never been more critical.

Telecommunications providers played a key role in the transition from the Information Age to the Internet Age. During the next transition, in which the Internet of Things is realised, their role is equally important – enabling not just billions of human-to-human and human-to-machine interactions, but also trillions of machine-to-machine interactions.

While the Information Age marked important advancements in our understanding of politics, history, religion, and science, that understanding was not accessible, as there was no distribution mechanism. The Internet now provides that global distribution channel. Today, those who excel are no longer those who can amass the most information in the shortest time, but instead those who can find, classify and verify information from an unlimited number of sources. In fact, the future will be transformed not by those who retain information, but by those who can turn that information into knowledge and innovation.

The Internet Age created massive wealth for those organizations that have found ways to participate and facilitate this information exchange. Hyper-connectivity has created numerous communications models, such as voice, messaging, video and collaboration via numerous devices, which facilitate the transmission and distribution of digital information. This has not only changed the way people communicate, but also the way businesses conduct business, economies function, governments govern, surgeons operate, and educators educate. In short, telecommunications plays an important role in increasing social knowledge. The very nature of the Internet, in which device manufacturers and application developers are free to innovate, makes it one of the most powerful creations in human history.

At the heart of these interactions is the telecommunications industry, building a global communications platform that connects disparate sources of information and upon which innovation can occur. The Internet allows geographically disparate, culturally diverse and previously isolated information sources with unique insights, experiences and expertise to communicate. Wireless technologies, leveraging licensed and unlicensed spectrum (WiFi), provide cheaper, ubiquitous coverage, allowing interactions between information sources to occur in real-time, collaboratively.

Cloud services allow sharing of social and intellectual information, providing a platform for global collaboration.

These interactions are not without their challenges – culture clashes, political unrest, social etiquette breaches, and privacy concerns are frequent topics in media outlets cautioning about the negative implications of technological advancement. However, by increasing social intelligence and awareness, technological advancements provide the tools to overcome these challenges.

Evolving the global telecommunications network from a means of connecting information sources to a source of knowledge itself provides the next big opportunity for innovation. To do so, telecommunications providers are transforming their networks into environmentally friendly (“green”) platforms with increased connectivity, visibility and programmability.

Extracting information from the global telecommunications infrastructure gives rise to the next iteration of innovation. Software-Defined Networks (SDNs) allow telecommunications

“Innovation is a critical driver of growth within the global telecommunications industry. As customer needs evolve and new market transitions emerge, innovation brings new revenue opportunities, and a chance to better serve the rising global population.”

John Chambers, Chairman and CEO, Cisco Systems

providers to program and control the network hardware. SDNs, combined with a network Application Programming Interface (API), which exposes network functions to developers, and analytics, that give insight at both micro and macro levels, provide the tools for the next generation of services and applications, while still ensuring the right level of privacy and confidentiality. These tools provide the “ability to gather, analyse, and distribute massive amounts of data, in real time, that society can turn into information, knowledge, and ultimately, wisdom.”

As telecommunications providers deliver on enhanced connectivity, visibility, and programmability, the global telecommunications network will provide the foundation for the Internet of Things, in which hyper connectivity between people and machines is foundational. The Internet of Things will, once again, redefine the limits of our understanding of education, communication, business, science, government, and humanity while creating opportunity for the next iteration of transition and invention.



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Start-ups: more than just a sideshow

Governments are recognising the potential for growth and job creation offered by start-ups, which have largely been ignored at previous G8 gatherings

By Jonathan Ortman, chair, Global Entrepreneurship Congress; president, Global Entrepreneurship Week; senior fellow at the Kauffman Foundation

At the recent 2012 Global Entrepreneurship Congress in Liverpool, in the United Kingdom, a staggering 3,500 'start-up junkies' from 125 countries gathered to share notes on the newest elements of national ecosystems that support new and young firms.

While plenty of attention has been given to small and medium-sized enterprises (SMEs), global economic policy gatherings and multinational institutions have largely ignored the importance of stimulating new, high-impact start-ups as a prime growth strategy for global economic growth. With some governments racing to build better entrepreneurial environments that attract smart entrepreneurs with the best ideas and networks, the G8 leaders might be wise not to simply acknowledge entrepreneurs as a sideshow, but consider them a central strategy for improving lives and building economies.

Appealing to a new generation

In 2012, there is already some convergence between top-down policymaking and hundreds of grassroots networks focused on smoothing the path of their countries' nascent entrepreneurs. Start-ups now appeal to a generation that once shunned 'business', thereby welcoming new creative talent. Moreover, new evidence shows that start-ups are the most potent driver of economic growth and job creation. Whether new firms grow or shrink is a vital measure of the collective fate of an economy. They create innovative products and new markets, providing jobs to millions around the world that generate wealth and raise living standards.

National leaders are already eager for policies that create jobs. The rationale is simple. In the United States, new firms are the most effective source of new jobs. Research from the US-based Kauffman Foundation using government data found that, between

1980 and 2005, almost all net job creation in the US took place in firms less than five years old. While older businesses add jobs, this process was not enough to offset the job losses that occur when other older businesses decline or shut down. On average, one-year-old businesses create almost one million new jobs a year, while 10-year-old firms generate just 300,000. And in 2007, the last pre-recession year, young firms accounted for two-thirds of the US economy's new jobs.

How billion-dollar businesses begin

Not all new businesses have the same potential. Many will fail, and few will have more than 30 employees. But only a few successful start-ups are needed to achieve a high level of ongoing growth. Companies that eventually generate \$1 billion or more in revenue will drive economic growth and job creation for many years.

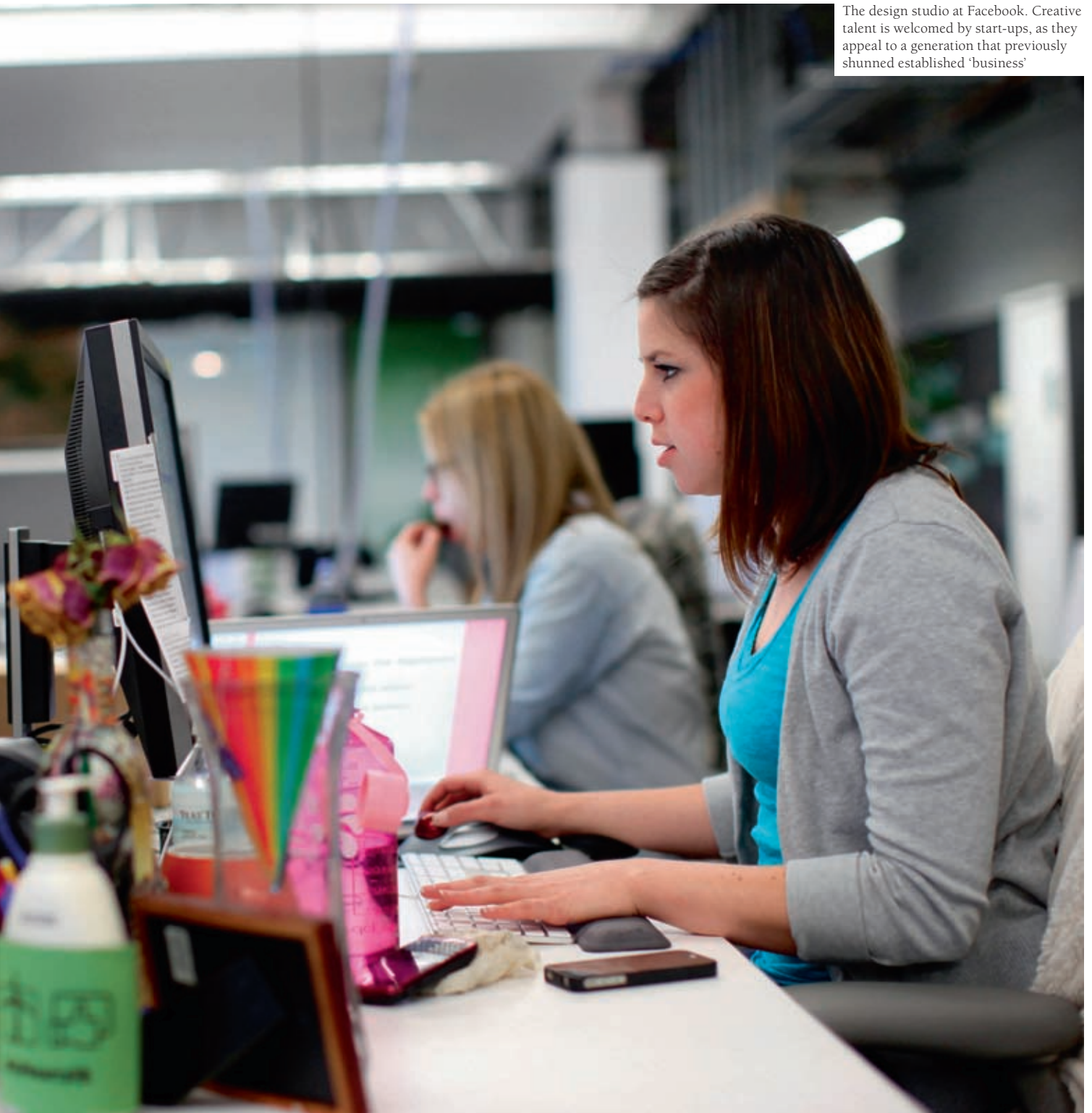
Kauffman research looks at the link between billion-dollar companies and economic growth – showing that about 15 of these billion-dollar companies arise every year. If those numbers rose to somewhere between 30 and 60, the US would add a full percentage point to gross domestic product (GDP), doubling it in 18 years instead of 24. Gains could be measured in terms not only of rising incomes, but also of new technologies that improve daily life around the world.

Whether it is Starbucks reinventing the cup of coffee, or Steve Jobs and Apple inventing whole new industries by unleashing an apps revolution on smartphones, high-growth companies invariably bring something new to society rather than simply responding to existing demand.

The challenge facing the G8 is to increase the number of new start-ups and to raise their success rate, so that more companies can become high-growth firms. For government leaders, this can be difficult. New-firm creation cannot be 'governed', and the



The design studio at Facebook. Creative talent is welcomed by start-ups, as they appeal to a generation that previously shunned established 'business'



traditional linear thinking of governments is antithetical to organic entrepreneurial activity. Entrepreneurship will always be messy. Leaders thus need strategies to inspire and smooth paths – not create plans for new top-down programming.

The good news is that there are already thousands of local start-up communities organised at the city level and populated by smart, global, open, socially motivated founders driven to do good and do well. A successful start-up ecosystem typically leads someone from nascent inspiration and discovery, through team formation and taking start-up action, all on their way to real scale and growth.

Many of the traits of a successful start-up are already known. They include the importance of teams and co-founder ‘dating’, of mentorship, of remaining lean, and being able to afford to recycle teams or ideas. While a young person with a disruptive idea may be vital, innovative high-growth firms also have experienced co-founders with unique knowledge of their industry. Venture capital – while important in some capital-intensive industries as firms scale up – is less of a factor for most new start-ups.

The path to growth

With such bottom-up start-up communities constantly relearning these lessons and adapting in real time to what works, government is free to focus on the best rules and incentives. No government programme will ever compete with boot camps such as Startup Weekend, or accelerators such as

TechStars. Government leaders should focus on encouraging more citizens to join these communities, inspiring those who would otherwise not consider entrepreneurship as a path.

For example, more than a dozen heads of state or government actively participate each November in Global Entrepreneurship Week, which in seven days attracts more than seven million attendees to 33,000 activities in 125 countries. The initiative helps legitimise entrepreneurship, puts successful national role models on a pedestal,

The challenge facing the G8 is to increase the number of new start-ups and to raise their success rate

and allows policymakers to see at first hand what is working among their own companies, so they can focus on creating the best legal environment for nascent entrepreneurs and young firms to thrive in their country.

This past spring, US president Barack Obama signed into law the Jumpstart Our Business Startups Act – the JOBS Act. In less than one month during a politically charged election year, the House of Representatives and the Senate supported a legislative package that combines measures in six different bills to make it easier for young companies to raise

money. The JOBS Act is only one of a series of ‘start-up bills’ that have arisen from looking at entrepreneurship not from the perspective of firm size – small and big business – but of firm age, namely those all-important first five years of firm formation. These bills are part of a rush to support start-ups driven by new data and helped along by President Obama launching Startup America.

This initiative, and other recent action in Washington, are excellent examples of an emerging non-partisan narrative founded on robust research that statistically explains the powerful relationship between new-firm formation and economic growth. For the US, this narrative is leading to changes including amending high-skilled immigration laws – such as start-up visas – and changes to capital gains rules, but every country will have its own shortlist.

What matters for the G8 will be using data from the World Bank and the Organisation for Economic Co-operation and Development on economic growth and job creation to guide what national governments should measure in their pursuit of smarter policies to support high-growth entrepreneurship.

Policymakers are likely to find a paucity of data, or plenty of myths, driven by 30 years of tired dialogue about SMEs. But whatever each country’s ‘start-up act’ looks like, focusing public dialogue on the inventors and makers of things at future G8 meetings would lead to sharing better information and ideas about how to raise the success rate of all entrepreneurs in a global effort to see more new firms improve lives and expand economies. ■



The founders of San Francisco-based start-up Schmendricks Bagels use social media services such as Twitter to reach new and existing customers

Open letter to the G8

Long-term investments in education and training, particularly at primary and secondary level, are essential for economic growth and employment



Dennis Van Roekel
President



Lily Eskelsen
Vice President

The financial crisis that hit five years ago added millions of people to the jobless ranks and threw millions more into precarious work. It also exposed two decades of growing inequality. Many workers have lost good jobs and far too many have lost the fundamental labour rights that went with them.

In the United States, the global economic crisis has resulted in nearly 200,000 educators losing their jobs, in critical educational programmes disappearing, in class sizes exploding and, for the first time in our nation's history, in a generation of young people whose future prospects are significantly less promising than those of their parents.

The National Education Association (NEA) knows that addressing this crisis and finding long-term solutions requires meaningful investment in quality education and training and a focus on ensuring equity for all. Widening income gaps around the world make it very difficult for children to access the educational opportunities that will ultimately propel their



Rebecca S Pringle
Secretary-Treasurer

The National Education Association calls on governments attending the G8 Camp David Summit to join together to create good, sustainable jobs and enhanced education and training opportunities for current and future workers

economic prosperity. A failure to focus on educational equity translates to a crisis of untapped economic and cultural potential.

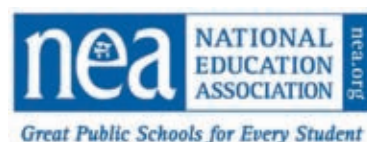
A compelling body of research links primary and secondary education to economic development and growth. A child's education increases average earnings and productivity. It also reduces the incidence of drug abuse, crime and welfare dependency. In the United States, the real rate of return on investments in education and training programmes – in terms of pay-off to lifetime earnings relative to the upfront costs – is five to 15 per cent per year.

NEA calls on governments attending the G8 Camp David Summit to join together to end the crisis – to create good, sustainable jobs and enhanced education and training opportunities for current and future workers.

We join with Education International and the global labour community to call for:

- Sustained investment in quality public services and quality education to overcome the crisis and to build democratic societies in which all people have the opportunity to live healthy, rewarding and satisfying lives;
- A broad range of urgent actions for jobs and recovery, including a renewed investment in innovative job growth for 21st-century needs that create decent and secure employment;
- Fiscal policies that raise greater revenue from upper income groups and corporations, fight tax fraud and evasion, close loopholes and crack down on tax havens;
- Full respect for trade-union rights and the promotion of strong systems of collective bargaining and social dialogue that help build fairness and democracy;
- More comprehensive social protection through the creation of a global social protection floor supported by adequate funding;
- Guarantees of rights to such basic needs as food, water, housing, health and quality public education for every student.

We look to the G8 for leadership to ensure that long-term investments in education and training materialise to enhance the prospects of the current and future generations.



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Unlocking the potential for innovation offered by ICTs

Information and communications technologies are already inspiring innovation, but governments need to address the obstacles to access that remain

By Jeffrey A Hart, Indiana University, United States

What is the potential impact of the diffusion of information and communications technologies (ICTs) on innovation in the global economy? At first view, the question seems simple. Some of the major consequences are reduced cost, time and effort associated with communicating across great distances. The faster and less costly the spread of potentially economically consequential ideas and new knowledge, the faster the pace of innovation, especially in those parts of the world previously cut off from information flows. The questions are only: what barriers to the flow of information and ideas continue to exist, and how might they be attenuated for the benefit of all?

Removing barriers

Not all information and ideas spread via ICTs will result in innovative activity. A good percentage will be for entertainment primarily, to be passively consumed, possibly to the detriment of creative activity and innovation. Also, not everyone who can benefit from the flow of ideas has access to them via ICTs. This lack of access requires addressing the so-called 'digital divide'. A deeper, and related, question is on the ability of people to absorb the information and ideas that are likely to foster innovation. A likely prerequisite is a long history of investment in the development of human capital – for example, through education and training. Moreover, there is the question of what types of innovation will be required in the coming decades, as opposed to where the biggest 'bang for the buck' might be on the supply side.

One of the main barriers is cultural. Linguistic barriers are especially important, since most significant information and ideas are transmitted via text that may be not

just in different languages, but in different alphabets and character sets. One of the most important innovations in ICTs – attributable to IBM's desire to sell into the vast Chinese market – was the ability to display most of the world's character sets in standardised formats. However, in providing inexpensive and accurate translation to ease the flow of information, there is still a long way to go.

Much of the knowledge that is important for innovation is tacit. To learn key aspects of how to use and further develop the technology, people need to communicate face to face. Conversion of tacit knowledge into

Many national-level indicators of ICT access are strongly correlated with, for example, gross domestic product per capita

explicit or codified knowledge occurs at a certain point when the technology is maturing. This process is accelerated to some extent when innovators attempt to establish their intellectual property rights (IPRs) by applying for patents and copyrights.

The global sharing of patent and copyright applications and final decisions via ICTs is already significant in reducing barriers to information flows. However, licensing fees, and other restrictions on use, are increasing. While there is a global interest in promoting innovation by enforcing IPRs, IPR regimes may need to be reformed to prevent them from institutionalising undesirable barriers to innovation.

One such example is the controversy over patenting parts of the human genome by firms owned by Craig Venter. Similarly, the recent debate on the Stop Online Piracy Act (SOPA) and the Protect Intellectual Property Act (PIPA) in the United States focused on whether IPRs had gone too far in protecting the interests of rights holders while harming those of people engaged in legitimate creative activity, even perhaps creating opportunities for censorship and other restrictions on free speech. The demonstrations against SOPA/PIPA in the United States triggered demonstrations against the Anti-Counterfeiting Trade Agreement (ACTA) in Europe, where the same issue is an integral part of domestic and European politics.

Infotainment versus innovation?

A growing percentage of the traffic carried by the internet, both nationally and internationally, is content shared digitally for the purpose of entertainment and social networking. This includes iTunes audio and video files, YouTube videos, Facebook updates, Twitter tweets and a growing BitTorrent traffic, along with people playing massively multi-user online role-playing games (MMORPGs). While this traffic may make users happy and allow them to make new friendships online, and while there may be some resulting stimulus to the invention of new technologies, it is likely to be somewhat at odds with the flow of information that encourages innovation.

The owners of the infrastructure over which the traffic flows have a clear stake in monetising all traffic, and therefore may like seeing infotainment flows crowd out other traffic because they can charge premium prices for it. The various debates about net neutrality reflect the concerns of the user communities that infrastructure owners will prioritise traffic that they can monetise over other flows. For example, Korea Telecom recently restricted traffic created by cable television and internet services associated with 'Smart TVs' sold by Samsung, hoping that Samsung would contribute to the cost of upgrading Korean infrastructure by sharing revenues with Korea Telecom.

While more than two billion people currently use the internet, in many parts of the world computer and internet access is nonexistent, or connections are too slow and



Smartphones have brought access to information and entertainment on the move, with new services developing at a rapid rate

Technological innovation is helping to close the digital divide, however some types of innovation are more useful than others



intermittent to permit access to valuable and timely information. The digital divide is the latest manifestation of the income and wealth inequalities that existed prior to the diffusion of ICTs. Many national-level indicators of access are correlated with, for example, gross domestic product per capita. The G8's efforts of the past decade to understand the global digital divide – for example, through the work of the Digital Opportunities Taskforce – have shown how difficult it is to bridge the divide in the short term.

Opportunities through innovation

One form of innovation likely to help is the wider use of alternative energy (especially solar and wind power) to ensure that power grids can power information devices reliably. Internet-based educational technologies, such as those created by the Khan Academy, can be applied to reducing the expense of providing high-quality education in the developing world. Inexpensive terminals – scaled-down versions of laptops and tablets – can be made available to schoolchildren. But, in the end, a precondition for success is the commitment to providing basic educational services in the form of teachers and well-equipped schools.

The world certainly needs more innovation, but some types are more useful than others. The current and future market for films will produce more innovations in three-dimensional, higher-resolution images such as enhanced – and virtual reality – technologies. While that innovation will preserve jobs and revenues in a small corner of the world economy, it may have little

impact on the rest of it. Innovation in ICTs in general has only recently paid big dividends in the form of higher productivity and growth rates in the advanced industrialised countries. Questions remain. In the near and mid-term future, which areas of science and technology will produce the best return on investments of public revenues in basic research and development (R&D)? While the diffusion of ICTs has changed how science is carried out and technologies are created and commercialised, what areas of innovation in science and technology will generate growth in employment, income and overall welfare?

Other than ICTs, there are growing clusters of innovation in biotechnology, nanotechnology, alternative energy and environmental technology. It is unclear which, if any, of these areas will generate the kind of growth that followed the diffusion of ICTs – or how the diffusion of ICTs can be harnessed to enhance innovation in other areas. So the approach to funding basic R&D that is likely to prevail in most advanced industrialised countries is the one created by Vannevar Bush during and after the Second World War, which involves scientists and engineers competing for research grants and using peer review to assess the quality of grant applications.

Investment in research

Applied R&D is another matter. Major differences in national approaches to funding this type of work will persist, with developmental or catch-up states – such as China – using industrial policies to prioritise areas for public investment.

Private investment will continue to play a major role in inventing and commercialising applied technologies. ICTs may contribute to facilitating new ventures, especially those too small to be of interest to venture capitalists or angel investors, including new services such as Kickstarter.com that connect investors with entrepreneurs for small-scale investments.

Room for international agreement

To sum up, the diffusion of ICTs can be harnessed to promote innovation. This is already happening. There remain important barriers to access that should be incrementally removed if the political will can be garnered to do so. Some are deeply embedded and likely to resist short-term policy changes, but others – such as better energy grids and diffusion of ICT-based education technologies in the developing world – will be more amenable to short-term improvements.

Governmental policies to promote the diffusion of infotainment services can waste valuable time and resources. That can be left to the market – as long as governments properly monitor their own IPRs and net neutrality policies. Bridging the global digital divide remains a legitimate concern for all governments for the long term.

Differences will remain in national philosophies on priorities for public funding in applied R&D, including funding ICT technologies for innovation outside the ICT cluster. Nonetheless, there is room for international agreements on new technologies, such as alternative energy, that are necessary for solving international problems. ■



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Towards stewardship in cyberspace

As the rewards and risks of the internet multiply, we need to ‘steward’ this information commons, much as we attempt to do for other shared resources

By Ron Deibert, director, Citizen Lab and Canada Centre for Global Security Studies, Munk School of Global Affairs, University of Toronto, Canada

The world’s seven billion people now share a single complex information and communications system, widely referred to as cyberspace. Cyberspace functions, and arguably functions very well, despite no grand blueprint or central point of control. Born as an experimental research network in universities, what used to be the ‘internet’ has mushroomed, more by accident than design, to become the information and communications operating system for planet Earth. A mixed, common-pool resource that cuts across political jurisdictions and the public and private sectors, cyberspace has become, as Marshall McLuhan foresaw, “our central nervous system in a global embrace”.

This planet-wide network produces a remarkable stream of innovation and social goods. Deep wells of knowledge, translated into multiple languages, are now instantly accessible to almost everyone. Precise geolocational coordinates, down to the level of centimetres, are now available in the palm of anyone’s hand. Instantaneous information sharing – ‘crowd sourcing’ – holds the potential of revolutionising everything from election monitoring to disaster relief to disease outbreak predictions.

Threat to infrastructure

Yet, as wonderful as are the fruits of cyberspace, so are the poisons powerful. Malicious software that exposes insecure computing systems is developing at a rate beyond the capacities of security researchers. Massive data breaches of governments, private-sector actors, non-governmental organisations (NGOs) and individuals now occur daily. Systems that control critical infrastructure – electrical grids, nuclear power plants, water-treatment facilities – have been compromised, risking a potentially catastrophic loss of life

should anyone with malicious intent seek to cause widespread harm.

These unfortunate by-products of an open, dynamic network are exacerbated by increasing assertions of state power. Insecurity, competition and mounting pressures to deal with collective action problems drive growing government interventions in cyberspace. Internet censorship at the national level, once thought impossible, is now a global norm. The OpenNet Initiative estimates that 960 million people live in jurisdictions that restrict access to an open internet in some manner. Dozens of countries have adopted explicit cybersecurity strategies, including the development of offensive cyber-warfare capabilities. Some countries actually benefit from the cultivation of the cyber-criminal underground, stirring a hornets’ nest of ‘hacktivism’ and espionage from which they derive short-term strategic intelligence and security benefits. A huge commercial market for offensive cyber-attack capabilities is sprouting to service the arms race that is only just beginning.

Extreme solutions may find resonance in the policy community. Proposals to censor the internet in response to copyright violations, to entrust secretive signals to intelligence agencies with the mandate to secure cyberspace for all, to loosen or even eliminate judicial oversight of data-sharing with law enforcement, or to delegate policing of the internet to the private sector – these policies are antithetical to the principles of liberal democratic government and to the system of checks and balances and public accountability upon which it rests. Furthermore, they legitimise the growing desire of autocratic and authoritarian regimes to subject cyberspace to territorialised control, and to the censorship and surveillance that go along with such control.

These trends portend the gradual disintegration of an open and secure commons of information on a global scale. The articulation of an alternative vision of security – one that protects and preserves cyberspace as a dynamic and open ecosystem – is thus urgently required. At its heart will be the elaboration of the proper rights, roles and responsibilities for all actors who share cyberspace.

Stewardship is typically defined as an ethic of responsible behaviour in a situation of shared resources, with respect to the natural environment and the commons, such as the oceans and outer space. Yet cyberspace is not a pure commons like these other domains. It is a mixed, pooled resource, much of it in private-sector hands, but with shared properties that benefit all who contribute to it. However, the concept of stewardship offers powerful guidance. In fact, stewardship is a natural fit for cyberspace governance, having been used explicitly by the engineers and scientists who built and designed the internet itself.

Stewardship goes beyond self-interest to demand accountability, in terms of rights and responsibilities to some larger shared social good. It is especially appropriate because cyberspace is an artificial domain that requires constant tending. It is the first entirely artificial environment – without humans, it would not exist. This places us all in the position of joint custodianship of cyberspace. We can destroy it, or we can preserve and extend it. The responsibility is inter-generational, extending to those digital natives yet to assume responsibility, but also linked to those in the past who imagined the possibilities for what something like cyberspace today presents.

Stewardship enriches what has become an almost empty euphemism: multi-stakeholderism. Governments, NGOs, armed forces, law enforcement and intelligence agencies, private-sector companies, programmers, technologists and citizens all play an interdependent role as stewards of cyberspace – but for none is it an exclusive domain. Concentrating governance of cyberspace in a single global body, whether based at the United Nations or elsewhere, makes no sense from the perspective of cyberspace. Stewardship in cyberspace implies numerous and distributed acts of

governance at all points of the environment, from the local to the global, undertaken by a multiplicity of actors. Indeed, the only type of security that functions in an open, decentralised network is distributed security.

Stewardship happens all the time in cyberspace, even if the acts are not described in such terms. When Twitter unveiled a new national tweet removal policy, it justified its actions in terms of larger consequences, and was judged according to principles of stewardship. As people entrust more and more data to third parties such as Twitter, how that information is handled, and with whom it is shared, must be based on more than mere self-interest and market considerations.

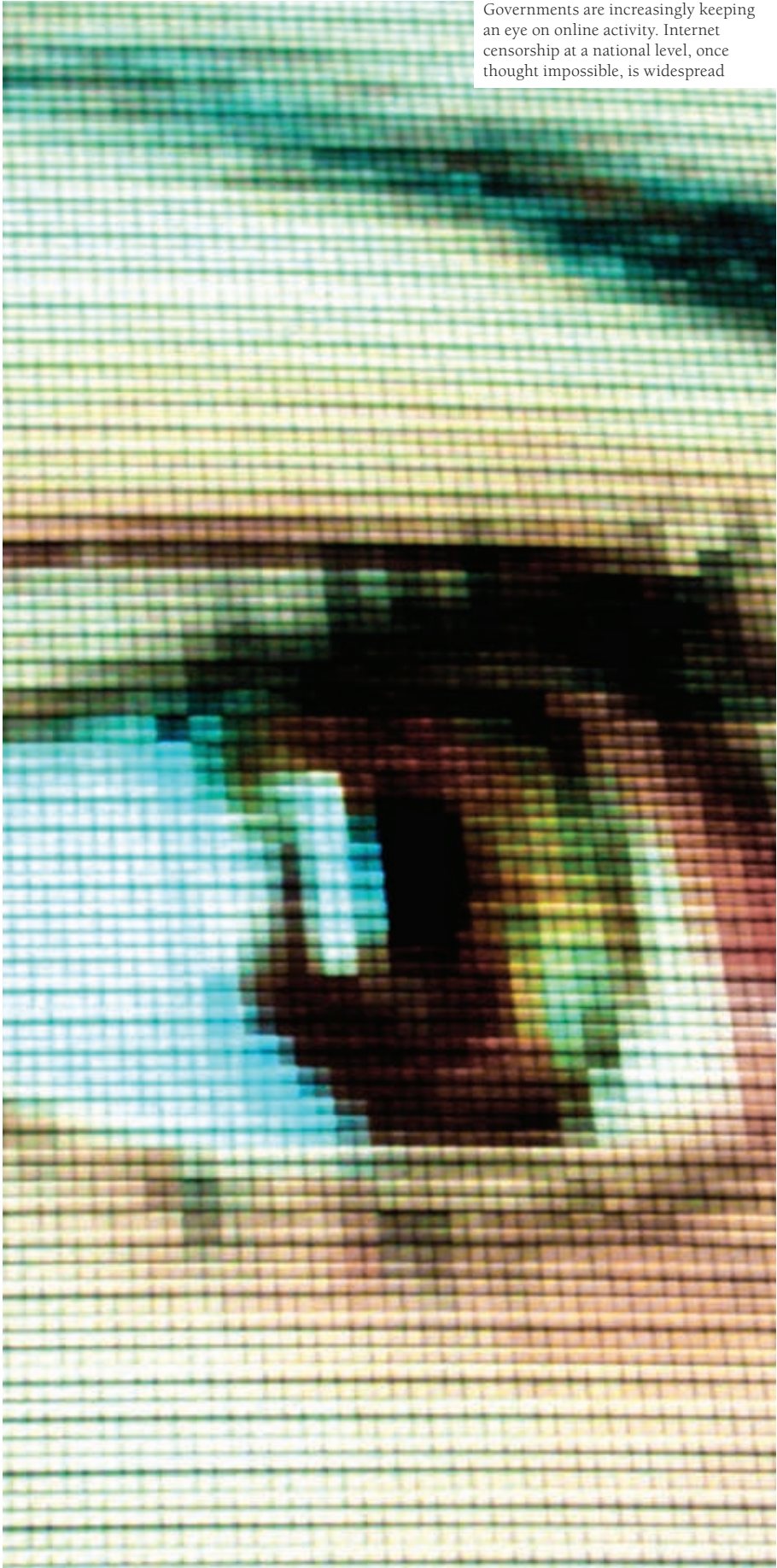
Likewise, profiting from products and services that violate human rights, or exacerbate malicious acts, in cyberspace is unjustifiable in a context of common shared information and communication resources, regardless of profitability. Justifying it on the basis of compliance with local laws is a hollow excuse, in the framework of the higher standards that stewardship in cyberspace imposes.

Limiting state power

Stewardship can help to moderate the dangerously escalating exercise of state power in cyberspace, by defining limits and setting thresholds of accountability. Today's tendency towards mass surveillance without judicial oversight is incongruous with stewardship in cyberspace. Governments are obliged to ensure that malicious acts are not tolerated within their jurisdictions, and to set the highest possible standards of self-restraint through proper mechanisms of checks and balances. Privacy commissioners and competition and other oversight bodies are critical as more and more information and responsibilities are delegated to private-sector hands – equal to, if not more than, those agencies that deal with public and national security.

Since cyberspace is ultimately a network of individuals, stewardship extends also to each individual and to the networks of organisations that constitute global civil society. Protected by academic freedom, equipped with advanced research resources that span the social and natural sciences, and distributed across the planet, university-based research networks are the ultimate custodians and independent monitors of an open and secure commons and the codes, protocols and principles that surround it.

To be sure, stewardship is not a panacea. It will not immediately cease the raw exercise of power and competitive advantage in cyberspace. It will not destroy malicious networks or prevent cut-throat entrepreneurs from profiting from the market to undermine cyberspace. But it will help to raise the bar, set standards, and challenge the players to justify their acts in more than self-interested terms. Above all else, it will focus collective attention on how to sustain a common communications environment in an increasingly compressed political space. ■



Governments are increasingly keeping an eye on online activity. Internet censorship at a national level, once thought impossible, is widespread

Tunisia: creating positive change

Little more than a year ago, the Tunisian Republic began its move into a new era of democracy and freedom. As it emerges from the Jasmine Revolution that ended former president Ben Ali's regime, the country faces many challenges, but it now has the power to overcome them and make fundamental economic and social changes that will set the tone for a more prosperous and stable future.

Among the most important challenges in the birthplace of the Arab Spring are the high rates of youth unemployment and inequality in incomes on a social and regional basis. The immediate goals, therefore, are to put in place a sustainable job-creation programme based on a more competitive private sector by removing some of the barriers that entrepreneurs have faced. Alongside this, the country is keen to diversify into more industrial sectors.

The new government is also seeking to reform the tax regime to reduce social disparity and redistribute public spending to help the poor and improve public services. There is a great deal of work to do, but in addressing these key issues face-on, the country is making itself an attractive home for overseas investment. The regulatory and political landscape, characterised by a new economic strategy, is more open to foreign investors, who in turn appreciate the new era of stability.

Local businesses are gaining confidence that the government will continue to loosen the restrictions on competition

Much of Tunisia is fertile soil – hence its large agricultural industry – and its long coastline on the Mediterranean Sea puts it within easy reach of Europe. In fact, Tunisia's location, as the northernmost country in Africa, gives it a strategic position for business that is hard to equal. It is the meeting point of many cultures, a bridge between Europe, Africa and the Arab world.

This is proven by the country's trade and investment relationships with the European Union and its membership of the Arab Maghreb Union, the Arab League and the African Union. Tunisia has close relations with France in particular, and there is a history of economic co-operation, industrial modernisation and privatisation programmes between the two countries.

Through its trade relations with the EU, Tunisia has programmes under way that focus on reinforcing partnerships to enable industry, particularly small and medium-sized enterprises, to fully benefit from its commercial relations with Europe. There is a mutual recognition of the need for more integrated markets, better technical infrastructure, less bureaucracy, and a regulatory regime to allow small and medium-sized enterprises to compete more effectively on the international stage.

Considerable progress has already been made in aligning Tunisia's legislative regime with that of the EU. For instance, there are discussions over an agreement on conformity assessment and acceptance of industrial products (ACAA), which could soon give full access to the single European market for industrial products that meet the necessary requirements.

Tunisia has a similarly close relationship with the US, which has been supportive during the transition and continues to build

stronger economic ties. The US has already granted \$100 million to Tunisia to help the government focus on its economic priorities, and has agreed a separate package of loan guarantees to help Tunisia raise capital, which will allow it to cut down debts to the World Bank and African Development Bank.

Furthermore, Tunisia, along with Egypt, Jordan and Morocco, is building a new partnership with the US to enhance the trade and investment that are vital to job creation and economic growth. In discussions chaired by the US as chair of the G8 and the Deauville Partnership with Arab Countries in Transition, an agreement has been reached to explore new ways to boost trade and investment between these countries, and to collectively identify new opportunities to increase regional competitiveness.

Under the new political system, there is a real chance to build on Tunisia's many natural advantages, and the most important goal is to fully develop its greatest untapped resource – the talent and potential of its people. With growing economic stability, there is a real opportunity to rebuild the vital tourism sector, boost foreign direct investment, bring back overseas companies to do business, and encourage Tunisia's SMEs to invest in growth.

Investing for the future

It is inevitable that the transition to a new political environment comes at a cost. Yet Tunisia is clearly well positioned for growth. Its economy has been expanding at a faster rate than many others, and there are clear opportunities to develop new and more sophisticated industries.

The current forecast for GDP growth is 3.5 per cent this year, but perhaps more important than such estimates is the fact that local businesses are now gaining confidence that the democratically elected government will continue to loosen the restrictions on competition that typified the previous regime. Optimism will no doubt grow as the new administration introduces incentives to help to channel resources towards high-value-added and knowledge-intensive sectors.

There are many opportunities in agriculture, industry and the services sector to foster growth and make the best use of Tunisia's human capital, not least by adapting schemes for education and training to meet the demands of a more dynamic and flexible economy.

This reborn Tunisian economy will be based on the rule of law and good governance, and with processes in place to increase transparency, competition and accountability, as well as economic efficiency and social justice, Tunisia can achieve the goals of industrial diversity, wealth generation and social equality that are so important to its people.

With the ongoing support of foreign partners and further efforts to improve trade relations with the EU, the US, its African neighbours and its fellow Arab countries, Tunisia has a real sense of opportunity, and the will to seize it.

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Reaching the Millennium Development Goals with energy

Global initiatives aimed at solving world problems are in place as part of an agenda on sustainable energy for all, to be discussed at the Rio Summit

By Timothy E Wirth, president, United Nations Foundation; member, United Nations Secretary-General's High-Level Group on Sustainable Energy for All

The Millennium Development Goals (MDGs) tackle some of the biggest problems facing the world today – poverty, women's and children's health, hunger and education. These are not impossible problems. They are challenges that can be met as long as people can gain access to the tools they need in order to better their lives.

The United Nations Foundation's initiatives seek to support the MDGs by reducing deaths from measles, malaria and polio, expanding childhood immunisation, using mobile phone services to enhance healthcare in developing countries, promoting opportunities for adolescent girls and spurring a global transition to clean energy.

Energy has been described as the 'missing' MDG. Access to modern energy services is a critical enabler for all of the eight goals, but to date it has been a silent partner, omitted from the text of the Millennium Declaration and neglected in policy and practice. This year, the attitude towards energy is changing.

UN secretary-general Ban Ki-moon has placed sustainable development at the forefront of his second-term agenda and has proposed an ambitious global initiative on Sustainable Energy for All. He has called on the world to support and achieve three interlinked objectives by 2030:

- Ensure universal access to modern energy services;
- Double the global rate of improvement in energy efficiency;
- Double the share of renewable energy in the global energy mix.

These objectives will be featured at the Rio+20 Summit in June 2012, 20 years after the first Earth Summit. It is an appropriate moment for national leaders to reaffirm their commitment to action on the subject of

climate change, building on steps that many are taking in their own economic self-interest. Taken together, these three objectives will catalyse global economic growth as energy demand increases in developing countries, many of which escaped financial contagion from the West, and make possible a step change in energy development.

Deploying advanced energy technologies that are increasingly competitive with conventional alternatives may enable some countries to bypass costly and polluting technologies and leapfrog to a more sustainable distributed energy system.

Today 1.3 billion people have no electricity, and another billion have it only intermittently. Four

of every 10 people still use firewood, charcoal, coal and animal waste for cooking and heating.

These deficits are extremely costly to economic development, human health and the empowerment of

women, as well as to the environment. They also represent an ideal business opportunity.

In most countries, women bear the physically demanding and time-consuming burden of gathering fuel and water, sometimes at great personal risk. The World Health Organization says that exposure to smoke from traditional cookstoves and open fires is one of the top five threats to public health in developing countries, causing nearly two million premature deaths annually, affecting women and young children the most.

Electricity and modern fuels are also needed for each of the MDGs – empowering farmers to produce and store more food,

enabling children to study at night, saving lives with refrigerated vaccines and medical care during difficult pregnancies, enabling safe drinking water and reducing pollution.

Development is not possible without energy, and sustainable development is not possible without sustainable energy.

The case for domestic alternatives

Very large flows of capital – \$500 billion per year, according to the International Energy Agency (IEA) – are needed to shift to low-carbon energy systems. But the energy sector is already large and accustomed to dealing with such capital demands, and those sums represent an investment opportunity, not a demand on governments. Concerning energy productivity alone, the McKinsey Global Institute estimated in 2008 that annual investments of \$170 billion would produce an average internal rate of return of 17 per cent and generate energy savings ramping up to \$900 billion annually by 2020.

Investment in renewable energy is growing rapidly, to \$260 billion in 2011 – close to the amount spent on fossil-fuel-based generation. Clean energy investment in the United States rose to \$56 billion, surpassing China's \$47

billion (although China is likely to maintain that spending level, unlike the US).

That scaled-up investment is decreasing renewable energy costs – by 14 per cent annually for wind, and 75 per

Exposure to smoke from traditional stoves and open fires is one of the top five threats to public health in developing countries

cent for solar over the past three years. History suggests that these trends will continue. Meanwhile, the increasing abundance of natural gas – in the United States, as well as Europe and China – means that gas, which has half the carbon content of coal, can be paired with renewables, hydro and various emerging energy-storage alternatives to provide a cleaner, more sustainable source of reliable power. In countries that still rely on costly imported oil for power generation, the case for domestic alternatives is particularly strong. Even extending energy access can be a viable business proposition. The IEA estimates that \$48 billion annually will be



The international attitude to energy generation is changing gradually, with increased use of alternative energy sources such as wind power

needed between now and 2030 to achieve universal access – far more than the \$9 billion that now flows in aid annually. But that gap ignores all the money that poor people have to spend every year on dirty, inefficient energy sources – \$40 billion on lighting alone.

Whether for kerosene, charcoal or electricity from a diesel generator, these costs far exceed the costs of cleaner technologies.

New business models

Often the initial cost of cleaner alternatives is higher – for a solar lantern or stove that uses liquefied petroleum gas, for example. New business models and innovative financing mechanisms are being rapidly developed to respond. Just as poor people cannot afford large bottles of shampoo, but can buy small packets daily, electricity has been made

affordable in Nairobi, for instance, through pre-paid purchases of small amounts over mobile phones. Just as the mainframe gave way to networked personal computers and just as mobile phones are displacing land lines, these distributed technologies will transform the production and use of energy in rich and poor countries alike.

The Sustainable Energy for All initiative seeks to catalyse new commitments to action by governments, businesses and civil society organisations, many of which will be showcased at the Rio+20 Summit in June.

Already the European Commission has announced a new technical assistance facility and promised billions of euros in investment assistance for developing countries. In April, the 23 countries participating in the Clean Energy Ministerial announced new initiatives

that could save consumers more than \$1 trillion over the next two decades. The payoff for these investments will touch everyone's lives – through a cleaner environment and better health, improved conditions for women, and the power of energy to change lives and produce prosperity.

The Sustainable Energy for All initiative focuses on the enabling tools of energy access, efficiency and renewables. By endorsing its three global objectives in Rio in June, world leaders can reaffirm what they are already doing – investing in clean energy technologies. At the same time they will give a powerful boost to the secretary-general's identification of sustainable energy as the essential precondition to sustainable development, mitigation of climate change and achievement of the MDGs. ■



A Kenyan engineering student shows how a 'smart charger' powers a mobile phone. Sustainable energy can transform the production and use of energy

The Amiran Farmers Kit Revolution

An agribusiness tool to create Sustainable Food Security in Africa

Bringing a Holistic approach to agribusiness, the Amiran Farmer's Kit (AFK) represents a new dawn in Agriculture. Making the difference between successful farming for agribusiness and subsistence farming the AFK Holistic approach is a package that comprises of the 3 pillars of success: 1) Knowledge (through training) 2) Knowhow (agro support throughout the season by local trainers) 3) Very High Quality inputs, (a small affordable farming unit that includes a greenhouse, hybrid seeds, gravity fed drip irrigation system, modern fertilizers, environmental friendly chemicals, protective gear, water tank, a Knapsack Sprayer amongst others). **These have been the foundations of the philosophy and the drive behind the amazing success story of the AFK.**

This Modern Sustainable Agribusiness Farming Unit has been designed and tailored for the success of the small scale farmer. Thousands of Amiran Farmers, who have entered the world of Amiran and purchased an Amiran Farmers Kit (AFK), have aligned themselves with these 3 pillars to success and with Amiran's motto - **THE FARMER MUST SUCCEED! The return on investment is realised within 1 or 2 seasons.**

This innovation and unique approach to farming has enabled the AFK to receive two prestigious awards; The MDG award for eradication of extreme poverty and hunger, 2010 as well as another MDG award on Youth empowerment, 2011.

AFK in Farms – Seeking Long Term Solutions

Various institutions understand too well that the only way to alleviate poverty is to form a sustainable means of wealth

creation such that the farmers will have a sustainable, steady mode of income rather than relying on annual handouts from the government and well wishers for their survival. The Kenya Red Cross Society for example has identified the AFK as a tool to mitigate famine especially in the drought stricken parts of the country. Other partnerships include the Food Agriculture Organization (FAO), the European Commission's Drought Management Initiative and many other NGOs, Donors and Government Ministries.

Next Generation Farmers

Many Youths have already taken a keen interest in the AFK technology as is evident in the fact that the average age of the Kenyan farmer is in the mid 50's while the average age of the Amiran farmer is in the mid 30s. With the aim of making agribusiness attractive to the next generation of farmers, Amiran has established partnerships which have seen the youth embrace Amiran's agribusiness approach. Through an initiative dubbed "Amiran Next Generation Farmers Initiative", many schools have acquired the AFK. In addition to strengthening food security in these schools and enriching the diet of the students, the AFK serves as an educational tool, a practical classroom for the students. Amiran is turning around the mindset of many youth who are now taking up this technology, and farming in general, not just as a traditional way of earning a livelihood but as an exciting career!!

Through its facebook page 'Amiran K', Amiran continues to attract a young calibre of farmers who get to interact with



An Amiran Farmers Kit (AFK) growing inside the greenhouses and outside

Amiran, chatting, sharing experiences and even making enquiries on all matters related to agriculture and the complete solution that Amiran offers. Indeed farming is now becoming 'cool' to the young generation! Amiran is proving to the youth that "farming is cool".



Children enjoy their tomatoes at the Kenya Red Cross AFK project in Moyale desert, Kenya



A young girl in Walda desert, Kenya holding tomatoes from the AFK

Kenya Tomato Growing vs Amiran Farmers Kit (AFK)



Kenya Red Cross and Amiran Kenya AFK project in a desert in Moyale – A view from above

For more information Visit: www.amirankenya.com or contact: afk@amirankenya.com

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The world needs to work towards greater equality and social justice

When inequality factors interact, the result is often a pervasive social exclusion that can be tackled only by crafted interventions – a fact that development policy formulated by international groups such as the G8 should reflect

Depending on whom you talk to, and which part of the world they are from, economic development over the past years could be referred to as either an impressive success story or a serious failure. The reality is that both of these portrayals hold some truth, with the minority of the world's citizens enjoying success and the majority being left out of it.

Despite tremendous progress in many respects, evidence on increasing national (within country) and global (between countries) inequalities, and the persistence of poverty and social exclusion, abounds. These trends clearly expose the inability of current economic models based on liberalisation and globalisation to foster sustainable and equitable development. If we look, for example, at estimates of global income inequality, the figures reveal that in 2007 the wealthiest 20 per cent of humankind enjoyed almost 83 per cent of total global income, while the poorest 29 per cent had just a single percentage point of that income. At the current rate of improvement, it would take the poorest one billion people more than 800 years to access 10 per cent of global income.¹ But while much of the discourse on inequality has been dominated by measures of income, taking a closer look at who are the people who are consistently being left out of development progress helps us to understand the multidimensional nature of inequality, and the important policy implications that this has.

Intersecting inequality and social exclusion

Evidence from a recent global study² produced by the MDG Achievement Fund (MDG-F) and the Institute of Development Studies (IDS), shows that in almost every society, in every region of the world, both rich and poor, there are

certain groups of people who face systematic social exclusion as the result of the intersecting inequalities that characterise their lives. These include:

- Cultural inequalities: forms of discrimination and devaluation that treat members of these groups as somehow inferior to others. These are identities ascribed at birth, such as race, ethnicity, and religion, among others.
- Political inequalities: the denial of voice and influence in the decisions that affect their lives and their communities
- Spatial inequalities: such groups frequently live in places that make them harder to reach or easier to ignore
- Economic inequalities: they are at the receiving end of an unfair distribution of assets and opportunities

Each of these inequalities is a source of injustice in and of itself, but it is their interaction that explains the persistence of social exclusion over time, and its resistance to 'business as usual' approaches to development. Caste, race, ethnicity, language, and religion are among the most common markers of exclusion. As elsewhere in society, gender cuts across all these factors, so that women and girls from marginalised groups generally fare worse than men and boys.

Issues of inequality, exclusion and social justice have become a unifying force amongst disillusioned citizens of both rich and poor countries alike who are calling for a rethinking of international and national policy frameworks. With the majority of the world's poor now living in middle-income countries, the onus is increasingly on national governments to adopt inclusive policies that tackle the multidimensional nature of inequality and respond to the social, cultural, political and economic realities that create them. But national inequalities do



Tigray, Ethiopia: a regional government representative gathers information on women's needs and access to health services



Woorani women, Ecuador: obtaining sociocultural and economic data on the indigenous population is important for inclusive policies



Philippines: the MDG-F is working with the government to provide safe water to 122,000 households in disadvantaged regions

not stand alone and are magnified when looked at from a global perspective of inter-country/region disparity.

It is high time that leaders meeting at the G8, the G20 and other international fora devote the necessary political energy to tackling pervasive inequalities, integrating it as a central part of development policy applicable universally to both rich and poor countries. The post-2015 discussions that are aimed at determining a new development agenda after the 2015 deadline of the Millennium Development Goals offers one opportunity to do just this, while including mechanisms of accountability for delivery on agreements made.

Caste, race, ethnicity, language, and religion are common markers of exclusion, while gender cuts across all these factors

As we go forward, it will be important to learn from countries that have already made progress on the inequality front. While each country should devise strategies that are most likely to work for its own context, research on

Crafted interventions that tackle inequality

Since 2007, the MDG Achievement Fund has been supporting 130 joint programmes in 50 countries worldwide, with the aim of supporting national efforts to achieve the Millennium Development Goals. Evidence from some of these programmes shows that while poverty and inequality are part of the same problem, tackling inequality requires crafted interventions that address the social, cultural and political causes of exclusion.

In Ecuador, for example, collecting disaggregated socioeconomic data on the realities of indigenous and Afro-Ecuadorian communities, passing antidiscrimination legislation and providing culturally relevant basic services on maternal health have helped the government to adopt more relevant social policies and practices that positively impact the lives of excluded groups.



Chocó, Colombia: the MDG-F is working to improve food security and nutrition for the indigenous and Afro-Colombian communities

national experiences shows the importance of certain motivations and policies:

- Matching the drive for economic growth with an even stronger drive for equality: redistributive fiscal policies, reformed taxation systems, and more investment in those left behind
- Strengthening the resource base of marginalised groups: land reform and land titling, asset transfers and inclusive financial systems, investing in broad-based, employment-centred economic growth
- Investing in infrastructure and area-based development
- Improving the outreach and quality of basic social services, ensuring they are culturally relevant
- Comprehensive social protection measures to sustain basic living standards
- Comprehensive collection and dissemination of information that is disaggregated
- Legislating against discrimination combining it with other measures such as affirmative action.
- Investing in developing participatory monitoring tools which encourage government accountability
- Group-based solutions: enabling excluded groups to organise around, and participate in, decisions that affect their lives;
- Focusing on transformative approaches that address the root causes of inequality.
- Strengthening formal and grassroots democratic processes, committing to greater international solidarity and the promotion of inclusive spaces for global policy debate.

**The MDG Achievement Fund supports national efforts to eliminate poverty and inequality*

Footnotes

- 1 Isabel Ortiz and Michael Cummins (2011), *Global Inequality: Beyond the Bottom Billion*, Social and Economic Policy Working Paper, Unicef
- 2 Naila Kabeer (2010), *Can the MDGs Provide a Pathway to Social Justice? The Challenge of Intersecting Inequalities*, Sussex and New York, IDS & MDG Achievement Fund



www.mdgfund.org

Harnessing investment for sustainable development

Foreign and domestic investment in developing countries is key to promoting environmental, economic and sociopolitical sustainability

By Supachai Panitchpakdi, secretary-general, UN Conference on Trade and Development

Investment plays an essential role in promoting growth and sustainable development, boosting countries' competitiveness, generating employment and reducing social and income disparities.

As the domestic investment levels of many developing countries are low, particularly in least-developed countries (LDCs), there is a need to harness foreign direct investment (FDI) to promote economic growth. Depending on the situation, however, FDI can substitute for, complement or even strengthen the formation of capital by domestically owned firms.

As a result, if foreign investment is to foster economic development, policymakers need to ensure that FDI does not lead to the 'crowding out' of domestic investment. In particular, they should seek to ensure that finance and other resources are available in a fair manner to domestic as well as foreign firms. Moreover, national development strategies and investment policies should be coordinated to maximise the synergies between FDI and domestic investment.

Investors working in tandem

There are situations in which foreign and local firms can work together to exploit their respective comparative advantages and achieve mutually beneficial outcomes. In infrastructure, a close association between foreign and domestic investment – such as through public-private partnerships (PPPs) – can help substantially in meeting local development needs, especially through the transfer of complex technologies and expertise to the local economy and its enterprises.

In agriculture, transnational corporations can play a significant complementary role, providing much-needed capital, technology and other contributions to increase productive

capacity in the host country through contract farming. Domestic and foreign investments can also interact with one another, enabling a 'crowd-in' effect for agriculture-related activities such as irrigation.

With regard to climate change, foreign and domestic investors can join forces and contribute to efforts to meet low carbon emissions targets and, more importantly, by supporting developing countries in their pursuit of long-term sustainable growth and development.

Outlook for foreign direct investment

Despite turmoil in the global economy, global FDI inflows rose by 17 per cent in 2011 to an estimated \$1.5 trillion, surpassing their pre-crisis average in 2005-07. FDI inflows increased in all major economic groupings – developed, developing and transition economies.

Developing and transition economies continued to account for half of global FDI in 2011 as their inflows rose to a new record, driven mainly by robust greenfield investments. In these groups of economies, the 2011 increase in FDI flows was no longer driven by South, East and South-East Asia, but rather by Latin America and transition economies. Africa, the region with the most LDCs, continued its decline in FDI inflows.

FDI flows to developed countries also rose by 18 per cent, but the growth was largely down to cross-border mergers and acquisitions (M&As), not the much-needed investment in productive assets through greenfield investment projects. Moreover, some of the M&A deals appear to reflect corporate restructuring and a focus on core activities, especially in Europe.

The United Nations Conference on Trade and Development (UNCTAD) estimates that FDI flows will rise moderately to around

\$1.6 trillion in 2012. However, the fragility of the world economy, the volatility of the business environment, uncertainties related to the sovereign debt crisis and apparent signs of overheating in major emerging market economies will have an impact on FDI flows in 2012. Both cross-border M&As and greenfield investments slipped in the last quarter of 2011, indicating the risks and uncertainties for further FDI growth in 2012.

UNCTAD continues to promote investment for sustainable development through a range of activities. This is the overarching theme of its 2012 World Investment Forum, in Doha on 20-22 April. The forum aimed to formulate new investment policies and strategies for the post-crisis era, with a focus on sustainable development and inclusive growth. By boosting investment in the real



economy, such strategies and policies can help to restart the engine of growth and generate much-needed employment.

Reflecting the spread of new forms of international investments in recent years, UNCTAD's 2011 *World Investment Report* was devoted to the topic of 'non-equity forms of international production and development'. These investment modes are increasingly being used by transnational corporations in their global value chains. They offer opportunities for developing and transition economies to integrate more closely into the rapidly evolving global economy, to strengthen the potential of their own productive capacity and to improve their international competitiveness. Cross-border activity in non-equity forms of investment is significant, particularly in developing countries. It is estimated to have generated over \$2 trillion of sales in 2010 worldwide.

Multilateral efforts

The investment policy regime of the 21st century has become more complex, diversified and interconnected with various other policy areas. The 2012 *World Investment Report* takes a fresh look at investment policymaking and defines a comprehensive framework for sustainable development.

UNCTAD is also working with the G20 on ways to harness foreign investment in order to promote sustainable growth and

development. Since the G20's London Summit in April 2009, UNCTAD and the Organisation for Economic Co-operation and Development (OECD) have issued six joint reports relating to G20 investment measures.

In addition, UNCTAD is contributing to the development of the key indicators for measuring and maximising the economic and employment impact of private-sector investment. It leads an inter-agency working

Foreign and domestic investors can contribute to efforts to meet low carbon emissions targets by supporting long-term sustainable growth

group that includes representatives from the United Nations Development Programme (UNDP), the International Labour Organization (ILO), the OECD, the World Bank and other bodies to support the G20 in this objective. An interim report submitted to the G20 Cannes Summit in November 2011 offered a policy tool to measure, and thereby maximise, economic value-added and job creation arising from private-sector investment in value chains.

UNCTAD is also following up on G20 concerns regarding food security and, together with the Food and Agriculture Organisation, the International Fund for Agricultural Development and the World Bank, prepared the report *Options for Promoting Responsible Investment in Agriculture* for the G20 High-Level Development Working Group.

UNCTAD, together with UNDP, the ILO, the OECD, the World Bank and other invited organisations, is identifying and promoting the best existing standards for responsible investment in value chains, as well as voluntary investor compliance with such standards. A report submitted by the inter-agency group to the Cannes Summit took stock of existing standards for sustainable business conduct, identified key issues regarding current standards, drew lessons for the further development, promotion and implementation of such standards, and outlined policy approaches for their promotion and implementation.

UNCTAD has high expectations for the forthcoming G8 summit in Camp David. It would be pleased to collaborate with the host in the meeting's preparation. The G8, together with the G20, can provide further impetus to political and economic cooperation and coordination on investment and development issues and stimulate multilateral support in favour of investment for sustainable development. ■

Domestic and foreign investors are encouraged to work together to help emerging countries work towards a sustainable future



The Kuwait Fund: helping people help themselves

Since gaining its independence in 1961, Kuwait has committed itself to the principles of cooperation and humanitarian aid, largely through the Kuwait Fund for Arab Economic Development. The Fund, which was the first institution in the Middle East to take an active role in international developmental efforts, recently celebrated its 50th year, and over that time it has built an enviable track record of financing economic, social and development projects in developing countries.

Focused on providing loans on concessionary terms, offering technical assistance to finance feasibility studies, contributing to projects for social and economic improvement, and training people in developing economies, the Fund has extended a helping hand to 104 countries. Its motto is 'helping people help themselves', and it has been the cornerstone of friendship and solidarity between the state of Kuwait and the developing world.

The extent of its generosity stretches across cultures and across the world to reach those who most need its help. For half a century, Kuwait has used the wealth that flows from its rich oil industry to bring finance, knowledge and support to countries that need to tackle serious health problems or invest heavily in agriculture and industry to strengthen their economies and raise standards of living. After 50 years of giving, it is appropriate to reflect on the Fund's achievements, and look ahead to the future.

Building a better future

During the past five decades, the Fund has provided more than US\$2.35 billion – around 16 per cent of its total lending – to more than 120 farming and agricultural projects including irrigation, animal production, fisheries and agro-processing. This support has provided vital assistance to so many people that it is impossible to list every example, but just a few key initiatives show how diverse an understanding the Fund has of the needs of the agricultural sector, and the value it places on cross-cultural ties.

One could look, for example, at the 15,000-hectare water project in South Lebanon, which focuses on irrigated agriculture fed from the Litani River to support the production of fruit, vegetables and animal fodder. In the years ahead, it is estimated that around 400,000 people will benefit directly from this project of drainage and irrigation works, land reclamation and water treatment.

In Mali, the Fund has helped to finance the Ke-Macina irrigation project, which aims to increase the production of crops, mainly rice, in the country's eastern region by using water from the Niger River and reclaiming around 4,600 hectares of land, with more than 4,000 rural families directly benefiting from the new infrastructure.

In Nepal, the Fund has backed the Praganna irrigation project, which brings water to 5,000 hectares along the Rapti River bank.

But irrigation and water management are not the only methods of improving farming. The Fund's involvement with the poultry industry in Egypt demonstrates that health issues are equally as important.

In Egypt, substantial work has been done to curtail the effects of avian influenza and protect not only public health, but also the country's poultry stock. The Fund has helped to finance small, medium and micro-scale projects to develop integrated processes for the production, preparation and marketing of poultry to improve standards of safety.

Projects that directly address human health issues are just as important. For instance, guinea worm, which is caused by a nematode parasite, is found in many African and Asian countries. People who drink infected water suffer terribly as hosts to the worm, which causes intense pain and can lead to conditions such as sepsis, arthritis and tetanus.

The solution to this incurable disease is mainly education about the simple filtration of drinking water and technology to provide clean drinking water. Since the formation of the Global Guinea Worm programme in 1986, which the Fund has supported, the incidence of the disease has fallen from around 3.5 million each year to below 10,000.

Alongside its support for health programmes that help developing countries to combat diseases such as guinea worm and river blindness, the Fund has also shown its willingness to contribute to initiatives such as the Chernobyl Fund, which was set up to help Ukraine in dealing with the after-effects of the 1986 nuclear disaster.

The transport sector is another key focus for the Fund, because of its potential for huge social and economic impact. Up to the end of 2011, the Fund had extended 339 loans to 80 developing countries – from China and Central Europe to South America and Southern Africa – to improve transport infrastructure, knowing that it is vital for food and medical supplies to reach remote and rural areas, and that it is the backbone of the agricultural and industrial sectors, not only for domestic use, but also for export.

No end in sight

The Fund's long history of involvement in projects that have dramatically improved the lives of millions of people is set to continue for many more decades. Work is ongoing to understand the needs of communities around the world, and to identify the best solutions for them.

Throughout its history, the Fund has built strong ties with many countries around the world, and its commitment to 'helping people help themselves' is as strong as it was 50 years ago.





Republic of Uzbekistan

Irrigation and agricultural support promotes food security

Since 1961 Kuwait Fund has supported development projects in more than 100 countries

KUWAIT FUND *helping people help themselves*

www.kuwait-fund.org



African infrastructure: foundation for a continent's growth

Africa needs support to build the transport, power and telecoms facilities that are vital as a basis for its ongoing economic growth

By Lars H Thunell, executive vice president and CEO, International Finance Corporation, World Bank Group

Even as new roads, ports and power stations are being completed across Africa, the continent's people and its growing economies are demanding more.

Thanks to a combination of factors – including better governance, soaring commodity prices and increased foreign investment, especially from China, India and other emerging powers – Africa has chalked up a decade of unprecedented growth: its gross domestic product figures are now the envy of many in the developed world.

But more must still be done. Africa's recent rise highlights – even deepens – long-standing structural problems, with infrastructure growth failing to keep pace. The reality in many African cities is congested roads, a lack of clean water and frequent power outages. Most of Africa's population has no access to electricity.

The International Finance Corporation (IFC) – a member of the World Bank Group and the largest global development finance institution focused on the private sector – is helping to mobilise investors to meet this challenge. Africa's continued reform programmes and IFC's strategy are coming together at an unprecedented scale in 2012, when IFC will, for the first time, invest and mobilise more than \$1 billion in private infrastructure in Africa.

Facilitating investment

Overcoming the obstacles is one of the keys to helping the private sector reach its potential in creating jobs, raising incomes and improving lives. The World Bank estimates that \$93 billion in annual investment is necessary for the region to meet the United Nations Millennium Development Goals – an amount that is more than double the current rate of spending.

While most of that amount must come from government coffers, the private sector also has an essential role to play. Helping to fix Africa's infrastructure woes is a major pillar of IFC's strategy on the continent, where its goal is to improve the efficiency, affordability, reach and quality of basic infrastructure services through a combination of investments and advisory solutions.

Focus on building blocks

IFC develops greenfield projects and improves existing infrastructure installations. It provides equity and quasi-equity, finances corporate loans and arranges public-private partnerships, acquisition finance and refinancing. IFC's focus is on the building blocks of any modern economy: ports, railways, telecommunications and power, including renewable power.

In the power sector, where IFC is concentrating resources, African infrastructure commitments for the fiscal period 2000-12 total 19 projects and \$523 million. An increasing focus of the organisation's work is helping to rebuild infrastructure in Africa's post-conflict countries, where demand is often the greatest but resources are the most scarce.

A shortage of funding sinks some development in Africa; a more serious hurdle is a lack of know-how to develop and guide infrastructure projects so that governments can benefit from private-sector expertise, management and finance.

Providing this know-how is where IFC is leading the way. Developing deals requires time, effort, experience and the ability to strike the right balance between private and public interests. IFC has successfully counselled African governments – including local municipalities – on ways to engage the private sector in



Citadel Capital SAE



IFC advised the Kenyan government on its privatisation of the Kenya-Uganda rail line. Turnaround times for rail carriages between Mombasa and Nairobi have improved by up to 30 per cent as a result

essential public services, and on how to restructure state-owned enterprises.

IFC's support for private-public partnerships between 2008 and 2011 is expected to facilitate more than \$4 billion in private financing for infrastructure and health, and to provide improved services to approximately 19 million people.

Recent successful projects highlight the various ways in which IFC is helping Africa to build its infrastructure. Examples of such projects include:

- **Cameroon:** since 2001, when IFC advised the government on privatising its power sector, new owner-operator AES Sonel has invested more than \$1 billion, connecting almost 340,000 people to its system. The most recent transaction was the 2011 financing for the company's 216-megawatt Kribi project, the first commercial use of Cameroon's substantial offshore natural gas reserves. In addition to providing €60 million (\$86 million) in direct financing to the €263 million (\$360 million) project, IFC coordinated a larger loan package from partner institutions, and worked with the World Bank on a partial risk guarantee from the International Development Association to facilitate Cameroon's first long-term, local-currency loan for infrastructure;
- **Senegal:** IFC was the global coordinator of financing for a €230 million (\$302 million) toll road project, which, when completed in 2013, will run 25 kilometres from Diamniadio to Dakar, cutting travel time to and from the capital from two hours to less than 30 minutes. France's Eiffage won the project's World Bank-supported 30-year concession, for which IFC provided €22.5 million (\$30 million) in long-term debt alongside €40 million (\$52.3 million) from the African Development Bank, the West African Development Bank and local bank CBAO;
- **Kenya:** Kenya Airways, one of Africa's largest airlines, is launching a \$3.6 billion investment programme to double its fleet of aircraft and add 31 destinations. The Kenyan government's IFC-supported 1995 privatisation of this once-downtrodden state airline brought in KLM as controlling investor, turning Kenya Airways into the strong, profitable

performer that it is today. Now, as many European banks pull back from Africa, IFC's \$80 million loan and \$25 million equity stake serve as a stamp of approval, helping Kenya Airways to attract additional private capital so that it can serve many more cities in Africa as well as India, China and the Middle East.

- **Inter-regional:** In the ground transport sector, IFC also advised the Kenyan government's privatisation of the 2,352-kilometre rail line that links Kenya and Uganda. In 2011, IFC invested alongside the new private-ownership group, led by Egyptian-headquartered private equity house Citadel Capital, that is bringing the rail line back to life. Turnaround times for rail carriages between East Africa's biggest port of Mombasa and Nairobi

An increasing focus of IFC's work is helping to rebuild infrastructure in post-conflict countries, where demand is often the greatest but resources are the most scarce

have already improved by as much as 30 per cent as a result. To create similar efficiency gains in shipping, IFC is financing a private consortium's new €350 million (\$406 million) container terminal concession in Lomé, Togo, one of West Africa's few deepwater ports. This project will increase the flow of imports and exports across coastal West Africa and into landlocked Mali, Niger and Burkina Faso to the north.

These, and many other projects, underline the strides that Africa is making. While it will take time and sustained investment for the continent to build a solid infrastructure foundation, significant progress is being made. IFC will continue to provide significant support for Africa in this important process. ■

CREATING JOBS AND GROWTH THROUGH INNOVATION

TECHNOLOGY BASED INNOVATION AS AN ENGINE FOR THE COMPETITIVE POSITIONING AND SUSTAINABLE DEVELOPMENT OF THE ECONOMY



To know more about the Start-Up Initiative, visit
www.startupinitiative.com

To join forces or discuss working on similar growth and job-creation partnerships, email
startup@intesasanpaolo.com

OUR RESPONSIBILITY

The Intesa Sanpaolo Group is today among the top banking groups in the euro zone and the leading banking group in Italy with over 19.6 million clients served by 7,700 branches and present in over 40 countries.

As a responsible European corporate citizen with a global reach, we have a duty to be part of the solution in these times of volatile and increasingly interdependent global markets.

Working for years on an international scale, we experience innovation as a key strategic factor and technology as an enabler to boosting growth and creating jobs. That's why we decided to establish ourselves as a European catalyst, connecting the dots of innovation scattered throughout the ecosystem.

That's why we made innovation a key commitment in our interaction with clients, start-ups, peers and the society, and that's why we created the Intesa Sanpaolo Start-Up Initiative.

OUR INNOVATION COMMITMENT

Our commitment to innovation has so far taken on many forms, such as:

- financing businesses through the Nova+ programme by providing favourable credit lines for innovative enterprises;
- advising on EU programmes through Intesa Sanpaolo Eurodesk which offers access to grant funding;
- networking with top research institutions to expose their most promising start-ups to investors and companies; and
- conducting equity investments through Atlante Ventures, our early stage funds dedicated to venture capital investing.

SOMETHING MORE - THE INTESA SANPAOLO START-UP INITIATIVE

In light of our commitment, we soon realized that a broader, scalable, and more collaborative solution needs to be found. As a result, two years ago, we successfully launched the Intesa Sanpaolo Start-Up Initiative, a comprehensive programme aimed at facilitating both equity financing and business relationships for start-ups.

Selected start-ups go through an investment readiness training. The best ones attend arena events where they can pitch to international investors and businesses, obtain widespread media coverage, and gain access to a rich network of partners providing key services and resources. The arena events are organized by sectors, which today include biotech, cleantech, ICT & Web, nanotech & materials, social ventures, electromechanics, and healthcare. The events soon extended their reach from Italy to other parts of Europe, including London, Frankfurt, and Paris, as well as the United States with its key hubs in New York and San Francisco.

The events then added specific industry arenas whereby start-ups from various sectors present technologies relevant to a specific industry such as agro-food, construction & real estate, fashion & design, and transportation.

More recently, through the EU's Competitiveness and Innovation Framework Programme our bank has been tasked to apply its Start-up Initiative process as a turnkey solution to boost start-up opportunities in the mobile technology sector across Europe.

THE INTESA SANPAOLO START UP INITIATIVE IN NUMBERS

Since the launch of the initiative in September 2009, we generated the following results:

20	Italian investment forums
14	International investment forums
1,200	Screened submissions
300	Trained start-ups
200	Finalist start-ups
3,000	Investor & Corporate attendees
1,500	Follow-ups with the start-ups
40	Success cases*

*) the Start-Up Initiative enabled this number of specific commercial, service and investment deals

THE POTENTIAL OF ONE – THE POWER OF MANY

Although solitude, dispassionate search, and deep reflection can produce amazing ideas and discoveries, it is the collaboration of many that constitutes the critical force behind their realization on a broader scale.

As we face the challenge of building lasting prosperity, we become humbly aware that just as the challenge is not the result of the actions of a selected few, potential solutions cannot be realized on a grand scale without the contributions of many.

The Intesa Sanpaolo Start-up Initiative has so far proven to be a successful model that facilitates investments in entrepreneurs, reduces investors' risk exposure, and acts as a platform to connect with other players. Although initiated and chiefly operated by our bank, its success rests on the shoulders of

many, and its scalability depends on the collaboration with likeminded peers.

Through our global outreach, we have been most delighted to have successfully entered into several partnerships, including government trade & investment offices, international investment networks, business angel associations and some of the world's leading academic institutions that provide exposure to breakthrough technologies aimed at impacting humanity in a positive way.

VALUES – INGREDIENT TO LONG-TERM SUCCESS

As the leaders of some of the largest industrial nations gather these days in the corridors of insight, influence, and responsibility, it is as if the world comes closer for a few moments and is given the opportunity of discussing the many challenges afflicting mankind and

exploring suitable solutions. As it comes to realizing those solutions, more often than not, technological innovation turns out to be one of the key drivers, and entrepreneurs the key protagonists in realizing them.

It is here, that the values which some of the most successful entrepreneurs live by come to mind: the high-spirited courage of starting something new; the essential requirement of challenging oneself; the dispassionate search for the right answer; the indefatigable passion to continuously improve; and a dependable commitment to pursue ambitious goals.

Relying on this value framework, we look forward to working with likeminded partners to help advance innovation as a key strategic factor and technology as an enabler of economic development.

THINK BIG, START SMALL, SCALE FAST

THINK BIG

to allow yourself to think global and regard the world as your playing field

START SMALL

to make sure that "it" works and that you know what it takes to roll it out

SCALE FAST

to grow organically, successfully, and sustainably

The role of Asian Development Bank in shaping the continent's future

Asia's recent economic record has been impressive, but it faces huge challenges in ensuring that such growth is sustainable if poverty is to be eliminated

By Haruhiko Kuroda, president, Asia Development Bank

Asia has emerged as a centre of global dynamism. Today, it accounts for a third of global gross domestic product (GDP) and contributes to more than half of global economic growth.

Impressive growth in the past few decades has slashed Asia's poverty levels dramatically; between 1990 and 2009, the proportion of people living on less than \$1.25 a day fell from 50 per cent to 22 per cent. In sheer size and speed, this may be the greatest episode of poverty reduction in human history.

But these achievements may obscure another side of the Asian story. More than 60 per cent of the world's extreme poor live in Asia. The extent of entrenched poverty is just as staggering as the region's record of growth and expansion. Almost two billion Asians do not have basic sanitation. Nearly half a billion have no safe water to drink. Asia has made significant progress in meeting the Millennium Development Goals (MDGs), but is also behind in meeting several key targets.

A region of contrasts

Improving health and nutritional outcomes are among these targets. The 2012 report on the MDGs showed that the region still lags in 10 out of 22 indicators. The report also pointed to the slow progress in preventing hunger in 60 million children and the deaths of some three million before their fifth birthday. Based on current trends, by 2015 in Asia's off-track countries more than 60 million children will still be underweight. In 2008, 140,000 mothers needlessly died from causes related to childbirth.

The harsh contrasts between great advances and great deprivations are highlighted by increasing inequalities across the region. While the regional average poverty level is around 22 per cent, country-specific

figures range from zero in Malaysia to 55 per cent in Nepal. Some of the highest poverty rates – above 40 per cent – are found in South Asia. Eight of 27 countries – Bangladesh, Georgia, India, Mongolia, Nepal, Philippines, Turkey and Uzbekistan – are unlikely to achieve the MDG target of halving poverty by 2015, although the region has achieved it based on its regional average. Asia's growth is thus an unfinished story.

While the pace of economic growth must be sustained and increased, more attention must be paid to the quality and patterns of growth. That means redoubling efforts to reach those left behind in the development process so that they, too, can contribute

By generating new growth opportunities in trade, consumption and investment, Asia can help to stimulate the global economy

to growth and reap the rewards. It also means doing everything possible to arrest and reverse rising inequalities, which may threaten social cohesion and stability.

In addition, Asia's growth must be sustainable. The continent is under increasing pressure to reconcile stable and robust economic expansion with the growing challenges of energy security, climate change and massive urbanisation. By 2030, current estimates indicate that Asia will account for 38 per cent of global energy consumption. This comes with growing responsibility to address energy security. Asian economies also face serious consequences if they fail to act





Poverty levels vary widely across Asia, from zero in Malaysia to 55 per cent in Nepal, highlighting the contrast between economic advances and deprivation

decisively and collectively to mitigate climate change. Massive urbanisation is contributing to the already precarious energy outlook and environmental risks associated with natural disasters and other effects of climate change.

Asia's challenges are compounded by the need to safeguard its growth, despite a worsening external environment. The European debt crisis and its potential spillover effects remain uncertain, but Asia could be hit hard as finance dries up, choking off trade and investment flows. It is therefore crucial that developing Asia escalates its efforts to rebalance growth by increasing domestic demand while maintaining strong links to the global economy. Doing so would benefit national economies, bolster regional development and support global growth.

Inclusive growth

The Asian Development Bank (ADB) has, therefore, a key role to play. To sustain high growth rates, address widening inequalities, and pursue strong and sustainable development, Asia must fundamentally change the way it grows. It must make growth more inclusive, environmentally sustainable and better balanced, with increasing emphasis on regional cooperation. The ADB provides support through a clear strategic agenda on inclusive growth, environmentally sustainable growth and regional integration.

Inclusive growth not only generates economic opportunities, but also broadens access to these opportunities so that more members of society can participate and benefit from growth. This is a complex task and requires many different interventions in almost every development sector. Thus, ADB supports greater investment in education and health, especially for the poor.

It helps develop infrastructure to alleviate constraints to economic growth and connect people to markets so that they can join in and

gain from economic activities and growth. ADB also supports greater access to finance to allow the poorer members of society to take up opportunities to improve their productivity, incomes and living standards.

Regional integration

ADB's support for environmentally friendly technologies, such as clean and renewable energy sources and efficiency-improvement measures, helps its developing member countries address environmental concerns, including climate change. ADB works with countries to adopt environmental safeguards and strengthen institutions for their effective enforcement. It builds capacity in the region to adapt to climate change, promote sustainable resource management and also helps to improve air quality.

Regional integration will help rebalance growth regionally, and globally. ADB helps build stronger links among member countries in trade and finance and cooperation in economic surveillance. Lifting trade restrictions and strengthening intra-regional trade will help to reduce Asia's overdependence on exports to industrial countries and increase Asia's resilience to regional and global economic shocks.

However, measures to boost regional integration will have limited success in the absence of regional infrastructure that adequately connects national markets. Over the years, ADB has been providing critical investments for cross-border infrastructure projects – in transport, energy and telecommunications – to facilitate movements of goods, services, people and information across countries. These investments enlarge market access, reduce economic distance and facilitate trade, investment and labour flows.

Serious concerns remain over the European debt crisis. The G8 and G20 processes have played a key role in steering

the global economy through the recent financial crisis, and they are expected to continue to do so in the future. Their agendas focused on managing the crisis, supporting recovery and addressing issues related to global imbalances, economic governance and the prevention of future global financial crises. Their concerted and decisive actions proved effective. They should take a leadership role once again to help to resolve the current European crisis.

International investment

Asia can contribute by sustaining its own robust economic growth. By generating new growth opportunities in trade, consumption and investment, Asia can help to stimulate the global economy. With this in mind, ADB calls on the G8 and G20 to continue investing in Asia by reaffirming the commitment to the action plan of the G20 Development Working Group. There are concrete ways for G8 governments to support this commitment. By working with public lenders to make relatively modest investments under the action plan's infrastructure pillar, they can help catalyse much larger sums from the private sector and address Asia's wider development agenda.

Asia's fate is inextricably tied to what is happening elsewhere around the globe. The rest of the world has turned its attention to Asia. The continent's remaining challenges must be overcome in the interest of both the region and the global economy. Unlocking Asia's economic potential can create new markets that will help the rest of the world to transcend the current crisis. The Asia and Pacific region presents this century's greatest economic opportunity. If the G8 and G20 can tap into the region's growth and dynamism, they, too, stand to benefit. Ultimately, it is everyone's collective responsibility to build a new foundation for sustainable development and economic growth for all. ■



The high-rise skyline of Mumbai in India – rapid urbanisation in Asia raises questions about energy provision and the environmental risks posed by natural disasters and other effects of climate change

One planet – one health: moving towards sustainable solutions

The most important challenge to health is the pace of change in a world where all types of interaction are becoming increasingly complex and interconnected

The Millennium Development Goals (MDGs) are an important United Nations initiative to improve global health. They recognise that alleviation of poverty, adequate nutrition and clean water, education and the integrity of the environment are critical requirements for a healthier planet. Despite progress, one in eight children in sub-Saharan Africa still die before the age of five, many from malnutrition, diarrhoea, pneumonia and blood infections; in South Asia, maternal and newborn deaths from these causes are also common. HIV, malaria and tuberculosis are being targeted specifically, but a greater emphasis on underlying factors is needed. Current economic uncertainty threatens the stability of health systems and, together with unfavourable environmental changes, provides the setting for infectious diseases to emerge and spread.

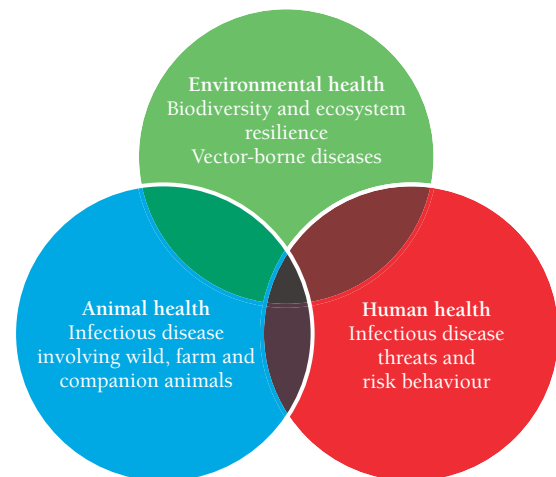
Infectious diseases will continue to challenge and erode global health initiatives if we cannot address these underlying problems in developing countries, and prevent and control the spread of infections to, and within, them. Research and capacity building across discipline boundaries are needed to unravel the complex interactions that drive the emergence and re-emergence of infectious diseases. Known factors include changes in commerce and agriculture; population displacement due to natural disasters and wars; climate change; human incursions into animal habitats and vice versa; increased global travel; uncontrolled use of antibiotics and chemicals driving microbial evolution.

A critical threat to continued health improvement and our ability to treat severe disease is antimicrobial resistance, acknowledged by WHO early in 2012 as a serious, growing and global threat to health. Totally drug-resistant (untreatable) malaria and tuberculosis were reported in 2012; many bacteria that cause potentially fatal sepsis, pneumonia, diarrhea and meningitis are now resistant to commonly available, and sometimes all, antibiotics.

Serious infections regularly cross the species barrier from domestic and wild animals into human populations, causing major financial and social impacts as demonstrated by the HIV pandemic and more recent SARS and “swine flu” outbreaks. The frequency of these events is predicted to increase, given greater human-animal contact and increased exposure caused by habitat disturbance and climate change-induced natural disasters.

The Asia-Pacific region is an important “hot spot” for emerging infectious diseases, with favourable climatic conditions, high population densities, livestock intensification and poorly regulated antimicrobial use. Because of extensive international travel and global trade that rapidly bypass geographic and social boundaries, these infections are a global threat.

The Sydney Institute for Emerging Infections and Biosecurity (SEIB) is based at the University of Sydney, Australia. Partnerships in research and capacity building are focused primarily in the Asia-Pacific region. This multidisciplinary initiative is developing novel insights into



complex infectious disease interactions, through research that engages environmental, biological, health, social (media and communications) and political sciences, law and ethics.

To support new research and implement new findings that would reduce the risk of epidemic infections requires political will, adequate tools for detection, intergovernmental and interdisciplinary cooperation, an educated constituency and functional health systems. Cross-disciplinary research and partnerships promoted by SEIB are an important component of this process.

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Financing democratic change in North Africa

The European development bank, the EBRD, aims to foster the shift to democracy in four Mediterranean Arab states through investment in the private sector

By Thomas Mirow, president, European Bank for Reconstruction and Development

The European Bank for Reconstruction and Development (EBRD) has now had more than two decades of dealing with the aftermath of revolution. Many lessons have been learned through hard-won experience. The bank was part of the international community's response to the fall of communism in 1989. It was set up to support the transition from central control to the free market – to help ease the traumatic shift from dictatorship to democracy.

In the light of recent events, the EBRD has been encouraged by its shareholders to extend its mandate to the Southern and Eastern Mediterranean region, adding in the first instance Egypt, Jordan, Morocco and Tunisia to the 29 countries in which it already invests. It will focus on trying to develop the private sector in the emerging Arab democracies. The emphasis will be on encouraging the growth of small and medium-sized enterprises – the drivers of job creation. The potential is huge in a country such as Egypt, where 25 per cent of the population lives on less than two dollars a day and where youth unemployment can be as high as 40 per cent. The EBRD has already begun technical assistance activities in all four countries and plans to begin its first proper investments later in 2012, once its shareholders have ratified the necessary changes to its charter and it has concluded that each of the four countries is applying the principles of multiparty democracy and pluralism successfully.

Across the whole of the Southern and Eastern Mediterranean region, the EBRD has the capacity to invest as much as €2.5 billion (\$3.3 billion) per year eventually. And every euro put into a project attracts, on average, more than two euros of private-sector investment. These investments can make a real difference. But they can only assist the efforts that the countries themselves will need to make. The EBRD's engagement for this region will be on top of the commitments it has made to continue investing heavily in its existing 29 countries of operation.

Private-sector support

These sums sound like a lot, and indeed they are. But so are the demands of the people in the aftermath of revolution. Across the region, it was the lack of opportunities and the unbalanced economic growth that fuelled social discontent and the bottom-up demand for change. In Egypt, the economy has suffered greatly during times of turmoil. Companies are reluctant to invest because of the uncertainty. Tourists, a mainstay of the economy, are staying away. The revolution there has inspired strong demand for more jobs and higher wages – demands that are impossible for the new government to meet as the economy's capacity continues to decline. There is a need to manage expectations.

From the EBRD's experience in Eastern Europe it knows that change – the process of transition – is a very long and winding road. It is better to be straight with citizens – telling them that jobs cannot be conjured



up overnight, but that real economic change requires patience and unfolds over generations. Even now, more than 20 years after the fall of the Berlin Wall, there remains a huge amount still to do in the EBRD's existing countries of operation.

In Egypt, Jordan, Morocco and Tunisia, the EBRD will focus on supporting the private sector. The region's most pressing economic problem is that it has been unable to develop a private sector that is independent, competitive and integrated with global markets. In fact, the countries of the region have relatively few formal private companies, under a third of the number per person in the existing countries of operation in Eastern Europe. The state is a dominating force in the economy. However, in the eyes of many citizens, those market reforms that have already been implemented have benefited only a few.

Strikingly, companies in the Southern and Eastern Mediterranean are often not part of global supply chains. There is also much

The region's most pressing economic problem is that it has been unable to develop a private sector that is independent, competitive and integrated with global markets



The Arab Spring has led to strong demand for more jobs and higher wages in the countries in which the EBRD proposes to invest

less intra-regional trade than there should be. In fact, inter-Arab trade is virtually at the same level as 50 years ago, in terms of the overall percentage of exports. There are too many non-tariff barriers, as well as too much regulation and poor infrastructure.

In trying to shift the balance away from state domination, the EBRD will bring important lessons from its existing countries of operation. After the collapse of communism, there was a rush to privatise state-owned companies, often with mixed results. However, efficient privatisation is better than rapid privatisation. There is evidence that speed risks bringing incorrect implementation and inadequate supporting institutions, and the danger that the process will be hijacked for personal gain. This must be borne in mind in relation to privatisations in the emerging Arab democracies.

Private enterprises, on the whole, perform better than state-run firms – but can only happen against a backdrop of well-regulated,

efficiently supervised markets. Therefore, an important part of the EBRD's approach is to engage in policy dialogue with governments to bring this about.

Economic inclusivity

Again, the task of making a case for the market economy, for the private sector, has rarely been harder. Over two decades ago, when the Berlin Wall fell, the majority of the newly freed peoples embraced the idea of capitalism. They knew that their old system had failed. The countries of Western Europe felt confident about extolling the market as the best way to run an economy: it had delivered growth. Now, of course, that self-confidence has been damaged by the global financial crisis of the past four years.

In Tunisia and Egypt, the success of many private-sector firms is questioned not because there is an alternative such as communism, but also because it has become tainted by cronyism. When these countries

tried to shift the emphasis from the state to the private sector, it was often well-connected insiders who benefited and became wealthy. The EBRD's efforts will be towards ensuring a much broader, well-governed, transparent and responsible private sector.

The EBRD's philosophy, as an institution, is simple. By concentrating on building up the private sector and market economies, it also builds up the number of people who feel they have an important stake in their country's future. It is a way to build sustainable market-oriented economies and, in the long term, to foster democracy.

Transition is difficult and setbacks are common. Vested interests must be overcome and new, more efficient systems of governance have to be created. The EBRD understands the challenges and stands ready to work closely with others committed to the same goals of assisting the people in the emerging democracies in the Arab world to build a better, fairer and more secure future. ■

BANSEFI, leading the way for financial inclusion in Mexico



BANSEFI helps people on low incomes across Mexico to gain access to secure, dependable financial services



Carlos Montaña
CEO, BANSEFI

Reforms in the regulatory framework set in place during the past 10 years have provided the foundation for the construction of a solid financial system in Mexico. A better financial system, together with responsible handling of fiscal policy throughout this time, have made the Mexican economy more resilient and capable of withstanding external shocks in a much better way than other economies.

The financial system plays a key role in the prospects for growth in any economy. The Mexican banking system still faces

the enormous challenge of making services available to most of the population. In many areas of the country, financial services are still provided by informal schemes, making the otherwise common and safe task of saving a risky and uncertain one.

The legal framework aims to regulate the financial intermediaries currently providing these services, making trustworthy financial services available to all. To make this happen, development banks have played a key role, focusing on the attention of people on low incomes, typically underserved by the private financial sector. Financial inclusion is a priority for the Mexican government and is part of the main agenda of the G20 summit this year. Helping to achieve the goal of enabling every person to have access to financial services is one of the reasons the National Saving Bank and Financial Services (BANSEFI) exists. This development bank has become a key player in fostering financial inclusion in the country.

BANSEFI has become an essential tool for the Mexican government in achieving financial inclusion. BANSEFI has expanded the frontier of financial services to reach the low-income population, a market niche that the private banking sector has not fully reached. One of the main goals of BANSEFI is

to be the first point of access to a financial system when no other financial intermediaries are present.

To offer access to financial services to this clientele, BANSEFI has created a network of 494 branches, spread out over the entire country. They offer financial products and services such as savings, remittances (both local and international), micro-insurances, and acts as a window for receiving payment of services (eg, utility bills).

The size and reach of this network is complemented with the joint venture between the members of the Popular Financial Sector and BANSEFI, known as L@Red de la Gente ('The People's Network'). This commercial alliance includes 287 financial intermediaries, increasing the number of offices to more than 2,300. L@Red de la Gente is the largest financial network in Mexico, with more presence than any other commercial bank.

BANSEFI has recently begun another commercial alliance via a correspondence bank. This began with DICONSA stores. These are community-owned shops, created by the government to sell food, basic products and agricultural supplies in Mexico's poorest rural communities. This network is made up of 25,000 stores that are located throughout the country. As many as 236 stores have been approved as BANSEFI correspondence outlets by the National Banking and Securities Commission. Many more are perfect candidates to enlarge BANSEFI's network, as they are placed precisely near the segment of the population intended to be reached by basic financial services.

In its 10 years of existence, BANSEFI has created the largest financial network in Mexico, with a presence in 2,380 municipalities (97 per cent of the municipalities). No other network has as wide a reach as BANSEFI. Last year, BANSEFI, through its financial network, made payments of more than 1.5 million international remittance transactions, for a sum close to \$600 million. In addition, the Institution manages 11.4 million accounts and \$15 billion in assets.

Helping low-income families

An outstanding result in financial inclusion for the Mexican government was achieved last year when BANSEFI created 6.5 million-worth of debit cards that were linked to bank accounts for the same number of people.

With financial inclusion high on the Mexican government's agenda, it was considered crucial to make all the people who are beneficiaries of the most important social programme in Mexico ('Oportunidades') account holders. They now receive their cash transfer through a debit card from BANSEFI. By opening these 6.5 million accounts, these low-income families now have a safe and reliable tool to save and make basic transactions in shops and via the ATM network.

In addition to the Oportunidades programme, BANSEFI distributes other government transfers, amounting to more than \$3 billion during 2011. Transparency and accountability are enhanced by the use of this tool. The positive effects are also found in reduced transaction costs, as Oportunidades' recipients do not have to travel miles to collect their benefits. Now the challenge is to provide further financial education to maximise the benefits of financial inclusion.

An important component of financial inclusion is financial literacy. BANSEFI has deployed a major programme of financial education for its network partners and customers. The aim is to have informed customers who will take better financial decisions and make the most of the financial services offered by the BANSEFI network.

BANSEFI offers financial education workshops to members of the popular financial sector who, in turn, will be able to replicate



Mexicans needed a reliable way to conduct financial transactions

financial literacy courses with their customers. BANSEFI also uses mobile units to give financial workshops in hard-to-reach towns. As part of the strategy of financial education, BANSEFI created a microsite called Finances for Everyone (www.finanzasparatodos.org.mx), where educational financial videos and information on financial planning, savings, credit, insurance and other services can be found.

BANSEFI has an ambitious agenda that seeks to consolidate and extend educational activities and financial inclusion by developing innovative and effective financial products that meet the population's needs, supplemented by the use of new technologies to expand the geographic coverage of financial services. To reach this goal, BANSEFI will foster the expansion of correspondence banking. This will significantly increase the BANSEFI network, while lowering the cost of opening full-service bank branches. BANSEFI will also work towards the use of mobile financial services that will facilitate transactions in areas where the cost of transporting funds are relevant. As more and more people use mobile phones and coverage increases throughout the country, the use of such technologies will reduce transaction costs and benefit millions of Mexican families.

BANSEFI, as the financial inclusion leader in Mexico, has shown remarkable achievements in offering access to financial services to the population, and especially to low-income families. Carrying out the BANSEFI agenda will keep Mexico on the right track, and technology will enhance financial inclusion in the country.

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The contribution of social business

The establishment of a new economic framework, in which markets are accessible to all, can bring greater prosperity and tackle a range of social ills

By Muhammad Yunus, Yunus Centre

I am a strong proponent of free trade. Encouraging people and countries to exchange goods and services with one another will, in the long run, lead to greater prosperity for all. But like all markets, global markets need reasonable rules that allow all participants an opportunity to benefit. Today's global markets, unfortunately, are only partly free. Some of the restrictions and distortions that have been left in place have had devastating consequences for poor countries. The imbalances caused by this semi-free trade are distorting markets, raising the prices of commodities and making consumption more difficult.

Hence the world needs a new economic framework. The most important feature of this new global economic architecture will be to bring the half-built theoretical framework of capitalism to completion by including the second type of business that I am championing – social business – in the marketplace. Once it is included in the framework, social business can play a very important role in solving the financial crisis, the food crisis, the energy crisis and the environmental crisis. It will also provide the most effective institutional mechanism for addressing the unresolved problems of poverty and ill health.

What do social businesses provide that neither government nor private firms can? One social business is a recent initiative, the Grameen Danone joint venture, which sells yogurt fortified with micronutrients to poor households in the villages of Bangladesh.

Innovative ideas such as edible yogurt cups or biodegradable cornstarch cups that can be buried in pits behind the Grameen Danone yogurt factory in Bogra, can allow the containers to decompose and thus help deal with the problem of waste and environmental degradation. Environment-related social businesses such as the Grameen Veolia venture, which sells clean water to poor people suffering from arsenic contamination, or clean, renewable energy technologies, community-based natural resource

management schemes for the poor in rural areas and disbursement of knowledge, are only a few of the boundless opportunities that can be made possible with social business and microcredit, as well as a bit of imagination and ingenuity.

Doing so obviously violates the basic concept of the capitalist system, which is profit maximisation. I have never followed existing road maps. My only concern was to see if my path was taking me where I wanted to go. Maximising profits may be very important for most entrepreneurs, but my businesses are a great source of my happiness. If you had done what I have done, you would be happy, too.

Prototype development is the key. In designing a prototype, all one needs is a socially oriented creative mind. That could be each one of you. No matter what you do in your life, make it a point to design or be involved with at least one social business to address the problem that depresses you the most. If you have the design and the money, go ahead and put it into action. If you have the design but no money, contact your friends – together you will find the money if you have a sustainable business plan.

An appealing concept

The concept of social business has attracted attention from diverse and important groups of people faster than I expected. People like the idea of business solutions to social problems. They see the limitation of their business in reaching out for solutions to existing human problems; and at the same time they see the technological capacities they have within their companies to make an impact on people's lives.

Through the concept of social business they can position their experience and technology against the real-world problems face to face, and engage in finding a solution that is sustainable.

It is the idea of devising a sustainable business solution to existing human problems that most attracted our partners. If the outcomes are satisfactory, the basic modalities of the entire world of business will change.

Entrepreneurship is the power to change. The best way to spread the power of social business is to engage young people and nurture them as social entrepreneurs. Today's youth have that power.

Entrepreneurship is a credible alternative to getting a 'good' job or being a victim of 'the system'. But entrepreneurs need access to markets so they can see what works and what does not. It is not a very difficult task.

A movement of social business entrepreneurs must be nurtured by creating exchanges (in the sense of markets) with guaranteed access for youth.

Young people can be engaged if you demonstrate to them that they have the power to create change. They have a voice through their participation in the exchanges that have a direct impact on their communities.

The way to spread the power of social business is to engage young people and nurture them as entrepreneurs

An organised effort is needed to nurture a movement that includes sharing great and successful models in the mainstream.

Social businesses should be introduced that involve youth by creating a global social business fund that provides loans and equity for improving the economy in the developing world. It could support programmes such as agricultural credit; local, national and international marketing; storage; the introduction of new technology; insurance; and price and wage guarantees. Social business has the potential to address all these issues in one go. Employment and entrepreneurship can be created and technology under the command of businesses can be used to solve problems that have been traditionally considered the exclusive responsibility of governments.

The need for massive subsidies and transfer payments by governments can be reduced by creative social businesses. The G8 can be a great platform for creating support for social business around the world. The developed countries have enormous amounts of technology at their disposal to make this happen. The citizens of the world have the creativity and knowledge. All we need is our dedication and determination to achieve it. ■



Community-based natural resource schemes offer many opportunities for social business. Here, a solar power system provides light in a remote village

Ensuring the world is fed

Hunger could be eradicated throughout the world by 2050 if everyone works together to reduce waste, manage production and preserve natural resources

By José Graziano da Silva, director general,
United Nations Food and Agriculture Organization

As the G8 leaders once again gather to discuss global challenges at the Camp David Summit, food security and poverty reduction should take centre stage alongside the financial and economic crisis, climate change and sustainable development.

These challenges are closely linked. Food security can connect the dots along the path towards sustainable development. But development is not sustainable if people are left behind. Even today, the right to food – a basic human right – is absent from the lives of 925 million people.

Hunger is a global challenge. There are many valuable experiences and lessons to be gained worldwide, but there is still a lot of ground to cover. International actions must be complemented by others at the local level, because people do not eat in global markets. People eat in their homes, in their cities and in their villages. These are the battlegrounds that will define whether we win or lose the fight against hunger.

A revamped global governance system for food security is necessary to coordinate ongoing efforts and link them to the local level, transforming the international discussions into quick and effective action to tackle emergencies and advance towards the long-term goal of food security for all.

Food security is good for business

The Committee on World Food Security (CFS) serves this function. It has recently been reformed to include representatives of civil society, the private sector and a range of international agencies and research institutions, making it one of the world's most inclusive international and intergovernmental bodies. It is the only global coordination mechanism for food security and supports country-led processes to reduce hunger and poverty. An example of how the CFS links global, regional and local levels is the recent approval of the Voluntary Guidelines on

the Responsible Governance of Tenure of Land, Fisheries and Forests in the Context of National Food Security. The CFS-led negotiations resulted in this milestone, which will improve how countries govern access rights to land, fisheries and forest resources.

Paradoxically, 75 per cent of the world's poor and hungry people live in rural areas. Many are subsistence and small-scale farmers with low productivity rates who survive on the food they produce for self-consumption or to sell in local markets.

The fact that in a world with plentiful food almost one in seven children, women and men is undernourished, is not only morally unacceptable and tragic, but absurd. Eradicating hunger would make everyone

Paradoxically, 75 per cent of the world's poor and hungry people live in rural areas. Many are small-scale farmers

richer. If children are properly nourished, they can learn more, lead healthier lives and will grow up to be more productive.

Investing in agriculture and nutrition to reach food security is good for business and good for governments. Agriculture can drive socially and environmentally sustainable economic growth, while adequate nutrition reduces costs in health, education and social security. Promoting food security, therefore, is an investment for society, not just an expense.

The world has the necessary conditions to guarantee food security for every citizen today and in 2050, when the population is expected to rise from seven billion to nine billion.

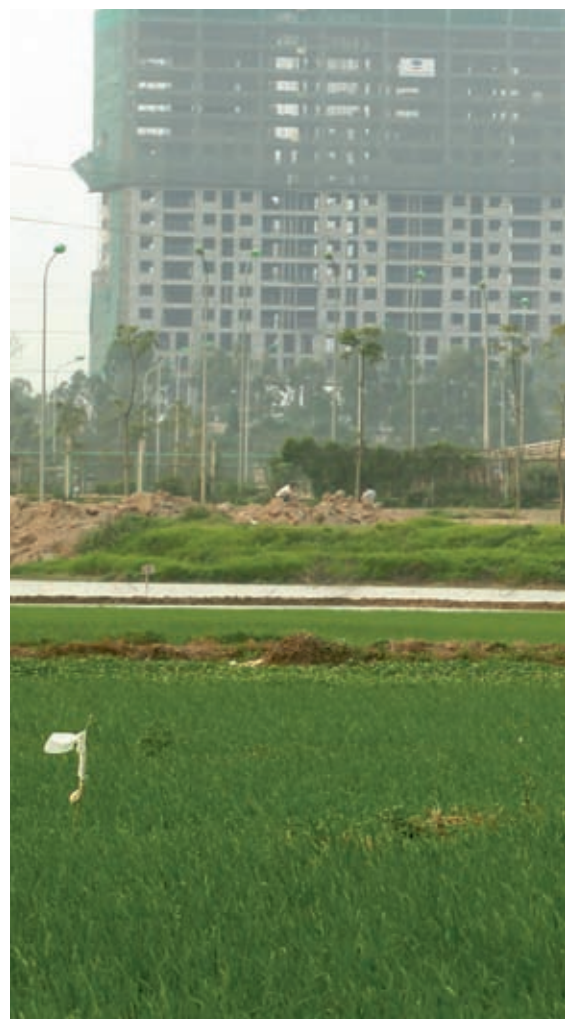
So the real question is not whether a growing population can be fed, but how. According to the Food and Agriculture Organization (FAO), between 2005-07 and 2050 agricultural production will have to

increase by 60 per cent to meet food demand. What can be done to guarantee food security without increasing agricultural output to such an extent, thus reducing the agricultural footprint on natural resources? We need a shift to more sustainable production and consumption patterns.

Water consumption in agriculture

The use of water exemplifies this challenge. Agriculture represents more than 70 per cent of all water consumption. It takes 1,500 litres of water to produce one kilogram of cereal and 10 times that to produce one kilogram of meat.

In terms of consumption, food is managed and consumed in a hugely wasteful way. At the global level, one-third of all the food produced is lost or squandered. In low-income countries, more attention should be paid to



measures that target the production chain. In industrialised countries, the focus should be on nutrition education to reduce waste and encourage healthier diets, since more than one billion people are either overweight or obese.

Per capita waste of food products by consumers is around 115kg a year in Europe and North America. In sub-Saharan Africa and South and Southeast Asia, people throw away as much as 11kg a year.

If the amount of food waste and loss could be reduced by 25 per cent, 500 million people a year would have food, with no need to produce any more than we do today.

The Green Revolution of the 1960s greatly increased the amount of food that could be grown. But intensive use of inputs, fertilisers and pesticides takes its toll on natural resources so that, today, farming-as-usual

is no longer sustainable. The world needs a doubly green revolution, a paradigm shift to sustainable intensification of crop production, especially for small-scale farmers.

Preserving natural resources

FAO calls this ecosystems-based approach 'Save and Grow'. It builds on traditional knowledge and adapts to local conditions and crop varieties, helping farmers to raise their productivity while at the same time preserving natural resources.

The focus on smallholders is important because they usually have the least access to resources, technology and training and lower yields than large-scale producers. But environmental virtue alone is not enough – farmers must see tangible benefits in terms of higher yields and reduced costs. With

the right management, those benefits can be delivered. For this greener revolution to succeed, there must be environmental awareness among intensive, industrial-scale farmers. This can be achieved by providing incentives for the sustainable practices and penalties for those that are unsustainable.

The old development models must be rethought. New ways to cooperate and learn from each other are needed, in both developed and developing countries. There is a wealth of knowledge to share and from which to learn.

The time to start building a food-secure 2050 is now. This is not a goal that FAO or any government can reach alone. The private sector, civil society, research institutions and academia all play an important role. If society joins together as a whole, hunger can be eradicated – before 2050. ■

An ecosystems-based approach to producing food called Save and Grow builds on farmers' traditional knowledge and helps to raise their productivity



Feeding Tomorrow

Throughout history, agriculture has been a driver of social progress and nutritious food has been the fuel for people to reach their full potential.

Today, with 7 billion people on the planet, there is greater demand than ever before to increase food production and allow more people in more countries to lead healthy, safe and productive lives.

At PotashCorp, we produce potash, phosphate and nitrogen to help farmers improve yields and produce more food. Our fertilizer ingredients help grow food – and by growing more food, we feed more hope for tomorrow.



Bill Doyle
President and Chief Executive Officer
PotashCorp

Supporting the G8 Vision

With the world's population expected to reach 9 billion by 2050, farmers are being asked to boost production by as much as 70 percent over the next few decades, with the majority of that increase to come on existing farm land.

Achieving the required increases is possible, but requires a commitment to improving crop nutrition practices around the world. This will allow farmers to grow the crops needed to meet rising demand for food, fuel, animal feed and fibre without aggressively moving production to rainforests and other green space.

Adopting high-yield agricultural practices in more parts of the world is important to fighting against climate change and reducing greenhouse gas emissions. Since the 1960s, it is estimated that modern farming practices have kept 590 billion tonnes of carbon dioxide from entering the atmosphere.

This level of success is, in part, a product of the "Four Rs" of crop stewardship: right source, right rate, right place and right time. It is also a measure of the importance of another "R": research.

PotashCorp wholeheartedly supports the G8's global efforts to assure sustainable food security and improved nutrition. We view this as an important position in meeting the needs of the world today and for generations to come.

Doing Our Part

An invigorated focus on global agriculture can help unlock the vast untapped potential of people around the world, especially in countries that have been traditionally undernourished.

It is our vision that farmers around the world will maximize the potential of their soils – and by doing so, they can help build a nutritious foundation on which their communities can thrive.

As a company, we will continue to pursue initiatives that encourage agricultural research and drive increased yields in a manner that is sustainable and environmentally responsible.

Together with other members of the global fertilizer industry, we support the International Plant Nutrition Institute (IPNI), a not-for-profit, science-based organization that has stationed scientists in many countries for hands-on involvement in agricultural research and development programs. IPNI's goal is to identify methods to achieve higher crop yields and to teach people how to improve production.

We believe farmers can produce enough food for our growing population. Like a seedling sprouting from the soil, food security solutions will rise from a foundation of research.



9 billion+

Expected global population by 2050

Source: United Nations

~ 50%

Current crop yield directly attributable to fertilizer use

Source: Agronomy Journal (January-February 2005), IPNI

70%

Estimated increase in crop production required by 2050

Source: FAO

90%

Expected percentage of required new crop production to be grown on existing cropland

Source: FAO



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Why the farmer should be put first

Sustainable investment in agriculture is the most effective way to reduce rural poverty, improve food security and stimulate economic growth

By Kanayo F Nwanze, president, International Fund for Agricultural Development

In recent years, agriculture has gone from obscurity to occupying a central spot on the G8 agenda. For those working in rural development, this revival of international attention is very welcome, as is the recognition of an increased role for private-sector investment.

Private investment in agriculture usually suggests the involvement of large organisations. But, cumulatively, smallholders are significant investors in this sector. There are around 500 million small farms in the world. More than 95 per cent of agricultural holdings in developing countries are less than 10 hectares. In Asia and sub-Saharan Africa, about 80 per cent of farmland belongs to, or is cultivated by, smallholders. Around two billion people depend on these farms for their livelihood.

Smallholders invest not only their own money, but also their time and labour in their farms. Therefore, it is fair to say that they are the primary on-farm investors in agriculture in developing countries. New investments in agriculture must be sensitive to the requirements of smallholders if they are to achieve the desired result of improving global food security and reducing poverty.

The power of smallholders

Investing in agriculture in developing countries is the single most effective method of improving food security for the world's poorest people, while also stimulating economic growth. Growth generated by agriculture is at least twice as effective in reducing poverty as growth in other sectors. Experience repeatedly shows – in countries such as Burkina Faso, China, Ghana, India, Thailand, Vietnam and elsewhere – that smallholders can lead agricultural growth.

Successful small farms can transform destitute rural landscapes into vibrant

economies, resulting in local demand for locally produced goods and services that also spur non-farm employment in services, agro-processing and small-scale manufacturing. This demand, in turn, leads to a dynamic flow of economic benefits between rural and urban areas so that countries have balanced and sustained growth.

There are sound economic reasons for supporting smallholder farming. Farming production systems have few economies of scale. Small farms are often more productive, per hectare, than large farms when agro-ecological conditions and access to technology are comparable. In India, for example, smallholders contribute more than 50 per cent of total farm output, even though they cultivate only 44 per cent of the land.

New investments must be sustainable – economically, environmentally and socially

One reason for this high productivity rate is that small farmers have a strong personal incentive to get the most out of their land and from their own family labour. Another reason is that family farms have very low management costs and are labour intensive, while larger farms are often heavily mechanised or have high costs involved in managing the workforce.

Nevertheless, in many developing countries, particularly in sub-Saharan Africa and parts of Asia, poor farmers do not produce enough to feed themselves and their families. Instead, they are net buyers of food and, with incomes of less than \$1.25 per day, they cannot afford to buy much.





Women make up a large proportion of the agricultural labour force in developing countries, but often encounter unique constraints

If the goals in investing in agriculture are to improve the food security of those who are hungry and to improve the economies of developing countries, then the aim should be to transform smallholder agriculture into successful businesses that are profitable and generate surpluses, and that can help provide career opportunities and a potential pathway out of poverty and hunger.

Targeting the investment

When one talks about farmers in developing countries, one is often talking about women. On average, women make up 43 per cent of the agricultural labour force in developing countries. In East and Southeast Asia and in sub-Saharan Africa, this figure rises to almost 50 per cent. In investing in rural areas, the capacity of women farmers to invest more effectively and with less risk must be supported, given that women in rural societies face greater constraints. Rural women usually have more limited land tenure, less access to credit and equipment, and fewer market opportunities than have men.

New investments must also be sustainable – economically, environmentally and socially – so that the benefits last, through the years and the generations. Anyone who has travelled into the rural areas of developing countries will have seen the aftermath of unsustainable development: broken tractors abandoned in fields, withered and untended trees, forsaken hillside terraces. This is the residue of development efforts that did not respect and respond to local conditions, whether cultural or environmental, and that did not work with the local community from the start.

Similarly, the Green Revolution that transformed Asian agriculture in the 1970s focused on reducing the number of crops and increasing reliance on improved seeds, fertilisers and better irrigation. It produced remarkable short-term gains, but came at a cost to the environment and to local species.

In the years since the Asian Green Revolution it has become clear that agricultural growth must be ecologically sustainable and that a diverse range of species, genetic variation and ecosystems is necessary in order for the land to be able to provide for future generations of farmers.

Indeed, in many developing countries, simply optimising conventional approaches, such as the simple use of fertilisers and

micro-irrigation, could yield dramatic results. Only about six per cent of the total cultivated land in Africa is irrigated, compared to 37 per cent in Asia. Irrigation alone could increase output by up to 50 per cent in Africa. Small increases in fertiliser use could also yield dramatic improvements in yields without risk to the environment, since farmers in sub-Saharan Africa use, on average, less than 13kg of fertiliser per hectare. This compares with 73kg in the Middle East and North Africa, and 190kg in East Asia and the Pacific.

There is also a critical need to develop national and regional markets, to ensure that productivity gains from new investments have the intended economic impact on developing-country economies. Similarly, there is an urgent need to invest in basic rural infrastructure. Today, about 30 per cent of the food produced is wasted, largely as a result of the absence of such basic necessities as markets, warehouses and paved roads.

Community-driven development

At IFAD, we see time and time again the transformation that occurs when development is sustainable and when local people are involved from the start. Last year, I visited Zongbega, a village in a drought-prone region of Burkina Faso, where smallholders are using simple water-harvesting techniques such as planting pits and permeable rock dams, along with crop-livestock integration. As a result, they have restored land that was once degraded and have increased their productivity. In Niger, a water-harvesting project in the Illela department is still going, more than 15 years after the funding ended – a fine example of the benefits of community-driven development.

In recent years, IFAD has been scaling up what it knows works, strengthening value chains, extending rural finance and creating new market opportunities for smallholders and other poor rural people. This year, as world leaders meet for the G8 in May and the G20 and the United Nations Conference on Sustainable Development in Rio in June, there is an unprecedented opportunity to solidify the role of public-private partnerships in support of agriculture. I hope their deliberations will take into account the biggest on-farm agriculture investors in developing countries: smallholder farmers. ■

Unlocking the power of partnerships for the world's poor and hungry

A world free of hunger and malnutrition is possible where there is decisive leadership and a desire to meet the needs of the poorest and most vulnerable

By Ertharin Cousin, executive director, World Food Programme

The world faces no more pressing challenge than global food security and nutrition, ensuring everyone maintains access to enough nutritious food. Today, across Asia, Africa and beyond, nearly one billion people are hungry and malnourished. Economic shocks, continued high and volatile food prices, as well as the growing impact of climate change and natural disasters, have sparked unrest and undermined progress towards the Millennium Development Goal of reducing global hunger by one half.

Yet the battle against global hunger and malnutrition remains winnable. With decisive leadership, transformative partnerships and targeted assistance, governments, the private sector, all non-governmental organisations (NGOs) and international organisations can leverage proven ideas and innovations to meet the urgent needs of the poorest and most vulnerable in the world, while building the capacity of countries, communities and peoples to feed themselves.

Scientific breakthroughs

At the 2009 L'Aquila Summit, the G8 brought the world together behind comprehensive solutions to the challenges of hunger and malnutrition – providing the leadership and global high-level public will required to support increased agriculture productivity, connect smallholder farmers to markets and promote access to sufficient nutritious food.

This year, G8 leaders have a critical opportunity to build on the promise of L'Aquila. By uniting public- and private-sector partners behind national plans, they can begin to change the face of hunger and malnutrition in the world through appropriate policies, programmes and national investments. They can scale up proven programmes, share scientific breakthroughs, improve the nutritional status of women and

children, strengthen resilience to financial and climatic shocks, and empower countries in Africa and elsewhere to achieve their vision of a world free of hunger and malnutrition.

As the world's largest food assistance agency fighting hunger worldwide, the World Food Programme (WFP) is already working to achieve this vision in more than 70 countries on four continents. Over the past 20 years, many countries have shown the way forward – launching national programmes that directly benefit their citizens and, in some cases, transitioning from being a recipient of WFP food assistance to being providers of food assistance to other countries.

WFP is learning from these examples and partnering with international organisations

Business as usual is not enough. The world's food security landscape is changing dramatically

such as the Food and Agriculture Organization, the International Fund for Agricultural Development, UNICEF, the World Health Organization, the World Bank and members of the United Nations Secretary General's High Level Task Force on the Global Food Security Crisis on answers to food security and nutrition challenges through risk-management strategies.

WFP is also partnering closely with governments and the donor community to develop disaster risk-management frameworks and early-warning tools in many countries and regions, including in the most affected areas of the Horn of Africa and the Sahel. With Brazil, WFP has partnered to open



the Centre for Excellence against Hunger as a global resource for sharing information, expertise and technical assistance on school feeding, nutrition safety nets and best practices that connect family farmers to markets. Through ground-breaking strategic partnerships with the private sector, WFP is deploying initiatives to build capacity, reduce hunger and eliminate malnutrition.

In partnership with the Bill and Melinda Gates Foundation and the Howard G Buffett Foundation, under its Purchase for Progress (P4P) Initiative, WFP is empowering smallholder farmers in 21 countries, many of them women, with training in improved production, post-harvest handling and other key agribusiness skills. It is working with the African Union and private-sector



Hunger can be eradicated where new policies are in place, connecting smallholder farmers to markets and providing access to nutritious food

financial institutions on cost-effective weather insurance tools that will help countries plan for and respond to the impact of droughts.

Effective safety-net systems

These successful partnerships must be sustained, leveraged and scaled. That means going beyond sharing information and collaborating on projects to systemic policy reforms, concerted strategies and programmatic changes required to significantly decrease hunger and strengthen food security and nutrition around the world. To meet today's challenges and capitalise on new opportunities, WFP and its partners must continue seeking innovative solutions, ensuring their joint efforts are driven by and responsive to local impact and experience,

while building local, national and regional capacity. The G8 can play a powerful role by supporting partnership platforms such as the Scaling Up Nutrition (SUN) movement, promoting national multisectoral policies and institutional arrangements that support improved nutritional status, and building the capacity of governments and vulnerable communities, enabling them to better anticipate and manage risks, including through effective safety-net systems.

The power of partnerships

Business as usual is not good enough. The world's food security landscape is changing dramatically with shifts in global markets, the rise and fall of national and regional economies, the effects of climate change

coupled with the rising volume and severity of natural disasters, gains and losses in development, and increased vulnerability to a range of systemic shocks.

At the same time, potential solutions to world hunger are also diversifying and multiplying from new breakthroughs in technology and the successes of emerging economies, through to local innovation and on-the-ground leadership.

The G8's continued leadership and focus on food security and nutrition are essential to unlock the power of partnerships between governments, farmers, the private sector, NGOs and international organisations.

Together, we can successfully address these complex challenges and help to create a food-secure world. ■



Investing in Africa's farmers: We are on the right track

We are at a watershed moment in Africa's development when agriculture has been re-discovered as the fundamental driver of the continent's economic and social development.

Africa has the greatest challenge of food security today but it also has the greatest potential to feed itself as well as the world. With the world's population expected to reach 9 billion by 2050, food production will have to double over the next few decades.

Agriculture has always been the backbone of sub-Saharan Africa employing almost 70 percent of our workforce, and contributing up to 80 percent of our GDP. Yet the vast majority of the human assets and capital of Africa have been locked out of this economic sector across the entire agricultural value chain – from farming to research, innovation, product development and market participation.

It is the smallholder farmers who currently supply most of Africa's food and they do this with minimal resources and little support, each working alone on a farm usually less than two hectares without the basic necessities of good seeds, healthy soils, finances and good policies. This is why African agriculture has fallen far behind that of every other continent with yields at one-quarter the global average.

AGRA's vision for the millions of smallholder farmers in Africa is a deeply exciting one. It is of an agricultural renaissance, a vision of a food secure and economically prosperous Africa, marshaling the capacities of a new generation of agricultural scientists, extension professionals and entrepreneurs across the entire food value chain. It is a vision that is beginning to be shared globally by many in the donor community and on the continent by a growing number of governments and businesses. There is an increasing recognition that with progressive policies and adequate resources invested in smallholder farmers, Africa does have the potential to become the breadbasket of the world.

That potential is already starting to be realized and we are already seeing success stories in country after country across Africa. We see smallholder



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farmers prospering as a result of bigger crop yields, rural families thriving as a result of increased incomes and whole communities benefiting from the growth of small agribusinesses.

But real, lasting change requires sustained and targeted investments by the global community and African governments. Investments are needed on a scale to reach millions of smallholders in many diverse and remote environments. Only then will decades of neglect be reversed and Africa's subsistence farming system transformed into a sustainable, market oriented commercial activity that both feeds and employs Africans.

Today, there is a growing and palpable momentum in Africa's fight for food security, prosperity and sustainable agricultural development with investments and actions to promote an African Green Revolution gaining ground. Some 30 African countries with the support of the donor community are taking the necessary actions to catalyze an agricultural revolution in Africa. Recent G8 and G20 summits have raised food security to the top of the agenda and generated massive financial commitments to African farmers. This G8 gathering in the USA must be no different. This is a moment not to be missed. Together, we can grow Africa out of poverty.

Since its formation in 2007, AGRA has become the partner of choice for many international and African institutions, corporations and governments working to enhance the economic empowerment of African smallholder farmers. It was one of the first truly African-led organizations to recognize the potential of Africa's smallholder farmers to feed the continent and to act as an engine of growth for overall development.



Continuing the progress in global food production

Despite impressive outputs, the agricultural sector struggles to meet demand as populations rise and diets are upgraded, and land is diverted for biofuels

By Donald GM Coxe, chair, Coxe Advisor

It is no coincidence that the largely unexpected surges in global demand for food have, in most cases, been met during the time that the G8 has evolved as an international forum for addressing world problems. The cooperation among leading countries on food policies has been a major contributor to global progress. Nevertheless, there is no room for complacency. There are three food-based challenges facing world leaders today.

First, how does the world respond to localised crop failures or food shortages that unleash malnutrition, starvation and, potentially, political destabilisation?

Second, how, over the long term, does the world increase food production and improve distribution policies to deliver enough basic food as the global population grows, at a time when rising incomes in formerly poor countries create even faster increases in demand for high-protein foods, such as meats, dairy products and oils?

Third, how does the world design and implement policies to prevent food prices from rising more rapidly than incomes, at a time when an increasing amount of corn, wheat and edible oils is being diverted from use as food for use as fuels?

The so-called Arab Spring began with a desperate Tunisian who immolated himself because he could not afford to buy enough bread for his family. Unaffordable food was a contributing factor in some of the other Arab revolutions and remains a major factor in the ongoing crisis in Sudan.

The value of international cooperation

The Food and Agriculture Organization (FAO) and the World Food Programme (WFP) of the United Nations are responsible for responding to food crises by organising and delivering emergency food supplies. For decades, they

generally had access to adequate supplies of grains because of surpluses accumulated under price-support programmes in the United States, Canada and Europe. Those surpluses gradually melted away, and the FAO and WFP have, on occasion, been forced to issue crisis calls for extra supplies after droughts, floods, locust plagues or other localised food disasters.

In that sense, the two agencies are the modern equivalent of Joseph's strategy in Egypt in the biblical story – accumulating and storing crops in good times against future emergencies. Now they need sustained support from food-producing countries. In particular, they need assurances that food will trade freely across the world, and that major food-exporting countries will do everything possible to avoid imposing embargoes that suddenly drive global food prices skyward.

The challenges of increasing demand

Due to improved farming practices across most of the world, grain output continues to expand impressively. However, as millions more people each year upgrade their diets through a greater consumption of meat, eggs, farmed fish, milk and cheese, the demand for corn, sorghum and soybeans keeps climbing, and global food prices are routinely rising faster than inflation.

Raising the protein consumption of billions of people to healthy levels is one of the greatest triumphs in the history of human development. The goal for the G8 is to continue promoting such progress.

This is, in practical terms, the work that the Bill and Melinda Gates Foundation has been doing in Africa. The African continent has the potential, given good governance and extensive use of modern technologies, not only to feed itself, but also to become an important net supplier to the world.



The most contentious remaining barrier to ending starvation and improving diets across Africa is the European Union's continued opposition to genetically modified seeds. The seeds that Africa most needs have inbred traits to resist seasonal droughts and repel pests and diseases without massive use of insecticides and herbicides. Perhaps the G8 could authorise an independent study of the successful large-scale use of such technologies in South Africa, and of the risks and rewards

As millions more people every year upgrade their diets to include more protein, global food prices are routinely rising faster than inflation



of opening European markets to some African-produced genetically modified foods. Other studies have shown that such liberalisation would lead to major increases in production and nutrition, and would help to create a class of self-sufficient farmers participating in global food markets.

There is another factor to take into consideration. The last time that the world experienced serious inflation was in the 1970s – a time when cost of foods and fuels

rose dramatically, causing two recessions. There are worrying signs of a recurrence. Since 2000, the price of Brent crude oil has risen from \$25 to \$124. That kind of price pressure has triggered even stronger demand for biofuels derived mostly from corn, sugar and oilseeds. In the United States, biofuel consumes 40 per cent of corn production – five billion bushels – for ethanol and 19 per cent of soybean oil. According to the US Department of Agriculture, biodiesel and

ethanol production from the six main crop regions of the world is projected to rise over the coming decade by 50 per cent for biodiesel and 40 per cent for ethanol. The implications for global food prices of such massive diversions are serious.

In practice, once a quota for biofuel allotments is imposed, that amount has ‘first call’ on actual production, which means that any disappointments in crop production during the growing season are more heavily reflected in food prices. Two years ago, when the chief executive of Nestlé was asked how to


The most contentious remaining barrier to ending starvation and improving diets across Africa is the European Union’s opposition to genetically modified seeds. The seeds that Africa most needs have inbred traits

reduce food prices, he replied: “Eliminate ethanol subsidies”. Since then, the US Congress has wisely moved ethanol towards market pricing, cutting its subsidies, which means its price will be driven primarily by crude oil prices and the global price of ethanol. However, the industry lobby is putting pressure on Washington to mandate an increase in ethanol usage from 10 per cent per gallon of gasoline to 15 per cent.

The G8 could consider commissioning a study of the impact of further sharp increases in allocations of foods for biofuels. Unless grain and oilseed production keep up with the rising demand for renewable fuels, food prices will have to rise, and the possibility of a major weather-induced food price shock increases.

The past decade’s record of increasing food production and reducing famines testifies to the success of the liberalisation of global food trading and the increasing use of scientifically tested inputs. Moreover, farmers’ incomes in many emerging economies have strengthened.

Challenges remain, but the world has learned what works to fight malnutrition, starvation and rural poverty – for the first time in human history. ■



**If I don't
get HIV
soon
I am
going
to die**

Unexpected Consequences

Jacob lives in West Africa. He appears every week at his local HIV clinic and asks to be tested. Each week, so far, the test has been negative and each time Jacob is devastated by the news.

The rest of Jacob's story is that he contracted hepatitis B from his mother at birth. The virus has progressively damaged his liver and he now has decompensated cirrhosis. There is a drug that has been shown to reverse decompensated cirrhosis but Jacob cannot afford it. The drug, however, is also used to treat HIV and is available as part of his country's internationally-funded HIV/AIDS programme. Jacob knows that his liver disease will kill him unless he can get access to this drug – his chances of surviving another year without treatment are just 30% – so naturally the most important aim in his life is to contract HIV. Unfortunately for him his country has low rates of HIV.

In Eastern Europe in some countries where HIV/hepatitis C co-infection is common, internationally-funded HIV/AIDS programmes provide treatment not just for HIV but also for advanced hepatitis C, since what is the point of suppressing one virus simply to let the other kill? In those countries there is no program for those mono-infected with hepatitis C. So again, for those with cirrhosis progressing towards inevitable liver failure or liver cancer, HIV is, ironically, the present they are hoping for.

The perversity of systems that can make contracting HIV a life-saver has come about not least because of the way that viral hepatitis, especially hepatitis B and C, has been ignored. With the exception of hepatitis B vaccination, up until 2010 viral hepatitis was not addressed at a global level. This is extraordinary considering 500 million people are living with chronic hepatitis B or C and 1 million die annually as a result; indeed new figures due out later this year may put deaths nearer to 2 million.

The World Hepatitis Alliance was set up in 2007 as an umbrella NGO of community groups worldwide to advocate for action. It became clear that the vast majority of countries accepted the need even if many were daunted by the size of the problem: 96% of low income countries in a global survey conducted by the Alliance for WHO in 2009 (Viral Hepatitis: Global Policy) described hepatitis as an urgent public health issue and 91% of all countries in the survey wanted assistance from WHO in at least one aspect of addressing the issue.

A year later in 2010 the World Health Assembly at last adopted a comprehensive hepatitis resolution. As a result there is now a Global Hepatitis Programme at WHO, a dedicated hepatitis team and a global hepatitis prevention and control strategy. Unusually, the resolution also established an official World Hepatitis Day on July 28th, only the fourth disease-specific official WHO day. The others are for AIDS, TB and malaria.

HIV/AIDS, TB and malaria are, of course, the three infectious diseases that the Global Fund was established to 'fight'. Hepatitis does not feature. Nor does it feature in the Millennium Development Goals, even though the majority of hepatitis is found in the developing world with prevalence rates varying from 5% to more than 20%. Indeed, the very belated acceptance of the need to address hepatitis means that it does not feature to any significant degree in the plans of any of the major global donors.

Unless this changes, unless hepatitis is seen as equally deserving of funding as the other three major infectious diseases, people like Jacob will continue wanting to contract HIV. That is not just perverse; it is unacceptable.

www.worldhepatitisalliance.org

World Hepatitis
Alliance



Shared values, shared responsibility: G8 and Africa's response to AIDS

Stories of hope and progress across the continent demonstrate what is possible when political will and social movements work together for change

By Michel Sidibé, executive director, UNAIDS

As the G8 meets in the United States, it faces another formidable agenda – one crowded with long-standing development challenges, enduring conflicts and emerging crises. The ongoing economic predicament adds another layer of complexity and adversity to its task.

Two stories stand apart from this narrative. Stories of hope and progress that were unthinkable 10 years ago: Africa and AIDS.

Africa's gross domestic product is expected to grow by nearly six per cent in 2012, about the same as that of Asia. More than half the countries on the African continent are reported to be delivering improved governance, particularly in economic and human development. Growth and stability have lifted millions of Africans out of poverty. Together, these shifts have enabled the beginning of a dynamic cycle of domestic growth and social development.

The African AIDS response provides another manifestation of African progress and reveals what is possible when political will and social movements converge. Globally, investments for AIDS increased by more than 900 per cent since 2001, reaching \$16 billion annually in 2009. As a result, more than five million people in sub-Saharan Africa receive antiretroviral therapy today – up from just 50,000 in 2002. Countries across Africa are seeing reductions of more than 25 per cent in the rate of new HIV infections.

Much of this progress can be credited to the leadership of the G8, which has given rise to some of the most game-changing advances in the history of the response. At the Okinawa Summit in 2000, G8 leaders joined in a historic commitment to combat infectious diseases, leading to the establishment of the Global Fund to Fight AIDS, Tuberculosis and Malaria, which has approved more than

\$22 billion to fight the three diseases. In 2005, G8 leaders made the landmark commitment “to provide as close as possible to universal access to treatment for AIDS by 2010” – catalysing a massive surge in treatment.

The partnership between the G8 and Africa continues to evolve. At the last summit in Deauville in 2011, G8 and African leaders issued “Shared Values, Shared Responsibility”, their first joint declaration. Emphasising a collective commitment to peace, human rights, democratic governance, sustainable development and mutual accountability, it marked a significant step in development cooperation – that Africa's development is indeed a shared responsibility.

Advancing a new, more relevant agenda

In 2012, however, the AIDS response confronts a critical paradox. Just as the response is registering unprecedented gains, investors are pulling back. For the first time, international assistance for AIDS decreased, from \$8.7 billion in 2009 to \$7.6 billion in 2010. Despite the G8's Deauville commitment, the Global Fund was forced to cancel its next round of grant-making due to financial constraints. Thus there will be no new Global Fund financing until at least 2014.

The major resource shortfall comes at a time when United Nations members have committed to place 15 million people on HIV treatment, eliminate new infections in children by 2015 and close the resource gap.

It is a tragic irony that this is the moment when the latest science shows that treatment not only saves lives, but is also a critical mechanism to prevent the spread of the virus. It comes at the moment when programmatic progress and scientific advancements have inspired global leaders to speak of “the beginning of the end of AIDS”. Now is the time for the G8 to renew its leadership in



Young people orphaned by AIDS carry food sacks given to them by the United Nations. Members aim to eliminate new HIV infections in children by 2015



In Africa, we used to track malaria by metrics of despair – cases and deaths, wasted life and squandered opportunity.

President

Jakaya Mrisho Kikwete
of Tanzania and founding
Chair of ALMA.

ALMA IS AN ALLIANCE OF 42 AFRICAN HEADS OF STATE AND GOVERNMENT

Today, we track malaria by statistics of progress and momentum, including a 33% decline in malaria deaths on the continent.

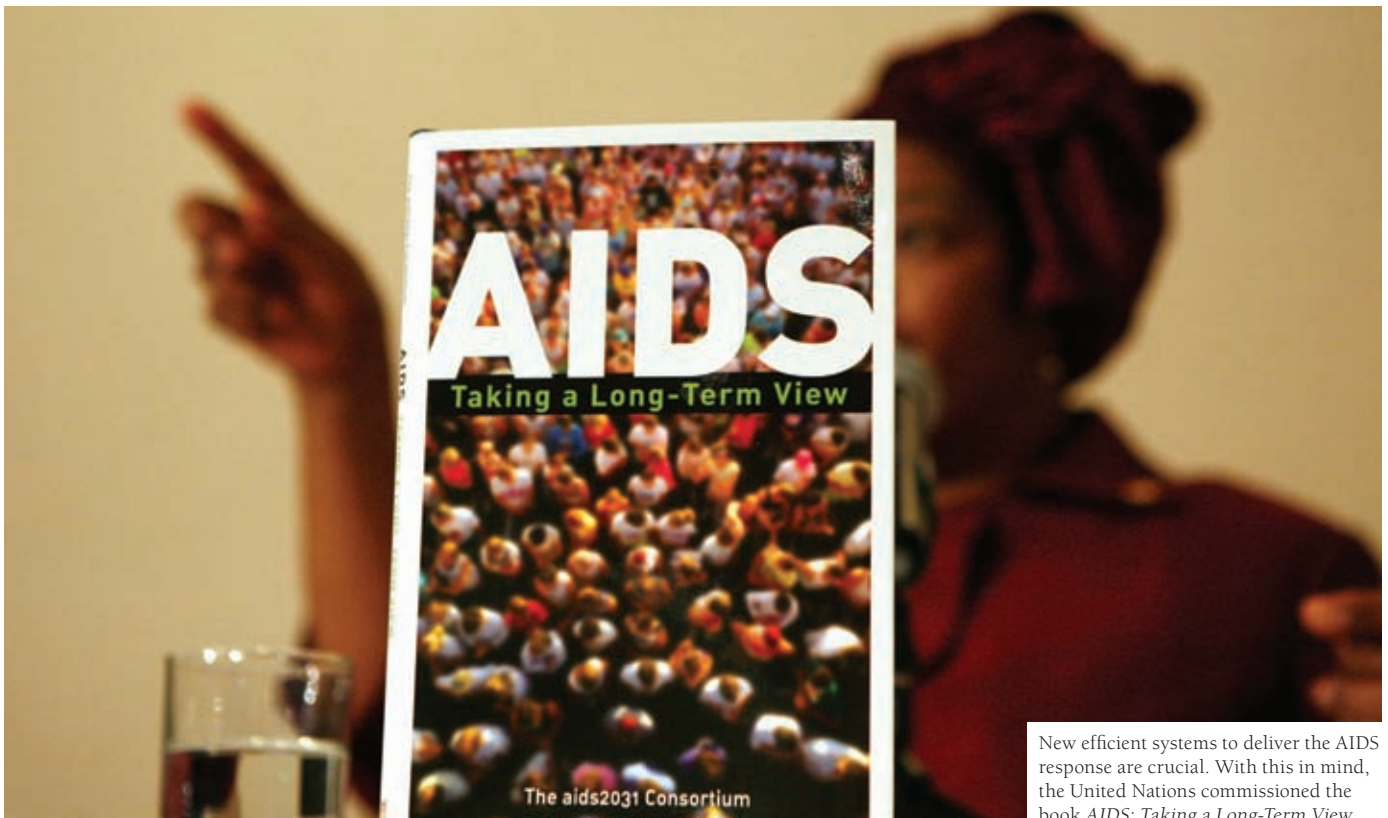
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New efficient systems to deliver the AIDS response are crucial. With this in mind, the United Nations commissioned the book *AIDS: Taking a Long-Term View*

the AIDS response. To pull back would be to drastically shortchange the returns on its investments – investments intricately linked to Africa's development. Investing in AIDS leads to healthy cohorts with economic returns. At an individual level, it means higher productivity and savings in medical and other costs. These gains translate into a healthier, more powerful market in Africa, which is increasingly integrated in the global economy. Conversely, to pull back would be to face the prospect of abandoning the millions of people on life-saving treatment and nearly 15 million AIDS orphans in Africa – a social injustice that would fuel frustration and create a recipe for social and political instability.

Africa's expanding strength, economically and geopolitically, provides a solid footing to begin to set a more sustainable agenda for AIDS. Now is the time to use aid to build country ownership of development finance and strengthen indigenous institutions in Africa. African leaders such as Boni Yayi, president of Benin and chair of the African Union, and Meles Zenawi, prime minister of Ethiopia and chair of the New Partnership for Africa's Development, are championing shared responsibility for Africa's AIDS response.

Advancing a new, more relevant agenda with Africa on AIDS will enable the G8 to maintain its leadership on this highly visible, successful and high-stakes international issue, in an increasingly complex development landscape. Now is the time to take three concrete steps to realise the promise of the G8's and Africa's shared values and shared responsibility agenda. First, the G8 must face

up to the fact that the AIDS response, one of the most successful global health campaigns in recent history, is in the midst of a funding crisis. While sustainable funding solutions must be sought, the G8 should take immediate action to mobilise new funds for the Global Fund to prevent any backsliding from the gains that have already been made.

Second, the crisis offers an opening to aggressively pursue innovative mechanisms

The AIDS response, one of the most successful global health campaigns in recent history, is in the midst of a funding crisis

for generating new resources for Africa's AIDS response. The G8 and African leaders should consider jointly developing transitional plans for sustainable financing.

Such plans would serve as a platform to secure long-term predictable international investments, as well as diversify funding sources by further tapping national budgets, private-sector contributions, social health insurance and other innovative financing mechanisms to deliver more sustainable investment solutions.

Third, to further reinforce African leadership, novel solutions to building more efficient and sustainable systems for delivering the AIDS response are crucial.

One such solution lies in the establishment of an African medicines regulatory agency. G8 countries may provide knowledge, technical and financial support to create such an agency in order to facilitate faster, more efficient roll-out of quality-assured medicines, including antiretrovirals. The current lengthy regulatory approval cycle in Africa – caused by low capacity and inefficient processes – contributes significantly to the slower uptake of novel health solutions, wasting resources and costing countless lives.

Another solution is to establish and strengthen, including through technology transfer, regional and continental centres of excellence in research, development and the production of medicines. Such an investment will quicken Africa's industrial development, as well as secure long-term access to medicines. Jointly investing in these sustainable solutions is a veritable manifestation of shared values and should be considered a *sine qua non* of the principle of shared responsibility.

Let the AIDS response continue to be an emblem of the capacity of the G8 to channel its expansive influence for social justice. With Africa on the rise, and the ever-quickening gains made in the response, the end of AIDS is an increasingly tangible prospect.

Let us respond to this crisis with the urgency it demands, yet also heed its lessons and cultivate a debate between the G8 and its development partners in order to establish a more relevant, sustainable and equitable development paradigm that is based on the principle of shared responsibility. ■

Investing in nutrition security is key to sustainable development

Tackling the issue of early chronic nutritional deficiency must be prioritised if the potential both of children and poor countries is to be realised

By Anthony Lake, executive director, UNICEF

The condition known as stunting – the irreversible result of chronic nutritional deprivation during the most critical phase of child development – may be among the least understood and least prioritised development issues today.

It represents a huge moral and practical challenge. It is also one of the greatest opportunities for G8 members to help developing countries – and their children – to reach their potential.

The news that hundreds of millions of children are at risk – of death, of a life shorter than that of their peers, of poorer cognitive capacity and thus less ability to learn in school and earn as adults – should command headlines and compel immediate action.

And yet the condition that affects these children – stunting – is still relatively unknown among many development professionals, health and education ministers – even among medical practitioners.

Stunting is the irreversible outcome of chronic nutritional deficiency during the first thousand days of a child's life, from conception through pregnancy to the age of two. The damage it causes to a child's development is permanent – and the cumulative effect it can have on a country's development is considerable.

Stunted children are inches shorter than they could have been with proper nutrition. Their immune systems are weaker, leaving them more vulnerable to disease. A stunted child is up to five times more likely to die from diarrhoea – a condition which kills more than 3,000 children under five every day around the world.

The condition affects far more than the body. It also inalterably affects the development of the brain. If one compares the brain cells of a well-nourished child with those of a stunted child, the difference is apparent, even to an untrained eye.

Combating malnutrition can help to prevent conditions such as stunting, which blights the lives of young sufferers and is hampering development efforts



The value of vaccines

It's no surprise that the lives of children born in the G8 countries and those born in the countries with the highest child mortality lie in stark contrast. Poverty and disease will claim the lives of many in the latter, and inevitably shape the lives of those who survive, affecting their ability to enjoy healthy childhoods, survive to become adults, have families of their own and contribute to their nation's economies.

But with a long list of problems facing poor countries and the world slow to recover from a shaky economy, how can we ensure that investments to improve the prospects of children make both good economic and moral sense? For governments and individuals looking for both social justice and economic returns, investment in childhood vaccination is a best bet.

These savings accrue wherever investments in childhood immunisation are made. In the US, according to researchers from the US Centers for Disease Control and Prevention (CDC), every dollar spent on immunisation saves more than \$5 in direct medical costs, with an aggregate savings of approximately \$10 billion. When also including indirect costs to society, such as losses due to missed work, death and disability, this saving jumps to \$11 per dollar, producing societal aggregate savings of \$43.3 billion¹.

Savings accrue wherever investments in childhood immunisation are made, but the power and value of vaccines are greatest in the places where children have the greatest risk of dying early in life. Consider that in 2010, about 69,000 children died before reaching their fifth birthday in G8 countries, but the eight countries that account for the highest number of child deaths worldwide experienced more than 60 times as many child deaths, ending the year with a staggering 4,201,000 fatalities² – one child every eight seconds.

The figures tell the story

A study conducted by my team at the International Vaccine Access Center (IVAC) at the Johns Hopkins Bloomberg School of Public Health reveals that the return on an investment in immunisation in even just these eight countries – India, Nigeria, Democratic Republic of Congo, Pakistan, Ethiopia, Afghanistan, Indonesia and Sudan – would be substantial. We found that

scaling up to 90 per cent coverage of vaccines for five childhood diseases would save 3.8 million young lives⁶ and avert \$99 billion in costs and economic losses³ by the year 2020 – equivalent to the money required to feed 362 million poor children for an entire year⁴. As noted poignantly by *The Economist*: “The dispassionate economic case for vaccination... looks at least as strong as the compassionate medical one.”⁵

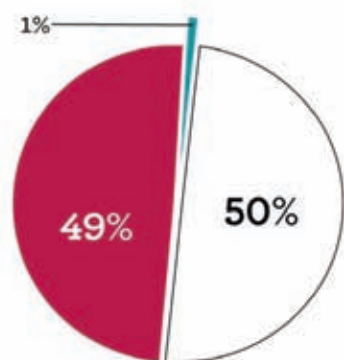
As scholars have noted, the experience of development in the past 50 years shows that good health can fuel economic growth, just as bad health can strangle it. Healthy children perform better in school, healthy adults are more productive at work, healthy families are more likely to have fewer offspring and save for the future, and healthier societies are a stronger magnet for investment than those in which the threat of disease is constant⁶. Studies also show that no period in a person's life is more critical to their future health and opportunity than their first five years⁷. When children are given the tools to help ensure they can grow, learn, and thrive, opportunities for achievement at the individual

The power and value of vaccines are greatest in the places where children have the greatest risk of dying early in life

level and for a country's future economic development are brought into sharp relief. Vaccines are chief among these tools, and are widely considered by economists to be among the best buys in global health.

Consider that smallpox, which had killed two million people per year until the late 1960s, was wiped out by 1979 after a massive worldwide immunisation campaign³. And that vaccination has brought us to the verge of eradicating polio, a crippling disease that once infected hundreds of thousands of people around the world each year, but now remains endemic in only three countries⁸. By expanding access to vaccines that are available now, we have the power to drastically reduce child mortality while providing a

CHILD MORTALITY: A GLOBAL COMPARISON*



■ G8 countries ■ 8 countries with the most child deaths □ Remaining 180 countries

*WHO child mortality estimates, 2008

platform to help lift families, communities and even entire nations out of poverty.

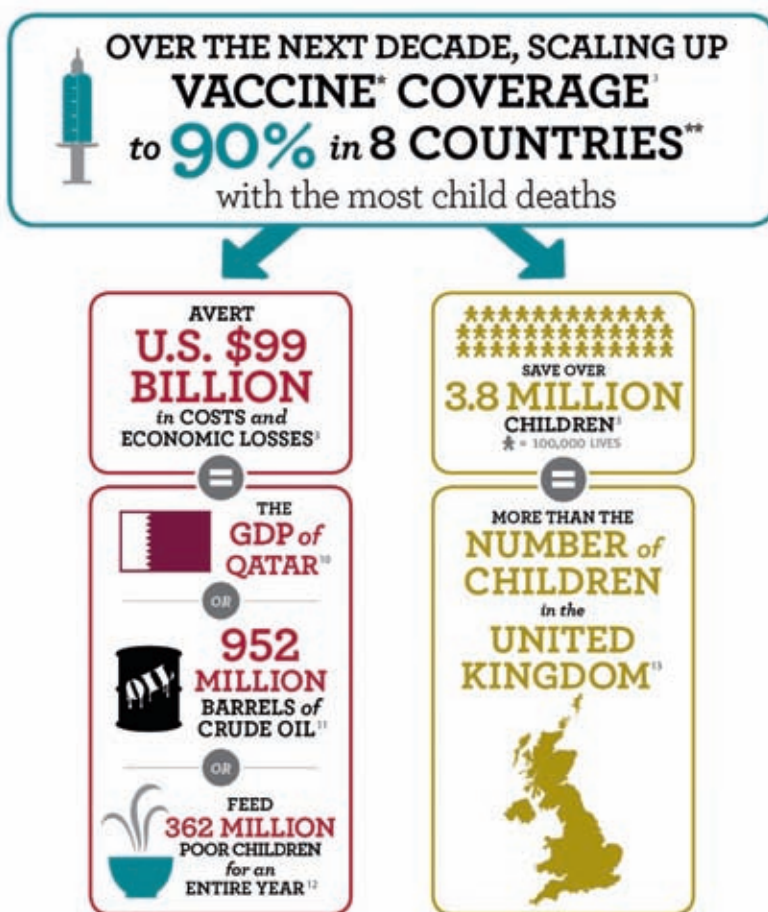
So, how can G8 governments do their part, while investing in ways that achieve the highest return? First, it is easy to recognise the value of vaccination when presented with dollar figures and drastically diminished death rates. Allowing us to do this, however, requires reliable disease surveillance and a strong research base. The information gleaned from surveillance and research provides crucial evidence of the health and economic returns of vaccination, which in turn fuels local investments in vaccination by developing country governments.

Next, G8 countries must continue funding an entity that expertly leverages the very best of public health and private-sector know-how: the GAVI Alliance. GAVI is a public-private partnership that utilises innovative market-based solutions to enable sustainable supplies of vaccines to reach children in developing countries. The results generated by GAVI's work are clear and calculable, as demonstrated by rising rates of immunisation and falling costs of vaccines.

The G8 governments have made a difference

Since the GAVI Alliance was formed in 2000, an estimated five million deaths have been prevented as a result of vaccines they have made available to developing countries at a reduced cost⁹. By committing to fully funding vaccinations in countries eligible for GAVI support through to 2015, G8 countries can make a palpable difference in the lives of children in the countries eligible for GAVI assistance, protecting them from killer diseases such as pneumonia and diarrhoea, and helping to prevent up to four million child deaths¹⁰.

It is easy to focus on the differences. But the effort to bridge the gap between children in G8 and low-income countries does not require a hard choice. Governments must commit to full funding of GAVI through to 2015, so that proven, practical



*Hib, malaria, measles, pertussis, pneumococcal and rotavirus vaccines, 2011-2020
 **India, Nigeria, Democratic Republic of Congo, Pakistan, Ethiopia, Afghanistan, Indonesia and Sudan (China not included)

vaccines can produce exponential benefits in proportion to their costs. Perhaps the best benefit of this investment is the knowledge that millions of healthy children will grow into hardworking adults, and help catalyse growth in developing nations that will help ultimately strengthen all of us.

Dr Orin Levine is Professor of International Health and Executive Director of the International Vaccine Access Center (IVAC) at the Johns Hopkins Bloomberg School of Public Health. IVAC's mission is to accelerate global access to life-saving vaccines through the development and implementation of evidence-based policies. To learn more visit www.jhsph.edu/ivac or follow @OrinLevine on Twitter.

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www.jhsph.edu/ivac

These deficits in brain-cell size and connectivity translate to a loss of between two to three years of learning. Later, when such stunted children enter the workforce, their diminished physical and cognitive development can reduce their earning capacity by as much as 22 per cent.

In dozens of countries, up to 40 per cent of children suffer from stunting. In six countries, more than 50 per cent suffer from this condition. In Afghanistan, 59 per cent of children under five are stunted.

A condition that is easy to combat

The burden is not restricted to poor or food-insecure countries. In India, a middle-income, food-secure country, nearly half of all children under five are stunted. Widespread in middle- as well as lower-income countries, stunting is among the most glaring inequities in the world. It most affects the poorest children, who are three times as likely as the richest children to be stunted.

The news that hundreds of millions of children are at risk – of death, of a life shorter than that of their peers, of poorer cognitive capacity and thus less ability to learn in school and earn as adults – should compel immediate action

Stunting is so common that it is sometimes mistaken for genetic heritage. It is not. But, while not hereditary, stunted women are more likely to give birth to stunted children as a result of their own nutritional deprivation. This passes the tragedy of stunting from generation to generation – and helps to perpetuate the cycle of poverty.

Around the world 180 million children under five suffer from this terrible affliction. The full measure of this loss cannot be calculated, and the short- and long-term economic costs of this silent emergency cannot be ignored. The World Bank estimates that countries that are blighted by stunting and other consequences of under-nutrition lose at least three per cent of their gross domestic product, and billions of dollars in foregone productivity, as well as on avoidable healthcare spending.

The good news is that the solution to combating stunting is known – for example, by providing extra micronutrients such as vitamin A, zinc, iron and iodine. These are all easy to deliver and highly effective. They are also highly cost-effective. So, of course, is breastfeeding. In 2008, eight leading

economists, including five Nobel laureates, in the Copenhagen Consensus, recommended priorities for confronting the top 10 global challenges. They ranked providing young children with micronutrients as the most cost-effective way to advance global welfare. Delivered together with efforts to promote exclusive breastfeeding for a child's first six months and to improve infant feeding practices, these interventions can change a child's life.

These strategies are working. In the developing world, stunting prevalence fell from 40 per cent in 1990 to 29 per cent in 2008. This is encouraging, but by no means enough. It has not saved the 180 million children suffering from stunting today. And it will not prevent hundreds of millions of other children from suffering from the condition. More needs to be done. The time has come to recognise nutritional status as a marker of progress in development and also as a maker of progress – and a key to more sustainable development. Governments must invest in programmes to prevent stunting or risk diminishing the impact of other investments in education, health and child protection.

To accelerate global progress on nutrition, a movement is needed, driven by the countries that bear the greatest burden of stunting, supported by governments, international agencies, civil society, academia and the private sector, and made possible by communities themselves – a shared commitment to combat this terrible condition.

That movement now exists: the Scaling Up Nutrition (SUN) movement. SUN was established in 2010 to accelerate global progress on under-nutrition, especially stunting and acute malnutrition. It has already brought together more than 100 partners working to encourage, coordinate and improve the effectiveness of support for countries that have pledged to put nutrition at the centre of their national agendas.

'Early risers' in the SUN movement

Already, leaders in 26 developing countries have joined SUN. These 'early risers' are reviewing their policies and programmes through the lens of improving nutrition. Some are reviewing their budgets to increase allocations for nutrition programmes.

It is still too soon to see direct results, but the early signs are promising. The momentum is growing – and must be built on. For a start, leading countries should allocate a larger percentage of their development budgets to support pro-nutrition programmes and interventions, paying special attention to the most disadvantaged. These include expanding micronutrient delivery, promoting exclusive breastfeeding for the first six months and improving child-feeding practices.

They also include community-based efforts to improve water, sanitation and hygiene and to treat common infectious diseases such as diarrhoea – the second largest cause of mortality in the under-fives. More than



80 per cent of all diarrhoeal diseases in children are caused by fecal contamination. Just as stunting increases a child's risk of dying from diarrhoea, the disease inhibits the absorption of critical nutrients, which then increases the chance of stunting.

Together, governments, international agencies and non-governmental organisations should improve their collective ability to implement, as well as monitor, the results that these programmes are achieving,

Encouraging small-scale farmers to grow more diverse crops would bolster efforts to improve nutrition in developing countries



identify the barriers to progress and coordinate efforts to overcome them. This, in turn, maximises the effectiveness of aid dollars and budget allocations at a time when economic adversity makes every dollar count more than ever.

In addition, although the difference between food security and nutrition security must be recognised, the policy and programme linkages in efforts to achieve both must be strengthened.

The importance of agriculture

Supporting small-scale farming in developing countries is an important element of a food security policy. But governments can do more than enable small-scale farmers to buy seed and fertiliser. They can also advocate for greater diversity – more nutritious crops, more plentiful sources of protein and more production of staples such as vegetable oil.

Finally, more countries should join the growing SUN movement. Of the G8 countries,

Canada, France, the United States and the United Kingdom are members. The G8 can send a strong signal about its commitment to sustainable development by making its membership unanimous – and, in doing so, encourage others to follow.

Together, we can make nutrition a global priority – and stunting a thing of the past. This is a cost-effective opportunity for a big global development win – an opportunity that nobody can afford to lose. ■

We've
found a way
to reverse
the global
diabetes
epidemic.

**Your
leadership.**



If we fail to act, 552 million people could have diabetes by 2030.

Diabetes is truly a global epidemic. With 366 million people already living with diabetes, the disease is putting a strain on healthcare systems globally and on our economies. In the U.S. alone, the cost is over \$218 billion annually — contributing to a total worldwide price tag of \$465 billion.

We can reverse this course. But to do so, we need strong global leadership more than ever before.

The world must live up to its promises.

In 2006, the UN General Assembly passed Resolution 61/225. For the first time, diabetes was publicly recognized as a chronic, debilitating and costly disease.

In 2011, the world went further. The United Nations High-Level Meeting on the Prevention and Control of Non-communicable Diseases (NCDs) defined the social and economic challenges, officially placing diabetes on the global health agenda.

The UN stressed that prevention must be the cornerstone of the global response to diabetes.

Our policy is action.

Novo Nordisk is committed to improving conditions for the millions who live with diabetes today, and preventing the spread of the disease tomorrow.

“We believe the pledge by UN Member States should be translated into concrete action to address the threat diabetes poses.”

*Novo Nordisk President and CEO
Lars Rebien Sørensen*

- Novo Nordisk’s Global Changing Diabetes® Leadership Forums have gathered participants from 78 countries and engaged more than 10,000 key stakeholders to address current challenges and work to change the future course of diabetes.
- Novo Nordisk co-founded the Diabetes Advocacy Alliance™ (DAA), a U.S.-based coalition with a goal to influence change in the U.S. healthcare system to improve diabetes prevention, detection and care. Ultimately, we must elevate diabetes on the national policy agenda.
- Novo Nordisk created the World Diabetes Foundation, a long-term commitment to creating awareness and expanding access to diabetes treatment and care in developing countries.
- In 2011, Novo Nordisk either trained or sponsored training for about 835,000 healthcare providers to diagnose and treat diabetes.
- In the U.S., a national education program, Ask.Screen.Know., highlights the need for early diabetes screening and detection and has reached millions of Americans across the country. Worldwide, the Changing Diabetes® Bus promoted the early detection of diabetes, screening more than 135,000 people across five continents.

Canada
France
Germany
Italy
Japan
Russia
United Kingdom
United States

Total projected number of people in G8 countries with diabetes in 2030
74.9 million

Developing Country	2030 total projected number of people with diabetes	Percentage increase from 2011 to 2030
China	129.7 million	44.1%
India	101.2 million	65.1%
Brazil	19.6 million	58.1%
Bangladesh	16.8 million	100%
Mexico	16.4 million	59.2%

We call on all world leaders.

Through global leadership, Novo Nordisk is making diabetes a priority. Join us and together, we can reverse this epidemic.

For more information on the global diabetes epidemic and best practices, visit changingdiabetesbarometer.com.

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The 'O Generation': tackling the childhood obesity epidemic

Measures are in place to confront the problem of poor diet and reverse a health trend that holds deep economic implications for future generations

By Mirta Roses-Periago, director, Pan American Health Organization

With childhood obesity rates doubling or even tripling over the past 20-30 years in most countries, the next generation could become the 'O Generation'. Many gains in child health would be reversed if present trends continue. Paradoxically, this overweight and obesity phenomenon is often accompanied by micronutrient deficiencies and anaemia from diets that are dense in calories but poor in nutrients, combined with lower levels of physical activity. This situation holds deep economic implications, in addition to the health problem: if the next generation is more overweight, less fit and less healthy, it will not learn as well and will incur higher healthcare costs over a lifetime, in turn affecting productivity and efforts to achieve fiscal consolidation.

The Region of the Americas is already the world's most overweight. The Let's Move! campaign launched in the United States by First Lady Michelle Obama aims to reverse the epidemic of childhood obesity in a single generation through joint action across government departments, the business community and civil society.

This is an example of political leadership to safeguard the next generation. But the problem extends well beyond the United States: most countries in Latin America and the Caribbean, and indeed in much of the world, are also experiencing upward trends in childhood and adult overweight and obesity, which are increasingly concentrated among the poor and less educated population sectors and thus are deepening social inequality.

Obesity is simply a subset of a much bigger problem, the largely silent epidemic of non-communicable diseases (NCDs) – namely, cancer, diabetes, heart disease and stroke, and chronic respiratory disease. Fortunately,

the world is now rising to the challenge. The historic United Nations High-Level Meeting (UNHLM) held in New York in September 2011 placed NCDs on the development and economic agenda for all countries.

While the most rapid increases in these diseases are taking place in the low- and middle-income countries, those countries that are members of the Organisation for Economic Co-operation and Development (OECD) also face a heavy burden of NCDs and an ageing population with increasing health costs, which will serve to undermine their fiscal consolidation agendas.

A crucial step forward

The UNHLM declaration sets out objectives for NCD prevention and control, including:

- By the end of 2012, the World Health Organization (WHO) will have developed a comprehensive global monitoring framework and voluntary targets, and the UN secretary-general will have developed proposals for global partnership;
- By the end of 2013, the members of the UN will have developed or strengthened multisectoral national plans; and
- In 2014, the secretary-general will have to report comprehensively on progress.

Having an accountability architecture is key to the success of summits, by providing metrics and setting responsibilities for action.

Thus, the process that WHO is leading to develop an effective global monitoring framework that includes goals and targets that countries are able to realistically adopt, is a crucial step forward.

The current global monitoring framework includes measures of changes in outcomes and exposures and the national response. Proposed voluntary targets to be achieved by 2025 and currently under consultation

with WHO members include a 25 per cent reduction in mortality between the ages of 30 and 70 due to cardiovascular disease, cancer, diabetes and chronic respiratory disease; reductions in risk factors such as hypertension (25 per cent), tobacco (30 per cent), salt consumption (30 per cent) and physical inactivity (10 per cent); and disaggregating all indicators by gender, age, socioeconomic position and other relevant stratifiers.

Preventive treatment

Given the need for a multisectoral response to NCDs, a clear corollary of the UNHLM declaration is that achieving these targets will demand 'all-of-government' and 'whole-of-society' approaches that confront head on the enormous health and economic challenges

In many parts of the world, countries are experiencing upward trends in childhood and adult obesity, which are concentrated among the poor

involved. Governments bring to the table their stewardship and responsibility for public policy, regulation and taxation, both at national and at local/municipal levels. Civil society brings its local know-how, legitimacy, networking, advocacy and community education efforts. The business sector brings products and services, technical knowledge and capacity, as well as obligations for social responsibility. Media outlets bring their ability to create awareness and mobilise.

The international financial institutions have a responsibility for contributing to support development, and NCDs are an undeniable obstacle to the continued development that they all want.

So, all hands are needed on deck to succeed in translating the UNHLM declaration into action in order to confront the NCDs epidemic. That is why the Pan American Health Organization has launched the Pan American Forum for Action on NCDs, with the participation of core partners such as the Public Health Agency of Canada, the



Campaigners in the US aim to reverse childhood obesity in a single generation, through joint action with government, local people and business communities

Help him celebrate his fifth birthday.

Each year, 1.5 million children die from diarrhea and millions more have impaired growth and development. However, a simple treatment of zinc supplements and oral rehydration therapy can be the difference between life and death.

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Obesity is behind the largely silent epidemic of diabetes, heart disease, cancer and strokes. Advice on good nutrition is key to solving this problem

World Economic Forum, the Spanish Agency for International Development Corporation, as well as other organisations.

The forum brings together government entities, the scientific and academic community, the business sector, international organisations and civil society – including faith-based organisations. Together they will raise awareness, help to promote innovative initiatives and scale up successful practices for NCDs prevention and control, as well as promote health at all levels, whether local, national or hemispheric. This strategy is relevant to each and every country's ability to intensify action on NCDs.

The forum will serve as an example of multi-stakeholder responses to the epidemic, called for by the UNHLM, and will work to

raise NCDs to the highest level of political attention nationally and regionally.

It will also build capacity for mobilising partners and resources and will develop strategic alliances to support effective NCDs prevention and control measures and the promotion of healthy living and well-being.

Taking into account a core set of low-cost, high-impact NCD 'best-buy' interventions identified by WHO, the forum's initial focus will include: communication and advocacy, dietary salt reduction and healthy nutrition, the scaling up of cardiovascular disease preventive treatment, the control and prevention of cervical cancer, and promoting physical activity and healthy workplaces.

The world can no longer afford a 'business as usual' mentality regarding NCDs. Inaction

would have a staggering cost. Over the next two decades, the toll from NCDs will exceed \$30 trillion in healthcare costs, lost productivity and personal medical expenses.

Time to act decisively

Tackling this challenge is, therefore, fundamental to fostering the well-being of every country's populations, alleviating fiscal pressures caused by rising healthcare costs, and preserving and stimulating the nation's productivity. The time has come for G8 members, and indeed, all world leaders, to take advantage of this opportunity to act decisively now, by promoting and adopting an all-inclusive multisectoral approach to the problem, one which will succeed in dealing with the silent epidemic of NCDs. ■

Strengthening maternal, newborn and child health: the next steps

How G8 leaders can strengthen global commitment to worldwide health goals and improve the chances of those most vulnerable to preventable disease

By Julio Frenk, chair, The Partnership for Maternal, Newborn & Child Health; dean, Harvard School of Public Health

When the G8 leaders gather at the US presidential retreat of Camp David in May, it will mark their third summit since the 2010 Canadian Summit, where the historic \$5 billion Muskoka Initiative on Maternal, Newborn and Child Health (MNCH) was launched.

Last year, during the G8 Deauville Summit in France, I referred to Muskoka

as 'a game-changer in terms of donor commitments' to save the lives and improve the health of pregnant women, newborns and children under five – the three groups most vulnerable to preventable disease.

The Deauville Summit focused on the accountability of these commitments, which is critically important to ensure that the necessary momentum and progress are maintained. It took place at the same time as the Commission on Information and

Accountability for Women's and Children's Health was completing its work. The 10 clear recommendations and 11 related indicators that came out of the commission will allow progress to be tracked year by year, alongside the G8's accountability process.

How can the G8 leaders at Camp David continue to play a leadership role on the three health-related Millennium Development Goals (MDGs)? There are several opportunities that could help maintain the high bar set by the leaders in Muskoka for achieving the MDGs, as well as other global health goals.

First, there is a need to strengthen the growing global movement for women's and children's health catalysed by the Muskoka Initiative and by the Global Strategy for Women's and Children's Health, which was launched by United Nations secretary-general Ban Ki-moon. Global health is about recognising the interlinked nature of health challenges across the globe. Those who fall outside current systems must be able to share



The direct global cost of child malnutrition has been put at between \$20 billion and \$40 billion each year

South Africa: a health portrait for the G8

South Africa is a middle-income country with a population of around 50 million people. It is ranked 70th in the world in terms of a gross domestic product of \$8,600 per capita. Total health expenditure accounts for around 8.5 per cent of GDP, relatively high by middle-income country standards. However, per capita spending in the private sector is significantly higher than in the public health sector, which covers 84 per cent of the population. This has motivated the design and implementation of a national health insurance system over the next 14 years.

The country is faced with a quadruple burden of disease with high mortality and morbidity rates arising from:

- HIV and tuberculosis (TB)
- Maternal and child diseases
- Non-communicable diseases (NCDs)
- Violence and injury, including motor vehicle accidents

Like all the other southern African countries, South Africa has a generalised HIV epidemic, which has stabilised over the past four years at a national antenatal prevalence of around 30 percent. It is estimated that 5.6 million people in South Africa are infected with HIV. In addition, the country ranks third in the world in terms of the TB burden, with an incidence that has increased by 400 per cent over the past 15 years. The TB/HIV co-infection rate is estimated to be around 60 per cent. Largely as a result of the twin epidemics of HIV and TB, life expectancy fell to a average low of around 53 years in 2004 but as a result of increased focus on the prevention and treatment of HIV and TB, this has now improved to 57 years. It is likely that further improvements will result from the programme of action of government introduced in 2009.

Although there is much to be concerned about the financing of healthcare in South Africa, as well as the burden of disease and epidemiology of avoidable illness, there is also much that has been achieved and much that has still to be done.

Some of the key successes and challenges are outlined in the sections that follow.

HIV

Through combined efforts of the private and public sectors a huge campaign to counsel and test 15 million South Africans for HIV was launched by President Jacob Zuma in April 2010, and as a result of this more than 20 million South Africans now know their status as regards infection.

The free provision of male and female condoms to the population has been one of the mainstays of the HIV prevention programme. Annually, more than 600 million male and six million female condoms are distributed. The decrease in HIV incidence in young people has been attributed to the increased availability and use of condoms.

South Africa has expanded its treatment campaign, which has now become one of the largest in the world, and by the middle of 2011 more than 1.6 million people in the country had begun antiretroviral treatment. This has partly been achieved by task shifting, allowing trained lay counsellors to counsel and test for HIV and by allowing certified nurses to initiate treatment. The HIV programme has also been institutionalised and by the end of the 2012 almost all public sector facilities will be treating

HIV along with other chronic diseases. A three-tiered information system is currently being implemented to monitor and manage patients on antiretrovirals.

Over the past year 320,000 medical male circumcisions were carried out. This biomedical intervention has been shown to be one of the most cost-effective ways of preventing the spread of HIV. The target for 2012 is to scale this up to 600,000 medical male circumcisions.

A far-sighted strategic plan for HIV, AIDS, sexually transmitted infections (STIs) and TB for the period 2012-16 was officially launched by President Jacob Zuma on World AIDS Day on 1 December, 2011. This plan integrates the treatment of HIV and AIDS and TB in the same strategic plan. This new programme has four strategic objectives:

- Addressing the social structural drivers of HIV, STIs and TB care, prevention and support
- Preventing new HIV, STIs and TB infections
- Sustaining health and wellness; and
- Ensuring protection of human rights and improving access to justice

TB

In addition to integrating TB with HIV and ensuring that every person with TB is screened for HIV (and vice versa), new technology has been widely introduced to ensure the early diagnosis of TB (and drug-resistant TB) with the purchase of equipment known as Gene-Xpert. South Africa is the leading user of this technology and is serving as the laboratory for the world in the introduction of this cutting-edge technology.

Introduction of rotavirus and pneumococcal vaccines into the immunisation schedule

In addition to the typical immunisation programme targeting vaccine-preventable illnesses in children, two new vaccines were introduced in 2008 to the expanded programme on immunisation (EPI). Rotavirus vaccine to prevent diarrhoeal disease and pneumococcal vaccine to prevent pneumonia were introduced, and within three years has reached coverage levels of 80 per cent of eligible children. Surveillance data suggests that deaths from diarrhoea and pneumonia in children have already decreased as a result of the introduction of these vaccines.

Prevention of mother to child transmission of HIV (PMTCT)

South Africa has reduced the transmission of HIV from mother to child transmission from eight per cent in 2008 to 3.5 per cent in 2011. This is a reduction of over 50 per cent and this success has saved 30 000 babies from contracting HIV from their mothers, and by so doing has reduced the under-one and under-five mortality rates. In addition, all pregnant women are screened for HIV and increasingly those eligible are placed on antiretroviral treatment for their own health.

South Africa has committed itself to exclusive breast-feeding and as from 1 April 2012 formula feeding will not be provided in public sector settings unless there is a medical condition requiring this. All hospitals in the country will be required to be baby-and-mother friendly over the next three years.



Non-communicable diseases

As in developed economies, non-communicable diseases (NCDs) are beginning to contribute significantly to the burden of disease in low- and middle-income countries. The South African Department of Health held a national consultation on NCDs and has developed a strategy and set of indicators to deal with this growing challenge. Two key interventions will be to reduce salt levels in processed foods and to curb alcohol consumption. These add to the impressive gains that the country has already made in decreasing tobacco use, especially among young people.

Quality of care

It has been recognised by users of the public sector as well as policymakers that although there are pockets of excellence there is much that could be improved in the quality of care that patients receive and experience. Supportive supervision and improved clinical governance are two ways to improve the quality of care, and South Africa has embarked on a pilot programme to improve maternal and child health by introducing specialists in paediatrics and obstetrics to be stationed closer to the provider-patient interactions and to give support and mentorship to front-line providers.

Infrastructure, equipment and human resources

Many public sector facilities (hospitals and clinics) do not have physical infrastructure, equipment and human resources in an adequate quantity and quality. A complete audit of all public health facilities is almost completed and a programme to systematically improve the infrastructure as well as availability of equipment and human resources has begun.

Management and accountability

It is recognised that management and leadership are pivotal to success in the health sector. The managerial competency and capacity of hospital and district managers have been reviewed and in many cases found wanting. A programme to systematically review positions and skills has been introduced to ensure that all managers have the ability to successfully manage and be accountable for their areas of responsibility.

National Health Insurance System

As indicated in the introduction, South Africa has a twin-tier health system with an expensive private sector and a public sector with inadequate capacity. To straddle this divide and to

ensure that money on health is more cost-effectively spent for all in need, a National Health Insurance System was introduced as a pilot in 10 health districts (approximately eight million people) on 1 April 2012. The first phase of the introduction of NHI will focus on strengthening the public health sector and finding creative ways of bringing in the private sector (general medical practitioners in the first instance) to provide care in the public health sector.

Development aid

South Africa has been very fortunate in obtaining development assistance from a range of countries, institutions and philanthropies. Given the burden of disease from HIV and TB in particular, as well as the need to strengthen the health system, significant financial and technical assistance has been provided to the country – without which South Africa may not have made the gains that it has with respect to both decreasing the burden of disease and strengthening the health system. It is therefore vital that bilateral, multilateral and philanthropy support to the public health care system is sustained.

Conclusion

South Africa has a health system that is faced with a large number of challenges, but has achieved a number of successes since achieving democracy in 1994. In responding to these challenges, the government is spending a significant portion of its resources on health care. In this it is helped by strategic investment by multilaterals (such as the United Nations' agencies) as well the bilaterals (notably USAID, the European Union and the UK's Department for International Development) who, in addition to financial resources, also provide technical assistance.

South Africa will continue to depend on all the help it can receive from its friends, but success in South Africa will help not only this country but the whole southern African region.



the benefits of available resources, including knowledge. The Every Woman, Every Child initiative, a campaign accompanying the Global Strategy, continues to galvanise new commitments and, importantly, to focus on concrete action in this area.

Second, health priorities and strategies must be integrated to maximise efficiency and impact. The global community tends to fragment the health and development agendas as if they are unconnected, competing priorities. On the contrary: they are deeply connected, especially from the perspective of the women and their families who are affected by them every day. For instance:

- One in every five maternal deaths is related to HIV;
- Malaria is one of the leading causes of child mortality;
- Nutrition and non-communicable diseases (NCDs) are closely interlinked with women's and children's health and with socioeconomic development.

This integration is required not only within the health sector, but also across other development sectors, through improving access to women's education, clean water and sanitation, through promoting food security and sustainable development and through ensuring participation in labour markets.

barrier to sustainable economic growth and development must be recognised. Malnutrition leads to losses in gross domestic product by poor countries of as much as three per cent each year. Adults affected by malnutrition earn almost 20 per cent less than their non-affected counterparts. It is estimated that the direct global cost of child malnutrition is between \$20 billion and \$40 billion each year.

Health means wealth

Everyone recognises that the health of populations contributes to the wealth of nations. But there must be a commitment to strategies that acknowledge that fact.

Finally, there is a need for greater accountability. When the MDGs were adopted in 2000, it marked the first time in UN history that every country in the world accepted accountability on a set of mutually agreed goals, targets and measures. In 2010, the Muskoka Initiative set clear goals for MNCH with an accountability framework. Moreover, accountability is one of the pillars of the Global Strategy for Women's and Children's Health. This will help produce lessons for other areas of global health and development.

In March, The Partnership for Maternal, Newborn and Child Health joined with three other leading global health partnerships

The importance of addressing malnutrition as a determinant of health, a marker of social inequities and a barrier to sustainable economic development must be recognised

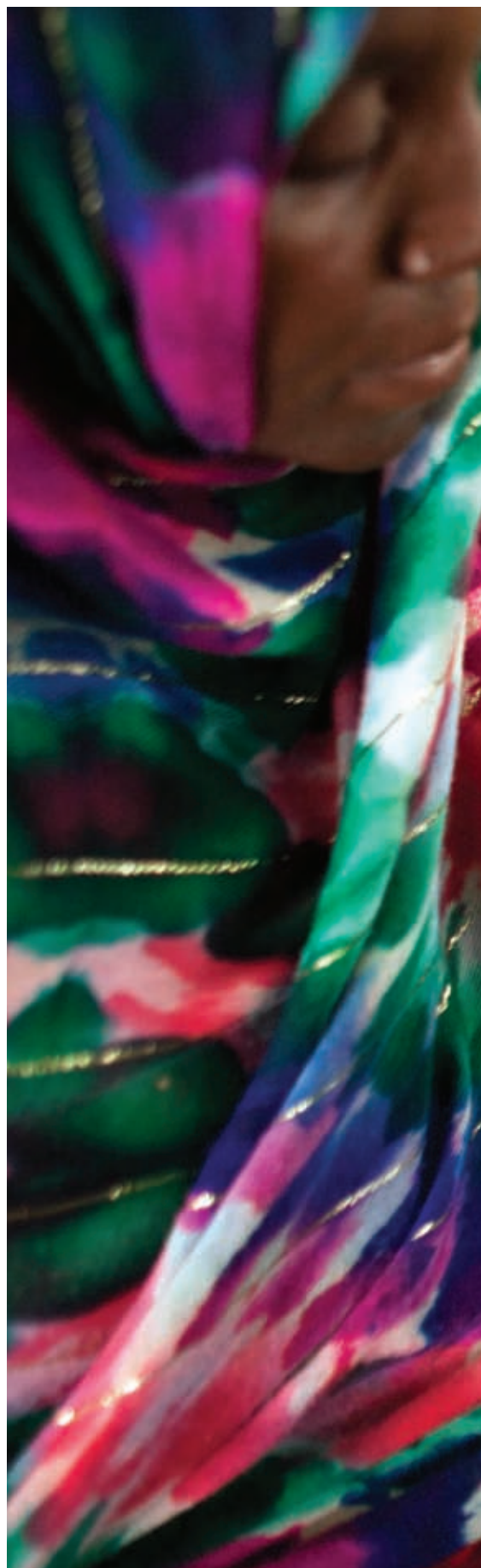
Third, the case must be made that women's and children's health is not merely an expense. It is an investment that contributes to future economic growth and sustainable development. Examples include:

- A background study to the Commission on Macroeconomics and Health found that as much as 50 per cent of East Asia's impressive growth from 1965 to 1990 could be attributed to reduced infant and child mortality, lower fertility rates and improved reproductive health;
- A study by the US Agency for International Development (USAID) found that maternal and newborn mortality and morbidity lead to \$15 billion in lost productivity every year;
- Reducing malnutrition can increase an individual's lifetime earnings by up to 10 per cent, and well-nourished children are less susceptible to disease and illness, thus lowering healthcare costs.

The importance of addressing malnutrition as a determinant of health, a marker of social inequities and an underlying

– the GAVI Alliance, the Global Fund to Fight AIDS, Tuberculosis and Malaria and the Global Polio Eradication Initiative – to send an open letter to G8 leaders asking for the inclusion of a specific statement of commitment for global health in the 2012 G8 Camp David Declaration and Accountability Report. The request was worded as follows:

'We acknowledge the need for continuing efforts to improve the health of women and children, especially in least-developed countries. Through the continued implementation of our Muskoka Initiative, we stand behind our commitment to Millennium Development Goals 4 and 5, and urge greater accountability and action through the full implementation of recommendations by the Commission on Information and Accountability for Women's and Children's Health in support of the Global Strategy for Women's and Children's Health, launched by the UN secretary-general in 2010. This includes addressing key needs, such as more support for family planning, as well as greater food security and better nutrition for pregnant women and children.' ■



Maternal and newborn mortality and morbidity lead to \$15 billion in lost productivity every year, according to the US Agency for International Development



Securing a future for the next generation of HIV orphans

As supplies of antiretroviral drugs dry up in some parts of the continent, it is more important than ever to help Africans run their own healthcare affairs



Dr Lisa Ramakrishnan,
chair and founder
of Vantage Health

Swaziland represents ground zero in Africa's enduring HIV crisis. The disease is the reason life expectancy in the kingdom has fallen from 60 to 32 years in the past two decades. It is the reason hospital wards are filled with stick-thin patients drowning in the fluid filling their lungs. It is the reason malnourished children still trudge across barren farm tracts to bury their own parents. **It is the reason why I founded Vantage Health.**

In 2012, HIV continues to stalk Africa like a curse. It is as invisible as it is deadly. You cannot always see it as you travel across the continent, but the disease is everywhere. It lurks in the blood. It lies heavy on hearts. Its presence stalks schools and hospitals. It is interred in the ground.

Once a hopeless diagnosis for the afflicted, HIV is now treatable for as little as \$87 per person each year. Infected Africans on antiretroviral (ARV) drugs can now live almost as long as those who are HIV-negative. A positive story.

International NGOs estimate that only five million Africans receive such treatment. At least 10 million people on the continent, of whom the majority are women and children, remain in desperate need of it. In Swaziland, a nation which is gripped by an unprecedented economic crisis, the stocks of ARVs have simply run out in rural areas.

Ending the dominance of the pharmaceutical industry

The bitter truth today is that HIV-positive women and children, who are in need of life-saving medication, are being turned away because of funding cuts, poor distribution and an over-reliance on foreign firms manufacturing the drugs that provide them with a lifeline. This cannot be allowed to continue.

I have made it my life's mission to engage Africa in a programme of self-determination that will end the dominance of major pharmaceutical firms and foreign donors in what has become a cut-throat globalised HIV business.

My mission statement is simple and compelling. By 2013, my firm, Vantage Health, will begin construction of factories in Sub-Saharan and East Africa, with technology from China and India, to establish local production of ARV medicines. By 2015, Vantage Health will be helping Africans make ARVs for Africa. We must all believe that Africa has the capacity to beat HIV.

In 2012, smallpox has been eradicated, the end of polio is nigh and the number of children dying from measles has dropped by more than 80 per cent. Brazil, India and China have been essential in driving this transformation, pushing down the price of drugs and introducing new business models that have reshaped how medicines are distributed and consumed. But these nations' changing geopolitical interests, and the increased adoption of intellectual property rules, will unleash price rises and tighter export controls for hugely profitable drugs such as ARVs. The changing commercial interests of pharmaceutical producers in India and China now present serious dangers for Africa's future.

Large pharmaceutical companies are increasingly aiming their sights on richer markets, where several blockbuster drugs are coming off patent. As the disease burden within India and China starts to resemble that of rich countries, with more diabetes and cancer for example, Africa's needs will simply slip off the radar.

Combine this with the decision by the board of the Global Fund to Fight AIDS to cancel the 11th round of funding and we have the perfect storm ahead for Africa's HIV-affected. How Africa's governments, not the G8 nations, respond to this changing weather system will ultimately determine whether the world's poorest continent overcomes its health challenges.

Averting the coming storm

Evidence is abundant that HIV is at the very heart of the most acute issues facing the Sub-Saharan and East African region, including maternal health, tuberculosis, broken homes and unemployment. In short, it will not be possible to build sustainable economies and credible health systems within African countries as queues for ARVs grow.

In parts of South Africa, a supposed beacon of economic hope, supplies of ARVs have recently collapsed. In every African nation frequent drug stock-outs as a result of funding shortages and supply-chain problems mean that patients have experienced interruptions in their treatment regimens, predisposing them to new forms of resistance and, ultimately, death.

The worst consequence of supply chains drying up is that Africans will no longer have faith in ARV programmes to treat HIV; they will simply stop attending clinics for treatment. We may have to return to rationing medication or singling out high-priority patients for treatment. The mortality rate will increase.

At Vantage Health we see ourselves as a warning bell anticipating the coming storm, but our production strategy for the future is based on precedent, not hope of survival.

The fact that nations such as India have stepped in by producing low-cost generic drugs illustrates how intellectual property policy can be used to increase access to affordable HIV medicines in developing countries. The Indian pharmaceutical industry is highly export-orientated and, by capitalising on infrastructure progress, has become a major supplier of generic medicines and low-cost ARVs to developing countries.



With emerging economies, improved roads and communications, as well as augmented water and sanitation programmes, Africa can follow suit. Nations such as Tanzania and South Africa have the stability, ambition and infrastructure to produce high-quality pharmaceuticals. Our commitment is based on a belief that African nations can be competitive in terms of energy supply, skills, infrastructure and regulatory efficiency.

Turnaround is not impossible. Prior to 1982, eight transnational pharmaceutical companies controlled up to 70 per cent of Bangladesh's local industry. Bangladeshi firms now hold that share. In Indonesia, between 1991 and 2010, the same dramatic reversal took place.

The need for further investment

Foreign investment in the sector is one stimulus that is already in place. India's Cipla is a partner in Cipla Medpro, South Africa's fourth largest pharmaceutical company, and has established a joint venture in Uganda with a Kampala-based manufacturer producing ARVs. Cadila recently announced a \$65m joint venture in Rwanda but the reality is, it is just isn't enough. More African enterprises need to come forward to meet the crushing demand.

At the heart of Vantage Health's mission is our inherent belief that bigger economies don't necessarily have better healthcare outcomes. Ultimately, governments, not companies, emerge as the most important actors in ensuring wide access to medicines for their populations, and ideally those of their neighbours. Their policies, from intellectual property regulations to public investment in higher education and roads, will ultimately prove more important than the whims of big pharmaceutical companies in Delhi, Geneva or Beijing.

The painful truth is that decades of dependence on other countries to supply medicines has diminished African self-determination and led to a helplessness that has allowed disease – and the acceptance of disease – to thrive.

Vantage Health plans to work with existing initiatives, and trained manpower and reward will be at the heart of our progress. However, we also recognise the urgent need for joined-up thinking to ensure secure distribution from laboratory to patient. ARVs are currently failing to reach the most marginalised members of society, including rural women, sex workers and households headed by children in remote areas. Providing sanitation, refrigeration facilities, good roads, detailed country maps and skilled staff to produce ARVs to WHO standards are all key parts of cracking that life-and-death puzzle.

Local clinics to improve maternal and child health

But our investment in Africa will go beyond this. On a micro level we also plan to build local clinics for mothers and children to ensure safe pregnancy, delivery and the steady availability of vaccinations for newborn babies. Such clinics would educate both employees and clients on the rapid spread of HIV and how irregular medication can lead to further infection.

The end game of the entire process is to have Vantage Health be just the beginning of a new industry emerging to create a competitive, thriving and domestic industry on home soil, benefiting and run by the people of Africa."

Over a decade ago, before treatment was available in Africa, some NGOs gave AIDS patients small notebooks and told them to write down their feelings so that, after their deaths, their children would know them. They became known as 'memory books'. In Swaziland, I recently found a book from 2002 written by a mother to her daughter. It simply said: "Happiness lies somewhere else, my child. Somewhere far from here."

I have met the victims of HIV on the deep rural plains of sub-Saharan Africa. I have seen families travelling with their HIV-positive children into Botswana and South Africa, desperately seeking ARVs. But in South Africa, fewer than half of the people who urgently need ARVs can get them. One mother, who was clutching a sick child, told me: "We are running to nowhere. We are holding out the begging bowl for ARVs to people who are beggars themselves."

I believe treatment and prevention strategies must work hand in hand. I am a medic, a scientist and, above all, a pragmatist. I set up Vantage Health knowing that supplies of ARVs in Africa are running dangerously low. On my travels across Africa, I have met NGO logisticians and administrators and fellow doctors who are deeply frustrated by the current situation. All complain of severe shortages of drugs. In Malawi, some healthcare facilities are now only able to distribute ARVs once or twice a week.

Africa's reliance on outsiders is not sustainable. We believe the answer is for communities to take ownership of their own healthcare. To be given the opportunity to participate in the management and production of life-saving medicines, is the start. We believe economic independence in healthcare is key in the fight against HIV. Vantage Health's mission is to hand the fate of future generations back to their communities.



www.vantagehealthgroup.com

More than money: the business contribution to global health

Increasingly, the private sector is plugging gaps in community healthcare, either through sustainable partnerships or by providing critical resources

By Jeffrey L Sturchio, senior partner, Rabin Martin

Two years ago, G8 leaders pledged an additional \$5 billion by 2015 to improve maternal, newborn and child health and to help achieve Millennium Development Goals (MDGs) 4 and 5. But in the often frustrating calculus of G8 discourse, the enthusiasm of the 2010 Muskoka summit has been tempered by the reality of the fiscal constraints that governments face as their economies struggle in the wake of the global recession. In this uncertain climate, business has emerged as a true partner with government and civil society in addressing some of the great global health challenges. This paradigm shift presents an opportunity for the G8 to facilitate deeper engagement with both private and public stakeholders to continue this trajectory of progress.

Every Woman Every Child

The Every Woman Every Child initiative is an important example of how effectively multisectoral partnerships can – and should – work. Launched by United Nations secretary-general Ban Ki-moon in September 2010 as part of the Global Strategy for Women's and Children's Health, the initiative has mobilised an estimated \$40 billion in commitments over five years. The goal is to save the lives of 16 million women and children by 2015, by filling the gap between the investment required for women's and children's health and the resources that are provided.

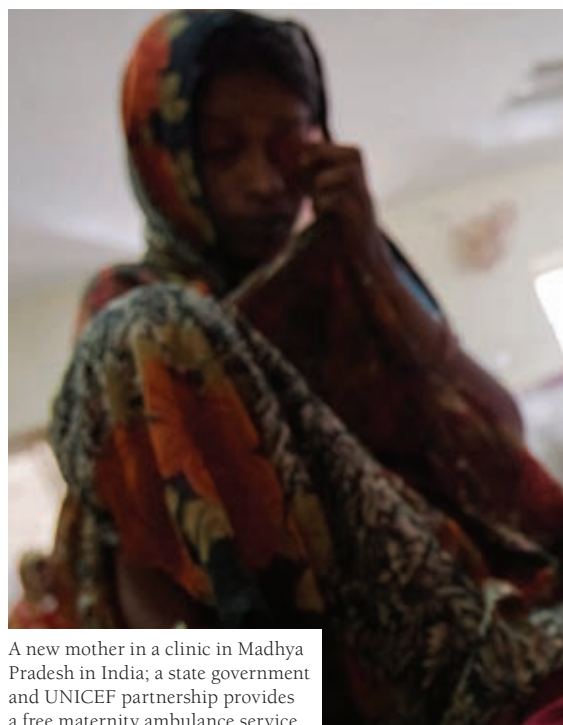
One of the most significant aspects of Every Woman Every Child is the wide range of partners who have made commitments to help. This is a striking example of the contributions that businesses large and small are already making to global health, bringing complementary resources and capabilities to reinforce the efforts of donors, national governments and other partners.

The 32 commitments made by 27 business organisations to Every Woman, Every Child include a diverse array of initiatives:

- General Electric will protect the health of mothers and babies in rural areas by addressing unmet health needs in remote or underserved areas by developing safe, affordable tools adapted to these settings, such as incubators for premature infants;
- Johnson & Johnson is investing \$200 million through to 2015 to help as many as 120 million women and children each year with a range of interventions – including the donation of mebendazole to treat intestinal worms, reducing birth asphyxia in infants and upgrading health facilities for more women at risk of fistulas;
- Medtronic, through the Medtronic Foundation, is supporting key planning and advocacy activities on a global scale to catalyse efforts to improve the prevention, care and treatment of non-communicable diseases, especially with regard to the most vulnerable populations, including women and children;
- Merck & Co, Inc (known as MSD outside the United States and Canada) has established Merck for Mothers, a 10-year, \$500 million initiative to help reduce maternal mortality by 75 per cent by improving the quality and supply of diagnostic, prevention and treatment interventions for post-partum haemorrhage and pre-eclampsia;
- Nestlé is expanding its Healthy Kids Global Program (HKP) to 51 new countries, addressing the challenges of poor nutrition and obesity by teaching children the value of good nutrition and physical activity through targeted programmes, developed in collaboration with national health and education authorities and child nutrition experts;

- Novo Nordisk will help improve the health of women and children with a focus on screening, treatment and care for gestational diabetes and by developing a partnership-based programme to address critical research gaps, develop innovation solutions, campaign for universal screening for gestational diabetes and mobilise key stakeholders to improve health outcomes for women and the next generation.

As demonstrated by these and many other commitments that are already making a difference, the private sector is providing critical resources to address global health priorities and to improve health outcomes. Equally encouraging is the trend towards utilising innovative public-private partnerships to develop sustainable healthcare solutions to deal with the challenge of maternal mortality. These partnerships focus on creating sustainable business models in resource-limited settings, enabling local business partners to develop tailored products and services for women and children while moving beyond dependence on donors.



A new mother in a clinic in Madhya Pradesh in India; a state government and UNICEF partnership provides a free maternity ambulance service

One such partnership is the Mobile Alliance for Maternal Action (MAMA). MAMA, which uses mobile phones to improve maternal health in developing countries, is piloting a programme that delivers audio health messages twice a week to 2,000 women to remind mothers to attend antenatal care checkups and how to stay healthy during pregnancy. MAMA seeks to achieve 'scale, sustainability and impact' by creating a replicable model of reaching low-income mothers and household decision-makers.

The value of innovative partnerships

MAMA is experimenting with different payment methods, which include subsidising rates, working with service providers to offer discounted rates and soliciting advertising. Founding partners USAID and Johnson & Johnson have made a three-year, \$10 million investment to create and strengthen programmes in Bangladesh, India and South Africa. Over the next three years, MAMA will help coordinate and increase the impact of existing mobile health programmes and provide resources and technical assistance to promising new business models.

Innovative partnerships such as these demonstrate the potential that comes from matching the capabilities and resources of the private sector – a bias towards innovation, a focus on efficiency and management, and a determination to reach scale – with the scope and democratic inclusiveness of the public sector. This potential can be seen not only at the level of multinational corporations working with multilateral organisations and governments, but also at the national level, where a vibrant ecology of energetic entrepreneurs, existing small and

medium-sized enterprises and supporting institutions is helping to deliver improved health outcomes in creative ways to a wide range of customer segments.

A promising example of a sustainable business model to address maternal health at the local level is the Drishtee Maternal Health Care Project in India. With support from MSD, Drishtee launched its Health Franchise programme in 2010. The franchise hires locally trained women to become a collective set of entrepreneurs and owners of Drishtee Health Kiosks, which provide maternal care and non-invasive diagnostics. The women are trained to work in a cluster of villages on defined routes in regions where government

The G8 can provide incentives for businesses to invest in global health solutions that can reach millions

facilities are either absent or non-functional. The goal of the Drishtee Health Franchise programme is to be sustainable by having each kiosk charge for its services, including a registration fee. By using trained women health entrepreneurs and by providing rural women with a safer option for childbirth, the project plans to reduce maternal mortality through community education and access to maternal health services.

As governments focus on financial recovery, partnering with the business community to explore sustainable models to address health is more important than ever.

The real question is not whether business has a role to play, but how to encourage additional collaboration and cooperation among businesses, the communities in which they operate and the public sector to address the growing health challenges faced by low- and middle-income countries.

In addition to maternal and child health, in recent years there has been an unprecedented mobilisation of resources and partnerships to tackle HIV/AIDS, tuberculosis, malaria and neglected tropical diseases (such as onchocerciasis, lymphatic filariasis, guinea worm, trachoma and schistosomiasis).

Non-communicable diseases – such as heart disease and stroke, diabetes, asthma and other respiratory conditions, cancer, dementia and mental illness, visual impairment – are bringing the next wave of global health challenges. There will continue to be a compelling case for businesses across sectors to contribute to solutions.

The influence of G8 leadership

How can the G8 leaders best help to foster greater business contributions to global health? Rather than focus on resource commitments, the G8 can help most effectively by exercising leadership – in policies, practices and partnerships.

By making the strengthening of health systems a priority and by creating enabling policy environments – in such areas as trade promotion, procurement and supply-chain management, product regulation and registration, and the mundane aspects of contract negotiations – the G8 can provide incentives for businesses to invest in global health solutions that can reach millions. Encouraging their partner governments to do likewise, and to share pragmatic solutions, will create useful leverage and expand the coverage of successful programmes.

Adopting practices that reinforce private-sector engagement in public health solutions – for instance, by requiring officials to consider working with private-sector providers in scaling up new health programmes (in effect, guaranteeing a market by becoming a core early customer) – will also help, as will implementing careful evaluations of investments to understand and build upon what works. And, finally, by actively fostering development partnerships that embody these enabling policies and practices, the G8 can model behaviour that will catalyse additional business investments in global health.

The G8 leaders can also apply their influence to bring together the right resources, the right expertise and the right solutions in innovative ways to create successful and sustainable responses to the challenges in maternal and child health identified at the Muskoka Summit in 2010.

More importantly, by implementing the right policies, practices and partnerships, the G8 can embrace the opportunity to create new whole-of-society approaches to address the global health challenges of the future. ■





The American Medical Association celebrates the work of the G8 nations and physicians around the globe.

Thank you.

The AMA is proud to play a major role in helping to improve global health. We are invested in making a difference in ways that include drafting policy for the World Medical Association, providing and recognizing the humanitarian assistance physicians deliver and, through *JAMA*, the *Journal of the American Medical Association*, and the *Archives Journals*, informing the world on matters of health, economics and global well-being.

Working together we will continue to improve the health of people around the world—a mission that matters to millions each and every day.



Read *JAMA's* May 16 Global Health Theme Issue.



Bolstering brain health makes perfect sense

As technology means fewer people are needed to carry out physical work and more are required for intellectual tasks, the role of the brain in the global economy is becoming increasingly important

By Vladimir Hachinski, president, World Federation of Neurology; chair, Working Group, World Brain Alliance

We are our brains. Hippocrates recognised this 2,500 years ago in observing that “from the brain, and from the brain only, arise our pleasures, joys, laughter and jests, as well as our sorrows, pains, griefs and tears. Through it... we think, see, hear and distinguish the ugly from the beautiful, the bad from the good”.

The key to health and well-being

Without a healthy brain, little else matters. It is crucial to the achievement of health, to solving global problems and to creating a better world. The leading non-communicable diseases (NCDs) of heart disease and stroke, cancer, chronic respiratory diseases and diabetes depend for their prevention, treatment and rehabilitation on competent brains, unclouded by stress, drugs or

an unhealthy diet, physical inactivity and addictions to tobacco and alcohol, as acknowledged by the recent declaration by the United Nations General Assembly in September 2011.

However, there is one factor that all these risk factors have in common in that they affect the reward system in the brain. Moreover, individuals in the anguish of anxiety or the despair of depression cannot necessarily follow healthy lifestyles. Consequently it is imperative that the G8, the World Health Organization, the UN and national governments avail themselves of the expertise of those who study the brain and its disorders.

Brain health begins with the mother

It is well established that a healthy pregnancy is a major determinant of a child's health and that the first five years of life are crucial in intellectual, emotional and social

The G8 can have a major role in promoting health, well-being and wealth by making brain health part of all policies, investing in neuroscience and taking advantage of all the knowledge that is currently available and applicable through the World Brain Alliance

depression. When the brain fails, the costs are staggering. Dementia consumes about one per cent of global gross domestic product (GDP), and will rise with the world's ageing population. Disability is more costly than death. Stroke is a leading cause of disability, brain failure and epilepsy.

A few common risk factors account for a large proportion of disease, namely

development as well as in the acquisition of lifelong habits. Women play a leading role in this. Their importance is recognised in *Non-Communicable Diseases: a Priority for Women's Health and Development*, published by the NCD Alliance in 2011. NCD control must be closely linked to the Millennium Development Goals, especially the maternal and child health initiatives.

In the digital age, repetitive physical labour and most activities that do not require intellectual input can be automated and robotised. Consequently, it becomes more important to have a higher level of intelligence and social skills in order to function and to be productive in what is an increasingly knowledge-based society.

The internet and social media have provided multiple opportunities for improving the human condition. They also require a higher degree of intellectual capacity than has been previously required, even until relatively recent times.

The World Brain Alliance

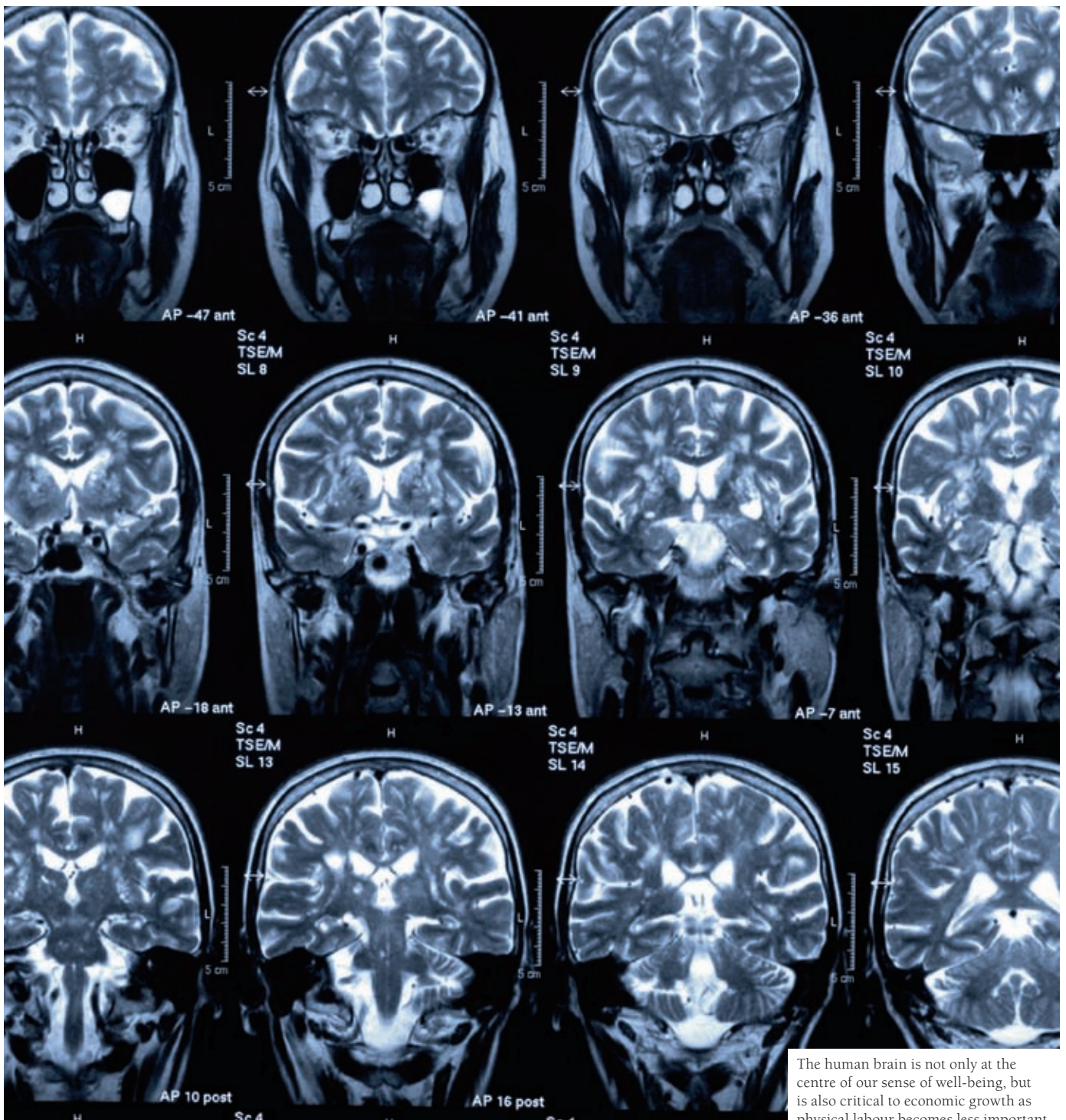
In recognition of the above facts, all the major brain organisations of the world came together to found the World Brain Alliance in Geneva on 30 March 2011. This umbrella group has the aim of promoting brain health and of treating, rehabilitating and preventing brain and mental disorders. It also seeks to move neurological and psychiatric issues up the agenda of global health policymakers.

The alliance is made up of 10 different organisations: Alzheimer's Disease International, the European Brain Research Council, the International Brain Research Organization, the International Child Neurology Association, the International League Against Epilepsy, the World Federation of NeuroRehabilitation, the World Federation of Neurology, the World Federation of Neurosurgical Societies, the World Psychiatric Association and the World Stroke Organization. Together, these organisations represent most countries of the world.

Their memberships encompass not only health professionals, but also neuroscientists, patient groups and volunteers, all willing to help implement the policies that will lead to better brains and better health and well-being.

The G8 can have a major role in promoting health, well-being and wealth by making brain health part of all policies, investing in neuroscience and taking advantage of the knowledge currently available and applicable through the World Brain Alliance.

Since all successful human activities involve a competent brain and since mentally and physically healthy individuals are key to productivity, the single best investment is to assure brain health – which, in turn, ensures health, well-being and wealth. ■



The human brain is not only at the centre of our sense of well-being, but is also critical to economic growth as physical labour becomes less important





Our responsibility as a world citizen is not to follow the crowd, but lead by example.

At Astellas, we are committed to improving the health of people around the world by providing innovative and reliable pharmaceutical products. Guided by this philosophy, we use our core strengths as a research-oriented pharmaceutical company to seek new ways of bringing better medical care to the global community:

- Global leadership in developing transformative new treatments in the fields of transplantation and urology
- A global sales and marketing network
- A robust pipeline with many “first-in-class” or “best-in-class” compounds that hold the promise of improving patient care in numerous therapeutic areas, including oncology and infectious disease
- Strong drug discovery technologies combining small molecule synthesis, fermentation, antibodies, and proteins

With these core strengths, Astellas is committed to targeting health issues that affect the international community, including child mortality, maternal health, and communicable and noncommunicable diseases. Astellas is working to change tomorrow by rising to the challenge of creating drugs that are truly needed, giving courage and hope to patients afflicted by illness worldwide.

Changing tomorrow starts with helping people today.

**Visit www.astellas.com/worldwide.html
to learn more about our global reach.**

Rio offers the chance to look at things differently

During a recent speech at a meeting of the World Social Forum, Brazilian president Dilma Rousseff explained how the foundations for growth in her country are being built on a sustainable model

It is very important that this meeting of the World Social Forum is taking place a few months before the United Nations Conference on Sustainable Development – Rio+20. The financial crisis and the uncertainty hanging over the future of the world economy give Rio+20 a special meaning.

In much of the developed world, the crisis was addressed by regressive fiscal policies, which have adverse social and environmental consequences and bring dangerous threats of unemployment, xenophobia and authoritarianism, paralysis in confronting global warming, and threats to world peace.

A few months ago, I was at the G20 Cannes Summit, which proposed a new world, with new ideas. Despite the advances eventually made there, I confess I was not satisfied with the results. It is not easy to generate new ideas and alternatives when we are dominated by political and ideological prejudice.

We are familiar with this story. In the 1980s and 1990s, we faced profound macroeconomic imbalances. Political and ideological prejudices imposed a conservative model on the countries of Latin America that, in Brazil, caused stagnation, the loss of democracy and sovereignty, and deepened poverty, unemployment and social exclusion. Today, in Europe, these failed ideas are being put forward again.

Rio+20, in which heads of state and government will participate, as well as significant sectors of civil society, should be an important occasion in a process of generating new ideas.

Rio will focus on significant environmental issues and the problems of climate change. The main topic of the debates will be a new

model for development, which is made up of three dimensions – economic, social and environmental. From now on, we want the word ‘development’ to be always associated with the term ‘sustainable’.

Alongside the Millennium Development Goals, it is also necessary to establish the goals of sustainable development. These goals, which include commitments and targets for all the countries of the world, are based on fighting poverty and inequality, and on environmental sustainability.

We assume that it is possible to grow in an inclusive way, as well as protecting and conserving. What will be under discussion at Rio+20 is a development model that can

The place that Brazil occupies in the world is not the result of any economic miracle, as it was in the past. It is a result of the efforts of the Brazilian people and their government, who chose a new path

link growth and job creation; the eradication of poverty and the reduction of inequalities; social participation and the strengthening of rights; education and technological innovation; and the sustainable use and preservation of environmental resources.

In Copenhagen, almost three years ago, our government took on new responsibilities on climate change. We presented to the world, and here in Brazil, our voluntary commitment to significantly reduce greenhouse gas emissions. Unfortunately, some countries were reluctant – and even today are reluctant – to announce what they intend to do to reduce emissions. We are the country that,

according to the United Nations, has done the most to reduce greenhouse gas emissions across the globe. These commitments are part of the great transformation that has been under way in Brazil over the past nine years.

What sustainable development means

When we talk about sustainable development in my government, I want to make it clear what we are talking about: for us, sustainable development means the accelerated growth of our economy in order to distribute wealth; it means the creation of formal jobs and an increase in workers’ income; it means income distribution to put an end to misery and poverty, with public policies to improve education, health, public safety and all services provided by the state; it means balanced regional income growth, to correct the imbalances among the regions of the country and to correct the underdevelopment of one part of the country, and it means the creation of a broad market for mass consumer goods to support internal development. It also means that Brazil is changing, and every day we will help it change, from the socioeconomic point of view, into a middle-class country; it means

development, with environmental sustainability a prerequisite.

Our choices in energy, food security, logistics infrastructure and technological innovation take into account the sustainable use of our natural resources.

Furthermore, sustainable development means strengthening social participation mechanisms and our democracy; it means encouraging and defending our

values, our culture, our cultural diversity; finally, it means a sovereign and competitive integration in the world.

The huge problem that President Lula began to unravel in 2003 was that of exclusion and social inequality. We are winning this battle, as 40 million Brazilians have been lifted out of poverty and ascended to the middle class. Our efforts to eradicate this social problem in the coming years will be seen in our determination to implement the ‘Brasil sem miséria’ (Brazil without poverty) programme.

The place that Brazil occupies in the world is not the result of any economic miracle, as

it was in the past. It is a result of the efforts of the Brazilian people and their government, who chose a new path. Brazil is now a different country. Nobody – nobody – and no group can ever take that from us. Today, we are a stronger, more developed and more respected country – a country that lives in harmony with its neighbours in South America, Latin America and the Caribbean, and wants to build with them a centre of development and democracy in the world.

Similarly, we have opened new relations with our African brothers, and with the Arab world, paying special attention to Palestine, which we hope can soon become a free state, a peaceful and democratic state, with guaranteed sovereignty.

In the BRICS countries of Brazil, Russia, India, China and South Africa, we stand for a new economic and multipolar political world order, which is fairer and more democratic. In all global forums, we favour multilateralism, disarmament and negotiated solutions to all threats to world peace.

Recent studies by the Organisation for Economic Co-operation and Development

show growing income concentration and increased inequality in developed countries and even in some emerging economies. The downside of this – and it is happening now – is soaring unemployment and widespread poverty around the world.

These two phenomena – unemployment and social inequality – are particularly cruel for rich nations, which won rights and have now lost them. And they are also cruel because they strike primarily young people, women and immigrants.

The dissonance between the voice of the markets and the voice of the streets seems to be increasing in developed countries, jeopardising not only social achievements, but democracy itself.

The dawn of a new era

The anger of young people, women and militants who occupy the streets in cities around the world is an important symptom that cannot be disregarded. In this context, the women of the world have taken an increasingly central and decisive role in promoting change. I am sure that we women

will do everything to ensure that the 21st century is the century of women.

Civil-society organisations and progressive governments: each in its way can turn these first years of the new millennium into the beginning of a new era. To this end, it is crucial to strengthen the South-South solidarity and cooperation that unite our peoples. The great movements of humanity are created by action, and also hope. It was the hope that moved my generation decades ago. Today, when I look at the path travelled and the goals achieved, I can only tell you – it was worth it. It is this hope that unites us and mobilises us for Rio+20. It is this hope that should always guide us in the search for a new, inclusive and sustainable way of life.

Knowing that the role of civil society will be crucial to the success of Rio+20, I am counting on your mobilisation, your engagement and your presence in Rio de Janeiro. I am sure another world is possible. ■

Unofficial translation of an address by President Dilma Rousseff at the World Social Forum in Porte Alegre, Brazil, on 26 January 2012



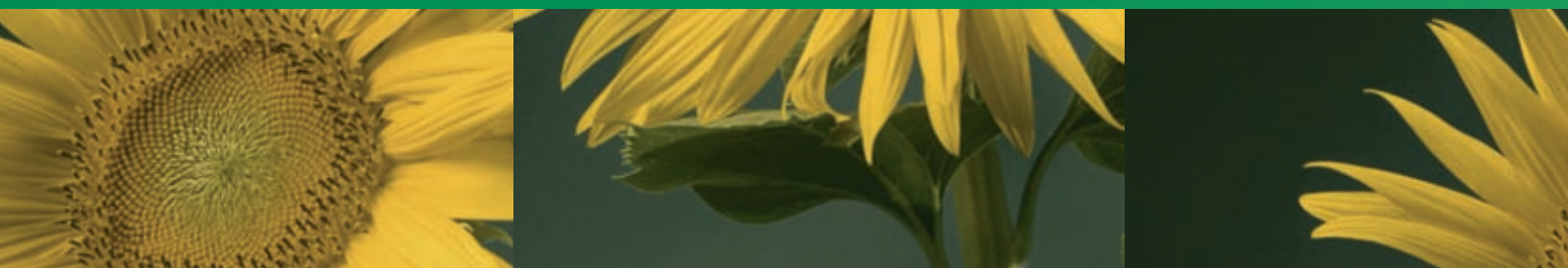
Although poverty is still an important issue in Rio de Janeiro, the Brazilian government has made huge strides in overcoming social inequality



Petrobras is more than an oil company.



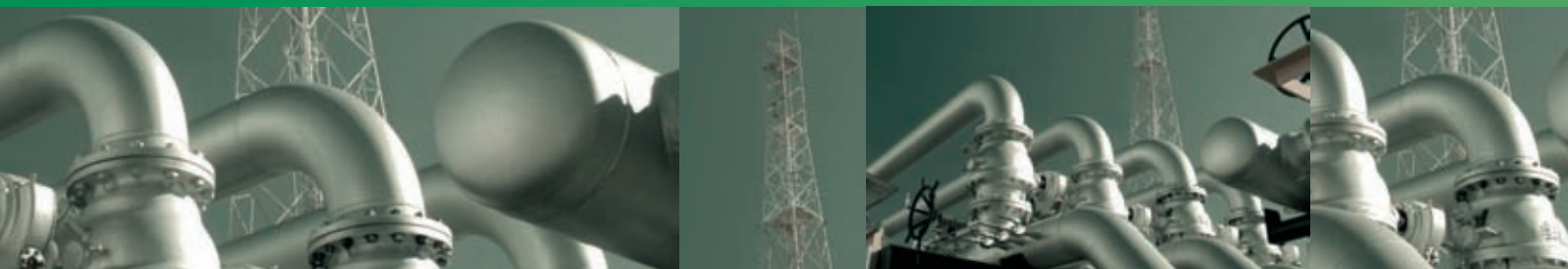
And if you think about it, it's more than an energy



Petrobras is renowned around the world for its technology and leadership in deep and ultra-deepwater exploration and production. It's also a pioneer in biofuels and invests in alternative energy sources.



company too.



But, more importantly, Petrobras is committed to social and environmental development and fosters good citizenship values, culture and the arts. If the future is a challenge, Petrobras is ready for it.



CHALLENGE IS OUR ENERGY

Enhancing energy security: lessons from Germany and Japan

For different reasons, two G8 countries have made the decision to abandon their nuclear generating capacity and focus on renewable energy instead

By Miranda Schreurs, member, German Environment Advisory Council (SRU)

Energy security is a major concern for countries around the globe, as well as in the G8 more specifically. In the United States, concerns about energy security have led to offshore oil and shale gas drilling and talks about building more nuclear power plants.

In Canada, exploitation of the oil sands is bringing the country new wealth, but at a cost to the environment. Russia continues to lead in fossil fuel extraction and is also looking to unexplored reserves in the Arctic waters. France, which relies heavily on nuclear energy, has suffered energy shortages at periods of peak demand that have been offset by energy imports from its neighbours.

The G8 has been dominated by energy models that depend on fossil fuels (coal, oil, natural gas) and nuclear energy. However, new models that could be both attractive and positive for energy security are emerging in Germany and could take root in Japan as well. Germany and Japan are both in the midst of energy revolutions.

Germany's revolution is planned from above. Japan's is an unplanned response to a crisis. For different reasons, both countries are likely to lead the G8 in promoting energy efficiency improvements and in developing new low-carbon energy systems. They will provide other countries with alternative energy models to consider as they develop their own energy markets.

The 1986 Chernobyl nuclear accident triggered Germany's energy transition. Soon after the explosion, the German government established an environment ministry and gave it responsibility both for nuclear safety and the development of renewable energy.

At the beginning of the 1990s, Germany derived only three per cent of its electricity from renewable energy sources. Today, as a result of policies to promote renewables and

strong public support, Germany generates 20 per cent of its electricity from a combination of wind, solar, hydro and biomass. The German government has set ambitious goals: to generate at least 35 per cent of electricity from renewables by 2020, 50 per cent by 2030 and 80 per cent by 2050.

Changes are to be made in the heating and mobility sectors as well, with 60 per cent of all energy from renewables by 2050. The plan has been likened to the Marshall Plan in scale, or to the Apollo project in terms of ambition.

A future in renewables

The transition to a renewable energy future is to be done at the same time that dependence on nuclear energy is to be phased out. As early as 2001, the German government had established a nuclear shutdown law, with the closure of the last nuclear plants envisaged for the early 2020s.

Although a decision was made in 2010 to slow the phasing out by extending the licences of operating nuclear power plants, this decision was reversed in response to the Fukushima nuclear meltdown in Japan in March 2011. Following the advice of an ethics commission established to review the implications of Japan's nuclear reactor problems for Germany, a cross-party consensus for a more rapid phasing out was reached. Eight reactors were decommissioned in 2011. Nine remain and will be taken off the grid in the coming decade, with the next one to be shut down in 2015.

What does this energy transition mean for Germany, Europe and beyond? It means that the entire German energy economy needs to be restructured. Some worry about what this will mean for energy-intensive industries or for household electricity prices, but German society appears willing to pay higher costs up front in order to realise higher energy security



As part of its energy strategy, Germany is keen to exploit the potential of offshore wind farms for electricity generation



and a cleaner environment in the future. It is a little like investing in a university education. The initial costs are high, but the expectation is of a payback in the long run.

There is a strong sense that the energy transition is an opportunity for the country and that it will lead to technological, structural and process developments that will provide new, exciting job opportunities. Were Germany not to choose this path, the country would also face higher energy costs for conventional energy imports. It will be important to cooperate with neighbouring European countries in promoting transition across the region and also export newfound know-how to developing countries.

Reaching these goals will not be easy or inexpensive. There will be winners and losers. Some investments can pay off relatively

New models that could be attractive and positive for energy security are emerging

quickly, such as improvements in energy efficiency in the residential and office sectors. Others will be more costly, such as the new high-voltage electricity grid infrastructure that will be needed to transport electricity from wind from the north of the country to the south. The higher the energy efficiency of the economy, the less energy is demanded, and this will mean a reduction in the new energy infrastructure needed.

Big hopes rest on offshore wind power as the wind blows stronger and more steadily 100 kilometres offshore than on land. Universities, think tanks and enterprises are researching possibilities for electricity storage systems and smart-grid technologies.

A major shift in planning

The energy transition in Germany has been long in the making. In Japan, the transition is being forced on the country by a natural and human-made disaster, the proportions of which are still not understood.

Japan derives about 30 per cent of its electricity from nuclear energy – or at least that was the case until the three reactors at

the Fukushima Daiichi nuclear power plant experienced meltdowns. A little more than a year later, the last of Japan's 54 nuclear reactors is scheduled to be taken off the grid for scheduled safety checks.

Despite the efforts of some in government and the energy industry to restart the nuclear reactors, prefectural governors such as Shiga Prefecture's Yukiko Kaba (only the fifth female governor in the history of Japan) have blocked these calls, demanding that society be given a chance to discuss what kind of energy future it wants and what risks are associated with maintaining nuclear energy.

In the meantime, major shifts in energy planning are under way. Plans to build new nuclear power plants have been scrapped. Some cities – like Tokyo – have taken plans into their own hands and established their own renewable energy targets.

The question is how many nuclear power plants will return on line and how quickly plans will be laid to develop renewable energy alternatives. Already, Japan has shown the world what is possible after a crisis in a society with a strong sense of community. Not only did the country respond to the horrible aftermath of the March tsunami that claimed the lives of 20,000 and the homes and livelihoods of many tens of thousands more, but people and industry also responded to requests to conserve energy. Electricity demand was reduced by 15 per cent in Tokyo by these voluntary emergency measures.

True, Japan has had to resort to more use of imported coal, oil and natural gas to meet the shortfall from the nuclear sector. There has been a sea change in attitude, however, about the safety of nuclear energy – especially given that the country is earthquake-prone – and the desirability of electricity from renewable sources. Japan has been looking to Germany for ideas about how a new energy structure could be developed.

Sceptics question whether such major-scale transition in the energy system can happen in a relatively short time. Supporters regard the energy transformations that are being planned in Germany and debated in Japan as an opportunity that will help both countries maintain their economic competitiveness and provide them with new jobs and industries, while helping to develop energy systems that, in the long run, will be far more sensitive to environmental constraints. ■

Athabasca's Cleaner



The global demand for energy will continue to dominate the Canadian and international political and economic agendas. Athabasca Oil Sands Corp. offers an innovative solution to these energy challenges. The company holds an enormous acreage position in Alberta's oil sands region and anticipates using a breakthrough technology to produce its extra heavy oil resources in a sustainable and responsible manner.

Athabasca's new technology is called thermal assisted gravity drainage (TAGD) which uses electricity to gently heat the reservoir. Thermal heating is similar to the in-floor radiant heating systems people install in concrete floors to keep warm and comfortable. The heat is constant and even.

The company believes TAGD addresses a number of international concerns: it eliminates mines and tailings ponds, uses directional drilling from pads to minimize the surface footprint; it uses no water and significantly minimizes carbon dioxide emissions. Thus TAGD could be more profitable and environmentally sensitive than other oil sands recovery methods.

The company's prize reservoir is in its wholly-owned Dover West oil field, about 70 kilometres north-west of Fort McMurray. The oil is trapped in a 100 - 150 metres thick reef, called the Leduc carbonate, about 350 metres below the surface. Conservative estimates from third-party evaluators show approximately 17 billion barrels of contingent oil-in-place (best estimate) which could support production of 250,000 barrels per day for several decades.

Oil Sands Strategy



For commercial production, Athabasca could clear a select number of corridors through the forest, construct pads and directionally drill wells into the reef. Each pad is expected to be reclaimed shortly after the extra heavy oil production ceases, unless another technological advancement proves effective to sweep the reservoir clean.

Athabasca has a large extra heavy oil reservoir that could be Canada's answer to Saudi Arabia's elephant oil fields.

Although it is preliminary and not yet commercially proven, Athabasca believes TAGD may help Canada become an energy superpower, producing cleaner energy.



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Why nuclear energy still has a crucial role to play

Despite the Fukushima tragedy, most countries have decided to retain nuclear power as an important ingredient in their overall energy strategies

By Victoria V Panova, Department of International Relations and Foreign Policy of Russia, MGIMO-University

Since the 2011 G8 Deauville Summit, nothing has happened that would allow for a drastic revision of the role of the nuclear energy in the world. The Fukushima tragedy of March 2011 reversed political thinking on the matter in several countries. Yet the general trend of keeping nuclear as an alternative energy source remained in the strategies of major or emerging nuclear users of China, India, France, Russia, Korea and the United States. Efforts in 2011 focused mainly on enhancing safety standards for existing nuclear reactors.

As the victim of the accident at Fukushima, Japan had only one reactor out of 54 functioning by the end of March 2012. Germany closed eight of its 17 reactors permanently, with a view to closing down all nuclear power plants completely by 2022. This trend was seen in Switzerland, Italy and other countries, even though several experts firmly believe that there remains no real alternative to nuclear energy. Nuclear power plants, while having high construction costs and long payback periods, emit virtually no greenhouse gases and thus could be considered climate friendly.

The cost of shutting nuclear plants

According to the estimates published by the International Energy Agency (IEA) in its *World Energy Outlook 2011*, shutting down nuclear power plants while trying to keep the global temperature increase within 2°C would cost the world up to an extra \$1.5 trillion by 2035. Notwithstanding popular opposition to nuclear energy, even after the Fukushima tragedy, the IEA's forecasts did not change much: they suggested a 70 per cent increase in nuclear power by 2035.

The cost of a total reorientation away from nuclear energy seems too high for the

today's world to bear, due to issues related to climate change, the depletion of hydrocarbon resources, the economic efficiency of nuclear stations and military aspects. Today, out of 63 nuclear reactors under construction around the world, China leads with 26. Ten are in Russia, seven in India and three in Korea.

The trend of investment in renewable sources of energy does not seem to have been influenced either positively or negatively by the events of 2011. Renewables continue to gain more and more ground. As an alternative to depleting hydrocarbons and using nuclear power in areas that demand much energy and heating, there could be greater use of combined cycle power plants, which now

Shutting down nuclear power plants while trying to keep the global temperature increase within 2°C would cost up to an extra \$1.5 trillion by 2035

reach up to 55 per cent of output efficiency, or use of geothermal heat pump systems. If Russia were to use energy-efficient light bulbs, the electricity output would be the same as for 26 newly built nuclear reactors.

Together, countries are undertaking measures to increase the share of renewables in the fuel and energy balance, to increase that share up to 25 per cent by 2025 in the US, 20 per cent and over in the European Union, and 14.5 per cent in China. The US, Germany, India, Spain and China possess around three-quarters of the world's wind-driven generators, while Europe, Japan and the US lead in installed solar-panel capacity.



The BRICS countries of Brazil, India and South Africa have a very good potential for renewables. Russia has only about one per cent of non-traditional renewable sources in its energy balance (without hydroelectric power). Nothing in terms of strategic thinking regarding nuclear energy's role for Russia has changed since it hosted the G8 summit at St Petersburg in 2006. That summit's

Renewable sources such as wind power are increasing their share of energy production, but do not offer a viable alternative to nuclear power



declaration on Global Energy Security found the formula to disagree by those of the G8 “considering plans relating to the use and/or development of safe and secure nuclear energy”. This was, in a way, repeated at the 2011 Deauville Summit with the commitment of “those countries having chosen to rely on nuclear energy” to “pay due attention to the safe operation of their nuclear installations”.

At Deauville, the leaders also approved the conducted or planned stress tests for their nuclear power plants to assess “accident prevention, emergency preparedness, crisis management and mitigation, and post-accident management”. The G8 also prompted the International Atomic Energy Agency (IAEA) to take proactive measures in this area. As a result, by February 2012 new

safety standards for the projected plants were worked out to replace the previous ones that had been created in 2000.

The G8 leaders at Deauville also called on all countries still not adherents to several relevant IAEA conventions to join or ratify them. They asked all relevant multilateral forums of safety authorities and operators to strengthen their efforts to that end. This had a somewhat minor effect with regard to the conventions. In the summer of 2011, Albania and Ghana acceded to the IAEA Convention on Nuclear Safety, while 10 countries remained outside that mechanism (including such important players as Algeria, Egypt, Israel and Syria).

This convention will have its Second Extraordinary Meeting on 27 August 2012 to look into ways of strengthening the regime as a whole, including introducing an efficient peer-review mechanism, as well as preparing for the sixth review conference.

Suggestions for the summit

Nuclear safety soared on the international agenda after Fukushima. Yet an understanding of interconnectedness and mutual vulnerability, not just of Japan or of the G8 countries, has led to work at all levels of international cooperation. It was important for G8 leaders to state their moral support for the Japanese people at such a difficult time and also to calm the world by stating that they were ready to take action to prevent such a disaster from happening again. Otherwise, there does not seem to be a technical need to foster cooperation in this area.

With the usual stress on nuclear non-proliferation, the G8’s 2012 American hosts will push through the relevant meetings of the G8 Nuclear Safety and Security Group and other mechanisms that the G8 supports for the activities taken by the IAEA and the relevant national authorities.

This was the case with G8 endorsement for the IAEA Response and Assistance network to strengthen international emergency preparedness. It looks as if the G8 summit will not need to play a bigger role than mere endorsement or promotion, for the necessary work is being done by lower-level national and multilateral experts on specific components, such as at the new sequence of nuclear safety summits, so far held in Washington DC in 2010 and in Seoul in 2012. ■

Shale: a global game-changer

Around the globe, a shale revolution is occurring, creating jobs, boosting economies, and redefining the international energy scope. From the United States to China, governments of all geographies are reassessing their energy portfolios, businesses are reallocating investments, and consumers are taking a second look at their energy bills. The shale revolution has taken hold of the global energy stage.

Game-changing technology: hydraulic fracturing

Today, thanks to technological innovation and industrial dedication, natural gas locked in tight shale formations is physically and economically accessible for our oil and natural gas producers.

While hydraulic fracturing was first used more than 65 years ago, the combination of this stimulation technique with horizontal drilling technology has revolutionised the world's natural gas supply, becoming a catalyst in the development of extensive unconventional resources.

Hydraulic fracturing is a method in which a fluid mixture of 99.5 per cent water and sand is pumped down the wellbore at high pressure to create cracks and fissures in shale to access natural gas that is otherwise trapped.

Despite speculation and propaganda, hydraulic fracturing is a proven-safe technology. In fact, out of the 1.2 million wells

that have been fractured in the US, not a single case of groundwater contamination has ever been proven as a result of hydraulic fracturing.

A study from the Energy Institute at the University of Texas at Austin reaffirmed this fact in February 2012. The study found “no evidence” of hydraulic fracturing ever leading to groundwater contamination.

Like any other industrial process, industry is aware of the need for continual advancement to ensure the safety of the environment in communities where development is taking place. From preliminary testing of the area via seismic data to restoration of the completed well site, industry places safety and the environment as a top priority in development. Industry has stepped up to voluntarily disclose chemicals used in more than 11,410 wells in the US. Safety, efficiency, water conservation, wellbore integrity and environmental protection are key chapters in development.

“I’m not aware of any proven case where the fracking process itself has affected groundwater”

US EPA Administrator Lisa Jackson (May 2011)

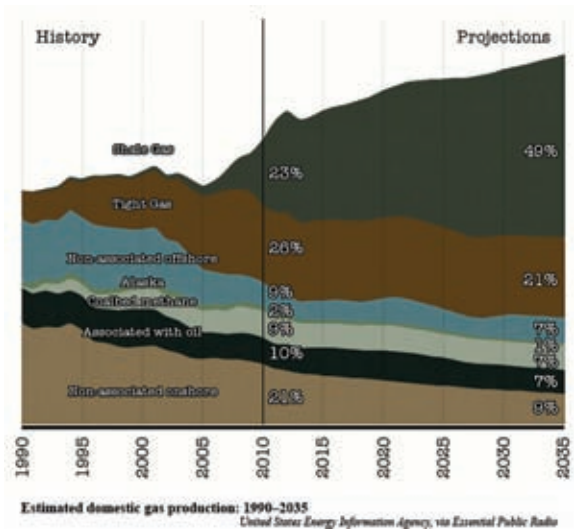
Shale around the world

Between 2010 and 2030, global demand for natural gas is expected to grow by close to 50 per cent. The need to develop our natural gas resource base is clear. Right now, more than 6,622 trillion cubic feet of known natural gas reserves exist in shale gas areas around the globe.

European Union: Newfound shale reserves throughout the EU – from the UK to Spain – could provide a new source of much-needed domestic clean-burning natural gas for consumers, while enhancing the EU's energy security. Poland, for instance, is moving forward with a robust plan to develop its shale reserves – which are equal to 300 years of domestic energy for the nation – and define its energy independence from Moscow.

China: Recent research surrounding China's prolific shale resources base (which may be 50 per cent greater than that of the US), and a national commitment to constantly develop and enhance the national standard of living, has spurred the government to increase its natural gas production.

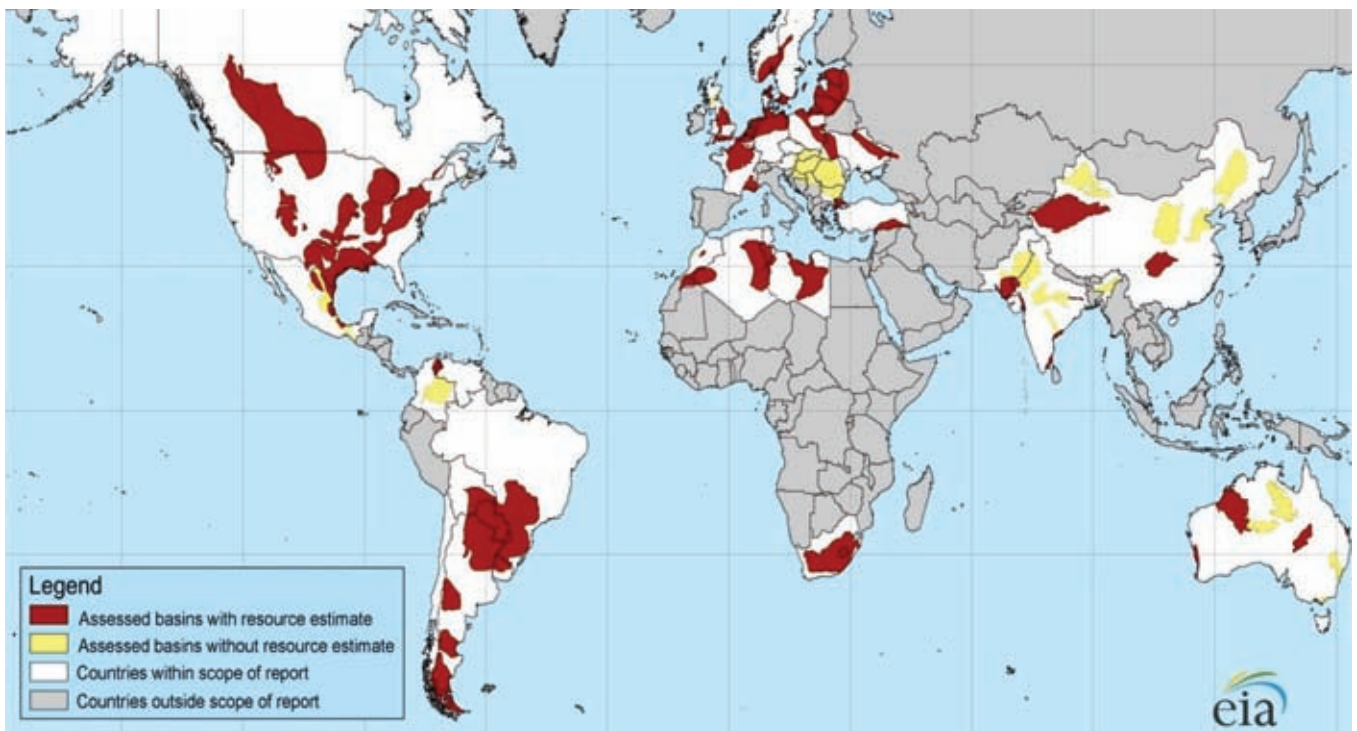
South America: Argentina is the largest natural gas producer in South America. Yet barriers to production have limited private investment, resulting in a decline in oil and natural gas production while consumer demand rises. Recent assessments,



however, suggest that its shale reserves may hold some of the world's largest natural gas supplies, making Argentina a significant player in the global energy supply.



Launched by IPAA in 2009, Energy In Depth (EID) is a research, education and public-outreach campaign focused on getting the facts out about the promise and potential of responsibly developing America's abundant oil and natural gas from shale reservoirs. Learn more about hydraulic fracturing and safe natural gas development from shale on our website: www.EnergyInDepth.org



Shale around the US

The US is estimated to have a 100-year supply of low-cost, clean-burning natural gas. In 2011, shale gas had grown to 34 per cent of total US natural gas production. By 2020, domestic natural gas production from shale alone is expected to supply 50 per cent of natural gas in the US.

Job creation, economic stimulus: As shale development supports industries across the nation, production has become a catalyst for job growth throughout North America. From reviving local steel mills to supporting family businesses, the safe development of America's homegrown natural resources is providing real opportunities for communities that might otherwise be casualties of the global recession.

In 2010 alone, shale development supported 600,000 jobs. According to estimates from global information company IHS CERA, this will grow to nearly 870,000 in 2015 and to more than 1.6 million by 2035. Development also contributed more than \$76 billion to GDP in 2010, while furnishing \$18.6 billion in federal, state and local taxes and federal royalty revenues.

Conclusion

Global recessions. Unemployment spikes. National security. These are the foremost issues of our time, complicated and dynamic quandaries that require innovative and multifaceted solutions. The development of natural gas from shale presents an opportunity for global leaders to work together and provide our growing world with the energy it needs to expand, advance, and progress. From Lower Saxony in Germany to the Eagle Ford in Texas, across to the Cooper Basin in Australia, shale gas areas around the globe are redefining our world's energy potential and providing countless economic benefits for local, federal, and global economies.

Footnotes

- 1 Energy Information Administration: *Argentina's Natural Gas Reserves*
- 2 IHS CERA, *The Economic and Employment Contributions of Shale Gas in the United States*, December 2011
- 3 Resources for the Future, *The Future of Natural Gas*, June 2010
- 4 IHS CERA, *The Economic and Employment Contributions of Shale Gas in the United States*, December 2011

“From my point of view, [hydraulic fracturing] can be done safely and it has been done safely”

US Interior Secretary Ken Salazar (February 2012)

Chemical and manufacturing industries that rely on natural gas as a feedstock for production are flourishing, capable of keeping their firms and workers at home for the first time in decades.

Energy security: In the US, oil imports have fallen from 60 per cent in 2005 to 47 per cent today, while OPEC nations are realising the potential of North America's vast new energy supplies and what they might mean for the future of global energy trade. As shale development continues to grow, expected to account for nearly 50 per cent of US dry gas production in 2035, our nation moves one step closer to securing its domestic energy security.

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North America as a global oil and gas power

A delicate balancing act is required as governments find ways to develop low-carbon energy sources, keep prices down and protect jobs in the industry

By Robert Johnston and Nitzan Goldberger, Eurasia Group

In recent years, governments have endeavoured to maintain a tricky energy-policy balancing act in seeking to shore up the physical security of supply, develop low-carbon energy resources, and promote affordable energy and job creation amid the global economic downturn. The challenge is perhaps best captured in US president Barack Obama's recent emphasis on 'all of the above' energy development. The shift to 'all of the above' as a policy centrepiece for the White House arguably reflects some lost momentum on the climate change and renewable energy front,

G8 governments must work together on best practices to develop resources safely

but also the stunning transformation of the oil and gas outlook within North America thanks to the innovation relating to unconventional resources in oil sands, tight oil and shale gas.

Delaying difficult questions

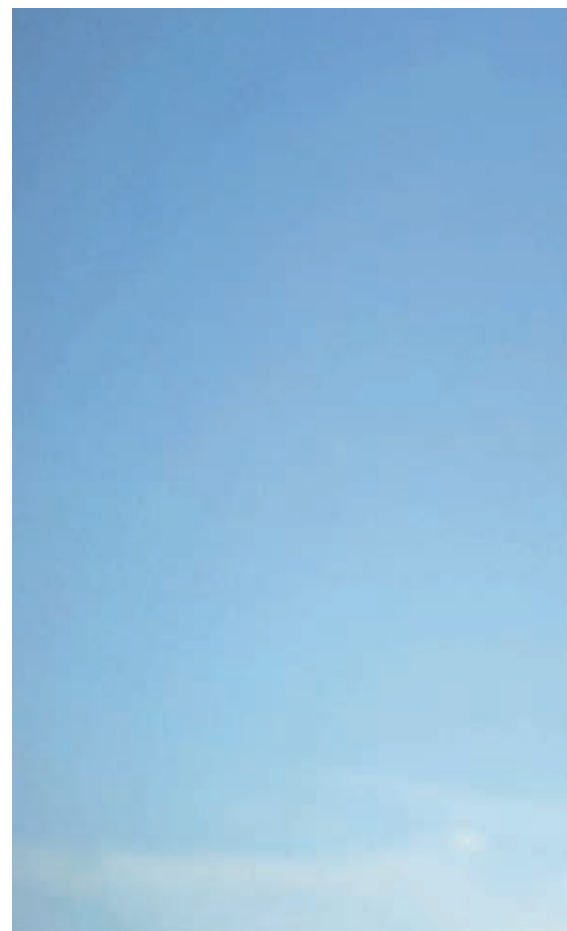
For the G8, the role of the unconventional boom in North America and beyond will bring breathing space for addressing difficult political questions on climate and economic questions for renewables, as the more optimistic outlook for oil and gas helps to stabilise prices and calm public anxieties about peak oil. To achieve this vision, G8 governments must work together on best practices and standards to develop unconventional oil and gas resources safely and responsibly. Moreover, G8 governments will also need to analyse the implications of changing energy supply chains and trade

flows as new supply sources come online. The boom in North America shale gas has turned the natural gas market on its head, and the US, once expected to become one of the world's largest importers of liquified natural gas (LNG), is in fact likely to become an exporter. The large volume of natural gas in the market has produced noteworthy gains for North American energy security, as well as for other national economic and environmental policy goals, while simultaneously changing the strategic trajectory for other major global gas producers around the world.

At the same time, the technologies and techniques used to tap into the vast shale gas reserves in North America are unlocking so-called, light and tight, oil potential in older conventional formations and shale formations. If estimates by the International Energy Agency (IEA), the National Petroleum Council and other sources are correct, the US could be producing two million barrels per day (bpd) or more of tight oil by the end of the decade. Together with offshore oil production, these resources would lessen the country's dependence on unstable countries for seaborne crude imports.

The Canadian oil sands are the third leg of the North American energy security table, along with shale gas and tight oil. The oil sands are expected to be the largest source of new supply from non-members of the Organization of the Petroleum Exporting Countries (OPEC) over the next decade, along with the US and Brazil. Over 800,000 bpd of new capacity is already under construction and expected to come online by 2016, with another 700,000 bpd to follow by 2020.

The technologies and techniques used to tap into vast shale gas and tight oil reserves in North America could have a considerable impact on global supply as the technologies proliferate to new markets. The shale gas play is well under way in Europe, with Poland



the most active market. Similarly, a recently announced strategic US-Russian joint venture seeks to apply tight oil extraction techniques beyond US borders to boost production from mature fields in Western Siberia.

Overcoming market disruptions

The combined Alberta oil sands/US tight oil boom is straining existing pipeline infrastructure, but gradually pushing out to coastal markets along the Gulf of Mexico and the Atlantic and Pacific coasts. The availability of these domestic barrels is already reducing the US pull on OPEC suppliers, freeing up barrels for other G8 members in Europe when supply from markets such as Libya and Iran is disrupted by political events. The availability of lower-cost domestic barrels also helps to sustain refining capacity in the US, bolstering

Barack Obama's 'all of the above' strategy to increase domestic oil production and promote new energy sources aims to protect jobs and keep oil prices low



energy security for the entire Atlantic Basin. Canada is also using its oil sands boom to build deeper economic links with Asia as it pursues a West Coast pipeline.

Both Canada and the US are moving towards the export of LNG to help open new markets for struggling US gas producers facing an oversaturated domestic market. This shift will help price realisation for North American producers, but also provide a new source of gas for Japan as it adjusts to a more gas-intensive future energy policy after the 2011 Fukushima disaster.

Preserving social licence to operate

The North American unconventional energy boom has been a job-creating engine and has the potential to deliver other public goods – for example, shale gas used in lieu of coal

to generate power, or more favourable trade balances should US LNG exports expand. On balance, however, broader public support for unconventional energy remains elusive even within North America, let alone the emerging unconventional plays in markets such as Western Europe. The oil sands have struggled to manage public perceptions and environmental opposition with regards to pipeline safety, lifecycle greenhouse gas emissions and tailing ponds.

Shale gas and tight oil operators are working to assure the public on issues such as chemical disclosure for fracking fluids and safety issues concerning the treatment of flowback water from unconventional oil and gas wells. These concerns have created friction within G8 member governments, with France moving to ban hydraulic

fracturing, uncertain support from the European Union for European shale gas development, and the European Commission's efforts to impose fuel-quality directives targeting oil sands exports.

The promise of unconventional energy

Going forward, G8 governments will have to find ways to bridge these differences – differences between the US and Canada on oil sands pipelines like Keystone XL, between Canada and the EU on oil sands and climate change, and between the US and EU on responsible shale gas development.

Without a common understanding on all of these issues, the full promise of unconventional energy as the key plank of an 'all of the above' approach to energy security will not be realised. ■

We have a better way to harvest the billions of barrels of





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crude oil from the oil sands... pure and simple.

Hundreds of feet beneath the forests of northern Alberta, Canada, lies an ancient oil bearing formation commonly referred to as oil sands. This rock solid formation of extra heavy oil offers a secure source of energy. About 80%, or 140 billion barrels, of Canada's oil sands reserves are too deep to be recovered using surface mining techniques.

The trick is how to get it out of the ground simply.

That's where advanced technology and the In Situ Oil Sands Alliance (IOSA) come together to provide North Americans with a responsible and innovative energy future. The alliance is a group of independent oil companies dedicated to the development of Canada's oil sands using in situ technologies.

These locked-in reservoirs of heavy oil (bitumen) require special methods to free the oil and bring it to the surface for refining. In situ simply means that the oil is extracted from where it is trapped using surface facilities similar to those used for producing light crude oil. Canada's oil reserves are estimated at 180 billion barrels, 175 billion in the oil sands and five billion trapped as light oil.

IOSA companies drill for heavy oil (bitumen). To do this, the formation is heated to free the bitumen that then flows through the wellbore to the surface. The technology avoids trucks and shovels, open pit mines and tailings ponds.

Drilling in these heavy oil (bitumen) formations reduces greenhouse gas (GHG) emissions through several practices including co-generation facilities, down hole pumps and infill wells.

Water for the in situ plants comes from deep aquifers unfit for human or agricultural purposes. About 90 to 95% of the water used is recycled.

IOSA companies expect to invest about \$7 billion to develop their respective resource bases over the next five years to produce more than 200,000 barrels of oil per day.

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Energy security is of crucial importance for the G8

Access to energy is the bedrock of global economic stability and growth, and policies that focus on maintaining security of supply are a priority

By Maria van der Hoeven, executive director, International Energy Agency

Energy markets in 2012 face a particularly daunting set of overlapping challenges and risks. Those can heighten market uncertainty – but concerted, vigilant and well-designed international energy governance can do much to mitigate it. I would like to urge leaders at the G8 summit at Camp David to seize the initiative on energy policy, especially given the backdrop of record carbon dioxide emissions, little or no progress in energy efficiency, as well as sustained high oil prices.

In times of economic uncertainty, one aspect of energy policy remains a priority: energy security. That is the case both for economies trying to stave off recession and for those whose rapid growth demands increasing energy inputs. Recent events such as the civil unrest in North Africa and the Middle East, as well as the incident at the Fukushima Daiichi nuclear power plant, have further heightened concerns, as was apparent at the October 2011 ministerial meeting of the International Energy Agency (IEA) in Paris.

Since the founding of the IEA in the 1970s, the traditional focus on oil supply security has expanded to other fuels, notably gas and electricity. At the same time, the nature of energy security is changing. Patterns of global energy consumption and production are shifting. There is a growing emphasis on universal access to energy. And the competitive and efficient transition to a low-carbon economy remains a priority, both for security and sustainability.

A fuller definition of sustainability

Sustainability means more than reducing carbon emissions. A sustainable international energy system is one that addresses the economic and social aspirations of all countries' citizens. That does mean limiting

climate change, but also moving over the long term toward cleaner and more efficient energy systems, and reducing dependence on fossil fuels. That has knock-on effects on international relations, political and economic stability, price volatility and national security. Indeed, sustainability is also security.

The IEA has continually adapted to these changing circumstances, but that does not mean that it has strayed from its core mission. From its founding in 1974, the IEA has been committed to ensuring oil supply security, most notably through the management of strategic oil stocks, but also through the provision of statistics and in-depth analysis of the oil market. Until now, the IEA emergency response system has been activated three times – in the run-up to the Gulf War in 1991, after hurricanes Katrina and Rita destroyed oil infrastructure in the Gulf of Mexico in 2005, and as global demand picked up after civil war stopped Libyan production in 2011. In all cases, the IEA's rapid response offset concerns about supply shortfalls and helped to stabilise global markets. However, IEA collective stock release actions are designed to alleviate supply shortages, not to manage oil prices.

Emergency action is only one tool in the IEA's box. Governments and market players rely on the IEA to offer sound advice and analysis, and to recommend appropriate action, both day to day and in times of crisis. That analysis is particularly important as global oil demand – driven by the economies of countries that are not members of the Organisation for Economic Co-operation and Development – continues to grow, leading to declining oil stocks and contributing to high prices. Tightening markets can make prices more susceptible to shock, which in turn can threaten economic recovery. Long-term supply security is even more worrying, particularly if current uncertainties, together with altered



Gas can play a part in reducing emissions. Here, the newly-opened Gazelle pipeline in Prague is able to supply natural gas within Europe



government spending priorities, discourage or delay the near-term investments that are so crucial to meeting rising energy demand.

The changing face of gas supplies

Gas security, a more recent general concern, has been partly ameliorated by increases in conventional gas reserve estimates and also the unconventional gas boom. But the latter remains primarily a US phenomenon. Emulating the US experience in other countries will require understanding of how much gas can be recovered, bringing in companies with the right expertise and material, solving potential environmental issues to the satisfaction of the public and assuring that returns justify costs. If domestic prices are too low, or if there is a lack of a transparent and predictable investment and regulatory framework, such resources will not be developed. 'Golden rules' to guarantee environmental and health standards, as well as a sound investment environment, will be key to ushering in a golden age of gas.

Uncertainties around game-changers go beyond gas. The share of coal-fired power in China and the growth of renewable energy will depend both on strong policy commitment and on technological developments over the coming years.

In Europe, power markets will have to handle the impacts of the German nuclear moratorium imposed after Fukushima. And significant integration of variable renewable technologies, such as wind or solar, worldwide will require upgrading power transmission networks to advanced smart-grid variants to maintain electricity security to customers. Energy supply security can

also take its most basic form – the provision of energy and energy access to those without it. Alleviating energy poverty has become a major priority for some of the biggest and increasingly important energy players. It is also an important area of analysis for the IEA. A special excerpt of the World Energy Outlook 2011 highlights the challenge and offers insights into mobilising the necessary financing to be able to respond.

Finally, one must consider energy sustainability, which goes hand in hand

Today is, potentially, the cusp of a golden age of gas, but gas can also crowd out lower-emission renewables and is no panacea for climate change

with energy security. The door is closing on achieving climate change goals that limit temperature increases to 2°C. On the current path, by 2017 the energy sector's total carbon allowance will be locked in. All additions beyond that limit would have to be carbon neutral. One reason that reducing emissions is important is because climate change can have a direct impact on security by affecting energy demand, supply and assets.

Improving energy efficiency will be a key battleground for achieving carbon-reduction objectives, as well as for creating renewed social and economic development. When

the G8 commissioned the IEA to develop 25 Energy Efficiency Policy Recommendations in 2008, there was an urgency and a strong commitment to global energy efficiency. It needs to be revived if everyone is to benefit from this most cost-effective hidden fuel.

Tackling the issues together

The G8 leaders should consider all of these challenges together. This is the last year of the Kyoto Protocol's first commitment period. Countries and industry in Kyoto countries will have to finalise their plans to comply with their emission goals. Here, pricing mechanisms and policy commitments that develop energy efficiency play an important role, particularly given the energy security benefits of curbing demand and imports. On politically and legally sensitive issues such as aviation carbon tariffs, leaders must remember that measures taken in order to reduce emissions do not necessarily have to impede their competitiveness.

On the supply side, leaders should consider fuel diversity. Gas can play a role in reducing carbon emissions at the expense of coal. Today is potentially the cusp of a golden age of gas, but gas can also crowd out lower-emission renewables and is no panacea for climate change. Renewable energy technologies themselves are rapidly maturing, but will require significant investments in transmission infrastructure to lay the ground for a low-carbon energy economy.

Despite the challenges facing G8 countries, I urge leaders not to allow short-term interests to overshadow long-term global energy security and sustainability. In the end, these are challenges that we must face together. ■



Coal to generate electricity is loaded on to a train in China. The growth of renewable energy in the area will depend on policy commitment and technology

G20 Research Group

The G20 Research Group is a global network of scholars, students and professionals in the academic, research, business, non-governmental and other communities who follow the work of the G20 leaders, finance ministers and central bank governors. It is directed from Trinity College and the Munk School of Global Affairs at the University of Toronto, also the home of the G8 Research Group.

Our mission is to serve as the world's leading independent source of information and analysis on the G20. As **scholars**, we accurately describe, explain and interpret what the G20 and its members do, and, on this basis, responsibly predict what they will do. As **teachers and public educators**, we present to the global community and G20 governments the results of our research, ways to learn about the G20 and information about the G20. As **citizens**, we foster transparency and accountability in G20 governance, and the connection between civil society and G20 governors. And as **professionals**, we offer policy advice about G20 governance, but do not engage in advocacy for or about the G20 or the issues it might address.

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The G8 and great hopes for sustainable energy

Camp David is a chance for the G8 to steer global energy governance and address key issues such as the transition to sustainable energy sources

By Dries Lesage, Ghent Institute for International Studies, Ghent University

A summit of the largest advanced economies in the world is always an excellent opportunity to discuss the planet's ecological future. In that context, energy is a top priority – and one for which the G8 can realise its comparative advantage.

Energy is multidimensional. It affects the global economy, climate change, development and poverty, as well as international security. Heads of state and the governments of the major powers are among the few political actors in the world mandated and resourced to oversee the interplay between these dimensions and detect governance gaps. Moreover, as a small, flexible and powerful group, the G8 is well placed to maintain political pressure on ongoing multilateral processes. Many of the latter, including in the realm of energy, are in desperate need of lasting high-level commitment.

Energy governance commitment

The G8 has already demonstrated its great potential to guide global energy governance in the absence of a world energy organisation. One of its achievements, following the 2005 Gleneagles Summit, was boosting the work of the Paris-based International Energy Agency (IEA) on energy efficiency and clean energy. This effort included intensifying the IEA's collaboration with non-members such as China and India. Since then, however, the G8 seems to have relinquished its once promising energy agenda. Some aspects of that agenda have moved to the G20, but the latter is not yet assuming the role of political leader for global energy governance. Given the select composition of the G20 and the fact that its summitry has rendered the G8's outreach to large emerging economies superfluous, the G8 is no longer eligible to take up this role.

Still, the G8 cannot afford to remain silent on energy at the summit. Indeed, it

should resume its commitment to global energy governance in an ambitious way, with a set of strong messages.

So what impact, then, can we expect the G8 Camp David Summit to have on global energy governance?

Urgency for green energy transition

First, G8 leaders must express a sense of urgency about the required transition to a sustainable energy supply for all. As the IEA indicated in its 2011 *World Energy Outlook* in November, even if governments live up to their recent promises on clean energy, the world is heading for a long-term average increase in temperature of more than 3.5°C compared to pre-industrial levels, well above the maximum limit of 2°C set by a global scientific and political consensus. A broad range of new and radical measures must thus be implemented quickly. This has to be done against the backdrop of financial and economic crisis and a steep decline in support for nuclear power since Japan's Fukushima disaster in March 2011. Moreover, 1.3 billion people still lack access to electricity, while the world's population is expected to grow from today's seven billion to nine billion by 2050.

More than ever, energy saving, energy efficiency and renewables – backed by more decentralised power generation and robust regulatory pricing and taxing tools – deserve the lion's share of coordinated efforts. It is time now to question the idea of massive new investment in fossil fuel sectors as a path to energy security. Furthermore, solutions such as carbon capture and storage, new drilling in ecologically vulnerable areas, clean coal or unconventional fossil fuels, can only play a limited role – if any – in a sustainable energy future.

On nuclear energy, it can only be hoped that the Camp David Summit will follow up on the language that the G8 agreed at





In the face of a 3.5°C long-term increase in global temperature, the adoption of sustainable energy sources needs strong advocacy from the developed countries



China plans to develop a 630-hectare sustainable city at Dongtan in the mouth of the Yangtze River. Combined heat and power systems, linked to the use of renewables, will source clean and reliable energy

its 2011 Deauville Summit. There, the G8's leaders rightly pointed to a glaring gap in global governance with regard to the international coordination of the safety of civilian nuclear infrastructure. A robust global framework is required, governed by the International Atomic Energy Agency.

Adhering to nuclear conventions

Existing international regulation is, most of the time, non-binding and non-enforceable. Adherence to relevant conventions could improve significantly.

A key message here is that nuclear safety can no longer be considered a matter of national sovereignty alone. But given the G8's constricted membership and the nuclear ambitions of non-members such as China, India and Korea, the organisation should press the G20 to embark upon this urgent agenda as well.

Camp David is also an opportunity to lend high-level support to United Nations secretary-general Ban Ki-moon's Sustainable Energy for All initiative. The goal of this is to meet three key objectives by 2030: ensure universal access to modern energy services, double the rate of improvement in energy efficiency and double the share of

renewable energy in the global energy mix. This initiative must be considered in the context of the UN Conference on Sustainable Development, scheduled for 20-22 June in Rio de Janeiro. As the G8 did before – by making the Millennium Development Goals (MDGs) a key theme of the 2010 Muskoka Summit in Canada – Camp David can reasonably be

Energy saving, energy efficiency and renewables deserve coordinated effort

expected to stress the historic importance of the upcoming Rio+20 Summit, 20 years after the influential initial United Nations Conference on Environment and Development. The state-of-the-planet mandates that Rio+20 adopts may turn out to be even more successful than those of Rio in 1992. A possible G8 contribution might be to speak out in favour of integrating a version of the Sustainable Energy for All targets into a new set of 'Sustainable Development Goals' or a set

of post-2015 development goals as a successor to the MDGs, in which the idea of sustainable development is more firmly entrenched.

G20 energy task force

Despite the valuable role that G8 leaders can still play in the field of energy, trends in the emerging world require that the G20 takes on a comprehensive and enduring energy agenda. As an urgent and multidimensional matter, energy still lacks a political steering group able to engage in overall strategic thinking, to address governance gaps and to put forward solutions for interconnections between policy areas. There is also a need to coordinate and, perhaps, consolidate the plethora of international energy initiatives, such as the US-initiated Clean Energy Ministerial, the newly established International Renewable Energy Agency (IRENA), the IEA's International Partnership for Energy Efficiency Cooperation (IPEEC) and International Low-Carbon Energy Technology Platform, and the UN's Sustainable Energy for All initiative. A smartly composed, standing G20 energy task force – including real representation from poor countries – could assume these functions. Support for such a proposal can be a great G8 contribution as well. ■

Climate change: has the momentum slowed?

Yinka Agidee
Head, Environmental Law and Climate Change Unit

The global economic crisis appears to have resulted in declining concerns about climate change, and this inevitably means environmental issues are taking a back seat in the political agendas of most developed nations. An immediate intervention is required, however, to build climate change-resilient development strategies to ensure that extreme weather and other unforeseen events do not result in large-scale humanitarian disasters with economic effects that far outweigh the short-term benefits of cost-cutting.

Climate change is a major threat to sustainable growth and development in developing countries. Africa contributes least to global emissions, yet it is one of the most vulnerable to its effects. Consequently, African governments are focusing on ways to ensure social and economic growth, eradicate poverty and increase development opportunities using scant resources. Given these priorities, development projects are rarely halted or hindered by environmental concerns, yet the fact remains that ecological degradation is a global issue that affects all people everywhere, regardless of national borders or economic status. For example, Nigeria is reputed to be one of the biggest gas-flaring nations in the world, with an estimated 18.9 billion cubic metres of gas flared per annum. Investment in climate-friendly projects, which facilitate gas utilisation, could result in long-term savings of around US\$2.5 billion per year that could be invested in improving infrastructure.

Adaptation and mitigation actions

A total solution requires adaptation and mitigation interventions that are fully integrated into the national development framework of these countries. Adaptation and mitigation actions are projected to cost African countries billions of dollars annually. Under the Copenhagen Accord 2009 (CA), adopted at the 15th Conference of the Parties to the United Nations Framework Convention on Climate Change (UNFCCC), developed countries pledged a total of \$100 billion to be used to fund climate change adaptation and mitigation actions in developing countries. In the midst of an ongoing recession, it remains unclear how funds will be raised; with these governments' attention diverted elsewhere, the private sector will have to play a key role in raising the proposed finance. In order to achieve this, the development of a legal and policy framework that is globally acceptable and provides for certainty of policy and returns as an incentive for the influx of private-sector funds is essential.

The Clean Development Mechanism (CDM) Programme of Activities (PoA) is a voluntary coordinated action by a private or public entity that can be used to achieve large-scale emission reduction in multiple sectors across a city, region, state, country or host of countries, and can be used to support the implementation of policies. PoAs can lead to Nationally Approved Mitigation Actions (NAMAs). NAMAs are policies and actions that developing countries voluntarily undertake to reduce emissions, and which they can also use to seek financial



assistance. Implementation of the NAMAs submitted by Brazil, South Africa, India and China, and most other developing countries, is conditional on developed countries providing financial or technology support in accordance with the provisions of Article 4, paragraph 7 of the UNFCCC.

The negotiations in Durban have resulted in commitments to agree to a definite cap on emissions by the year 2020 – to be negotiated by 2015 – and have also made provision for the Adaptation Fund and the Green Climate Fund to become operational. NAMAs are expected to be the main vehicle for mitigation actions in developing countries under a future climate agreement. In the final analysis, no matter what legal framework is eventually agreed, it is time for developed countries, particularly the G8 countries that represent the most advanced economies in the world, to demonstrate leadership by example by surmounting national interests and providing the necessary funding and technological know-how to enable developing countries to cope with climate change and transit to low-carbon economies. There is no better time than now, during the Chicago Summit. If the leaders step through the door first, other countries will surely follow.

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A chance to open up a new front on health, food and climate protection

The G8 leaders need to coordinate swift action on cutting damaging pollutants, to unlock huge benefits to millions of people worldwide

By Achim Steiner, United Nations Under-Secretary General; executive director, United Nations Environment Programme

If someone proposed that you could save close to 2.5 million lives annually, cut global crop losses by around 30 million tonnes a year and curb climate change by around half a degree Celsius, what would you do?

Act, of course. That is what six countries, in collaboration with the United Nations Environment Programme (UNEP), are doing under a new partnership called the Climate and Clean Air Coalition to Reduce Short-Lived Climate Pollutants.

Among the targets of the partnership, whose first countries are Bangladesh, Canada, Ghana, Mexico, Sweden and the United States, are black carbon or soot, hydrofluorocarbons (HFCs) and methane – the latter being a powerful greenhouse gas now known to aggravate the formation of other pollutants that harm health, crops and the climate, namely ground- or low-level ozone.

More than a decade of painstaking science has now built a powerful case that can no longer be ignored. Swift action on the multiple sources of black carbon, HFCs and methane can deliver extraordinary benefits in terms of public health, food security and also near-term climate protection.

Assessing the many benefits

Meanwhile, assessments, including those coordinated by UNEP and the World Meteorological Organization, indicate that in some extremely vulnerable areas, such as those with mountain glaciers, the climate benefits may be even bigger. In the Arctic, temperature rises might be reduced by up to 0.7°C up to the middle of the century.

Action on HFCs will also assist in climate protection: a recent study coordinated by UNEP projects that by 2050 HFCs could be responsible for annual emissions equivalent to between 3.5 and 8.8 gigatonnes (Gt) of

carbon dioxide (Gt CO₂eq) – comparable to total current annual emissions from transport, estimated at around 7 Gt annually.

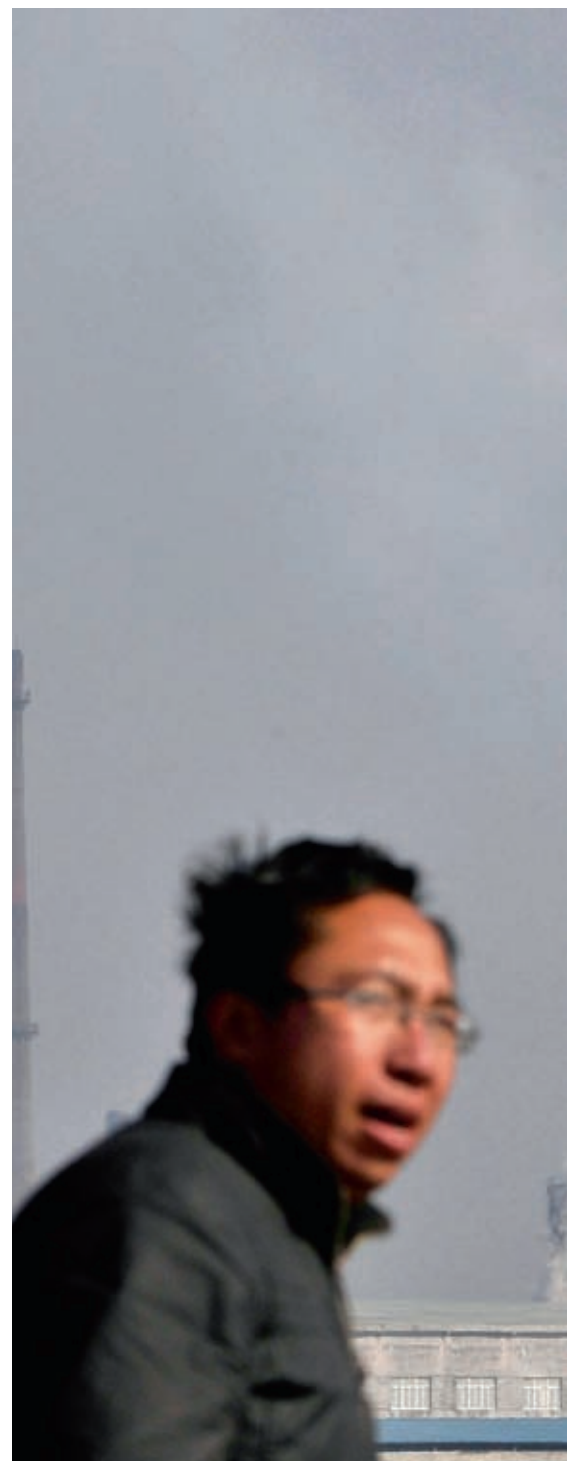
There is more good news. It is estimated that around half of the reductions in black carbon and methane emissions can be achieved through measures that result in cost savings over the lifetime of the investment. This is because some of the measures, such as recovering rather than emitting natural gas during oil production, allow the methane to be harvested as a clean source of fuel.

It would be a failure of leadership not to seize the benefits so manifest in respect to the health of humans, as well as the health of our world

Cutting black carbon emissions by, for example, replacing inefficient cooking stoves and traditional brick kilns with more efficient ones also helps to cut fuel costs for both households and kiln operators.

There may be additional benefits that have not yet been quantified. Project Atmospheric Brown Cloud (ABC), an international science project supported by UNEP, calculates that some short-lived climate pollutants (SLCPs) are also responsible for a phenomenon known as 'dimming', which may also have an impact on the photosynthesis of crop plants.

In India, the dimming trend has been running at approximately two per cent per decade between 1960 and 2000 – and the pattern more than doubled between 1980 and 2004. In China, the observed trend from the 1950s to the 1990s was about four



The effect of pollution from both the developed nations and developing economies – such as China – is having an impact on the earth's climate



per cent per decade, with the larger shifts coming after the 1970s, according to a UNEP Project ABC report.

There remains more science to conduct in this field. Some was highlighted at a recent meeting on the issue at the Institute for Advanced Sustainability Studies (IASS) in the German city of Potsdam.

This work ranges from the impact of these pollutants on rainfall patterns and the magnitude of the indoor health benefits to wider health benefits, including how these pollutants are linked to serious ailments associated with low birth weights and other diseases such as emphysema and lung disease.

A more focused approach

Meanwhile, socioeconomic studies into the take-up and use of clean cooking stoves show it may be necessary to emphasise their beneficial impacts. In order to reduce black carbon rather than just fuel use, highly efficient stoves need to be introduced. The IASS meeting was told that some studies indicate that, although women heading households welcome the new stoves for cooking, they may still keep the older, inefficient, smoky stoves because they produce heat. This is an important consideration in parts of the developing world that experience cold winters.

However, while science should and must continue including monitoring health,

agricultural and climate benefits globally and – perhaps more crucially – regionally, this is no longer an alibi for inaction. Rather, it is an underpinning of the action-focused coalition, whose broad aims are the following:

- Raise awareness of the urgency and benefits of taking action to reduce emissions of SLCPs, which include black carbon, methane and also some of the shorter-lived HFCs;
- Identify common approaches to take new action on these pollutants and also to reinforce actions in other organisations such as the Arctic Council;
- Promote the development of national or regional SLCP action plans and take steps to track progress;
- Mobilise funding commitments for SLCP mitigation of initially \$10 million in 2012 and provide upfront financing to create enabling environments for action, including leveraging private-sector investment in SLCP mitigation.

Some experts also believe that the issue of short-lived climate forcers could also represent a positive outcome at the Rio+20 summit in June – 20 years after the Rio Earth Summit of 1992. Perhaps it could also form part of any proposed process towards a suite of sustainable development goals that could be launched three years after Rio+20.

Before Rio+20, of course, comes Camp David. It is an opportunity for those attending

to join, support and strengthen the aims and objectives of the coalition. Other forums and other opportunities in advance of Rio+20 include the G20 summit in Mexico in June.

Fast action on SLCPs can deliver quick wins in a world often frustrated by the glacial pace at which sustainability challenges appear to be being addressed. It might also assist in keeping the increase in global temperature below 2°C, but only for so long.

Unless there is decisive action on carbon dioxide, then reducing all sources of SLCPs will not spare the world and its people from dangerous climate change during the 21st century – a point that needs to be underlined and inked in red.

But it would be a failure of leadership not to seize the benefits so manifest in respect to the health of humans, as well as the health of our world. So, if someone suggested that you could save close to 2.5 million lives annually, cut global crop losses by 25 million tonnes a year and curb climate change by around half a degree Celsius, what would you do?

Act, of course. We invite countries across the globe, including the G8 members, to join this inspiring and transformational coalition that unites the interests of the developing and the developed world and, above all, the interests and future prospects for seven billion people, rising to more than nine billion by 2050. ■



Swift international action on short-lived climate pollutants (SLCPs) could help to keep the increase in global temperature below 2°C – but only in the short term

Insuring the Future: Why Insurance Is Part of the Solution to the Climate Change Challenge

Given their exceptional complexity, can insurance – society's traditional risk-management tool – play a meaningful role in addressing the challenges that are posed by climate change?

After all, insurance is best suited to protecting private assets, while climate change presents a test to both private assets and public goods. Furthermore, insurance works most effectively in undistorted markets, while proposals to combat climate change routinely mention grants, subsidies, penalties and the creation of additional rights and obligations. And while insurance (like most businesses) works best in a stable, consistent and predictable environment, the current patchwork of rules and regulations means that there is an embedded political risk that the rules of the game will change along the way.

To complicate matters further, transitioning from a government-sponsored 'kick start' to a self-sufficient, sustainable, climate-friendly business model will be a challenge for all sectors, perhaps even more for insurance than most.

Yet even recognising these hurdles, the answer must be 'yes': insurance has much to offer in confronting the risks posed by climate change.

In the right policy environment, insurance has the ability to encourage risk reduction by establishing risk-based pricing signals in the form of premium charges (eg riskier behaviour or conditions result in higher premiums).

For example, we expect that much of the urban growth we will see in the next 40 years will be in areas prone to natural catastrophes. If policy makers are clear as to where they will allow building and which GHG emissions-reducing technologies are to be allowable, insurance could help deliver climate mitigation and adaptation solutions.

With respect to adaptation, reducing insurance costs to reflect mitigations investment in individual buildings makes economic

sense, but homeowners are rarely willing to make the upfront capital spend. A joint effort between government and insurers could create self-financing grants schemes that would facilitate this sort of improvement. This may also apply to windstorm protection and to energy efficiency.

Adding requirements that post loss rebuild to higher windstorm and energy levels standards can accelerate the adaptation process.

Insurance can also play a significant role in the transition to a more resilient and low-carbon economy if policy makers understand that insurance is both a mechanism to incentivise risk reduction using knowledge-sharing and risk-based price signals; and a pooling approach – but it is not a silver bullet.

Furthermore, insurers have developed detailed knowledge of the loss-causes associated with many of the risks anticipated from climate change, such as extreme weather or complex liability regimes. Insurers are also critical to making innovation possible, as with new technologies.

In short, the insurance industry can play a central role in dealing with climate change and to articulating a framework under which public policy should be framed, so as to avoid unsustainable risk-creation and accrual in our approach to climate change.

Zurich looks forward to working with the policy makers and other stakeholders to make insurance part of the solution to ensuring better living standards in the face of climate change.

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“Our journey to heal the lingering wounds of slavery began five years ago when the trustees of the W.K. Kellogg



A Journey of Healing



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THE W.K. KELLOGG FOUNDATION, FOUNDED MORE than 80 years ago by breakfast cereal pioneer Will Keith Kellogg, is partnering with communities in the Americas to support efforts leading to racial healing across a variety of ethnic communities and cultural traditions—called America Healing. Our journey to heal the lingering wounds of slavery and the displacement of indigenous populations, and the belief in racial hierarchies that spawned and sustained these injustices, began five years ago when the trustees of the W.K. Kellogg Foundation took a hard look at our own mission. After carefully reviewing our mission and the world we live in today, the board of trustees believed that if we were to live up to our founder’s vision to protect and nurture vulnerable children, we had to address the historical ideology of racism that was continuing to create structural inequities impacting the health, educational achievement and financial security of children and their families.

These challenges are found throughout the world and one private foundation can only do so much. Global leaders and the institutions they represent have an obligation to create opportunities for the kind of public discourse that acknowledges past injustices visited upon communities due to beliefs in racial hierarchy and its constructs of privilege, rights and entitlement. This dialogue also must present pathways to addressing inequitable outcomes for these communities. Civic, business and faith-based leaders must play their part, too, and use their considerable influence to heal racial division and build more equitable opportunities.

This call for dialogue toward action is made all the more pressing by the seeming unending stream of news of racial, inter-ethnic and religious divisions. Within the last year, reports of mass killings of teens, the murder of innocent school children, along with escalating racial tensions and violence in many nations stand as stark

and the displacement of indigenous populations... Foundation took a hard look at our own mission.”

—Dr. Gail Christopher, *vice president – program strategy, W.K. Kellogg Foundation*



reminders of the danger that looms when extremist, xenophobic, hateful and racially driven beliefs are allowed to fester. The untimely and violent deaths of too many young people in the United States has sparked protests in cities across the country, yet this story is repeated—yet untold—in communities across America and indeed, the world. Thousands of young people are killed each year, lost to senseless violence. The cycle of hate repeats itself over and over again yet the proverbial needle has not moved. Progress must be made, and we must hold ourselves accountable for that progress.

To move forward, it is important for our leaders to understand the ubiquitous nature of racism and its historical lineage across all nations. The devastating effects of slavery, colonialism and resource-driven conflict have been well-documented, yet we have not done enough to challenge the ideology of racial hierarchy that supported and sustained these ills. To this day, we still see a world where the nations that benefitted the most from the slave trade and colonial ambition remain the most economically and technologically developed. These countries, paradoxically, are often the most reluctant to confront or discuss the impact race has on the day-to-day lives of their citizens and have instead left these difficult conversations to countries such as South Africa.

Our entire global economic system is built on finding and procuring human and natural resources in ways no one could have envisioned at the turn of the century. Technological

advances and interconnectivity force citizens and regimes alike to grow more global in their outlook. Crises around water, food, climate and unemployment cause massive migrations of people. Nations that fail to accept this reality and to engage in productive conversations about race risk their economic and democratic potential and they deprive children, our most important resource of opportunity and justice.

While laudable, The United Nations Convention on the Elimination of All Forms of Racial Discrimination is not enough. Deliberate and conscious racial discrimination is a symptom of a much deeper and more widely embedded belief system—the idea of assigning value to a person's being based on physical characteristics such as skin pigmentation. Because this belief system flourished for so many centuries fueling conquest and expansion of the “New World” in the 17th and 18th centuries, it became foundational to the systems and cultures that exist in so many countries today (G8). It is past time in the course of human evolution that this belief system be uprooted and put aside. Its vestiges are no more suitable to the 21st century and beyond, than the belief that the world was topographically “flat” at the turn of the 14th Century. That flawed belief limited the journeys and advancement of the world community, just as a continued reliance on entrenched racist biases still stagnate our global community's growth.

It is our collective challenge to come together in our own way and on our own terms to change attitudes and beliefs. We must all be held accountable and begin the hard work of racial healing across nations and in homes, schools, neighborhoods and places of worship. Communities, indeed nations, often respond to these types of tragedies with calls for tolerance and temporary efforts to restore peace and civility. But history tells us that episodic efforts are not adequate. The insidious nature of engrained hateful beliefs requires sustained and coordinated work for their eradication. Leaders must prioritize this vital work as part of broader efforts to promote development and economic progress within and between countries.

But to truly succeed in the long-term, there must be a solemn commitment by one and all to this work, to unifying our planet, to rejecting racism, to finding strength not resentment in our differences. Our children and their collective futures are at stake.

The world cannot wait until some dream of better opportunity—this work, the work of racial healing, must start today. We call on our global leaders gathered here to demonstrate the courage and commitment to build a more equitable and just world for these children, across communities, across cultures and across nations.

Ensuring security in the Middle East, northeast Asia and worldwide

Any conflict in northeast Asia would be devastating in its global impact, so international organisations need to consider how to respond to such a crisis

By Lee Dong-hwi, Korean National Diplomatic Academy, Ministry of Foreign Affairs and Trade, Republic of Korea

The so-called Arab Spring, which began in Tunisia and spread to Egypt and Libya, led to the prospect that these countries just might achieve political development at home. Moreover, the revolutionary wave in the Arab world raised hopes that it would contribute positively to regional peace and prosperity elsewhere. Yet the Arab world faces countless uncertainties, which are clouding the rosy view of the future. The mixed assessments of the international measures taken in response to the Libyan conflict, in particular, are now stumbling blocks to resolving the ongoing conflict in Syria.

Some countries have taken issue with the fact that the United Nations principle of the Responsibility to Protect – commonly known as R2P – had made possible unlimited military intervention, eventually resulting in regime change in Libya. Their line of reasoning has rendered the international community's positive intervention in Syria increasingly difficult.

International intervention

Viewed from this angle, the changes in the political dynamics of the broader Middle East have presented a difficult challenge to the international community: to more proactively seek means of legitimate and effective international intervention for crisis and conflict management. Whether this is possible is contingent upon how the international community figures into its discussions the views of emerging powers and the corollary power shift. This question will also be crucial for a peaceful resolution of the Iranian crisis, which has been escalating of late.

The importance of finding ways for agreeable means of international intervention is more clearly proven by the fact that a

necessary UN response to the Syrian crisis has stalled. China and Russia exercised their veto rights at the UN Security Council regarding intervention in Syria. Finding themselves somewhere between the traditional Western powers, namely the United States, the United Kingdom and France, and newly emerging powers, such as Brazil, India and South Africa, Beijing and Moscow now seem to have a greater strategic edge in the international community's collective decision-making process.

The lesson learned from the Arab Spring is that, as long as globalisation continues to advance quickly, a crisis – be it confined to an individual state or a particular region –

Large numbers of heavily armed troops are deployed, so military conflicts are likely to escalate into international armed clashes immediately

requires intervention by the international community, and major powers' strategic interests are bound to have an impact on the decision-making process. In this light, a regional crisis should be understood and dealt with as a matter of global security – in short, from the aspect of how the international community should cooperate to collectively respond to various security threats.

The northeast Asian security environment differs significantly from that of the Middle East, where armed conflicts tend to be limited in nature, occurring within the boundaries of the country concerned. But in northeast Asia, where large numbers of heavily armed

troops are deployed, military conflicts – though significantly less probable than in the Middle East – will be highly likely to escalate into critical international armed clashes immediately if they do occur.

Northeast Asia has become a volatile region. Strategic competition between the US and China is becoming increasingly intense; Russian and Japanese strategic interests remain; and India is eyeing the region with a greater strategic interest. Above all, North Korea, which is led by a hereditary successor in his twenties and continues to develop nuclear weapons as a means of regime preservation, is a major factor in the region's uncertainties. Should a crisis occur in North Korea under these circumstances, it is highly probable that the four major powers surrounding the Korean peninsula will intervene strategically, for geopolitical reasons. Northeast Asia has the potential of rapidly becoming an international trouble zone.

Humanitarian and supply crises

A conflict on the Korean peninsula will clearly be a military threat. More than that, it will give rise to humanitarian issues – matters of life or death – for the North Korean people, who have already suffered from prolonged economic difficulties. In addition, China, Japan and South Korea, situated on or around the Korean peninsula, are the world's economic powerhouses, home to irreplaceable, unique products.

While a Middle East conflict could generate an energy supply crisis, a northeast Asian crisis could give rise to an enormous crisis in goods supply, which in turn might cause even greater ripples on the global economic scene.

As can be seen, crises in regions besides the broader Middle East, including northeast Asia, would inevitably require an international response. This only reaffirms the fact that the international community ought to improve its ability to address global security issues.

The international community is making efforts to establish new global governance across various fields, including finance, climate change and nuclear security, with a hope that this will serve as a mechanism for international order management that fairly reflects the changing distribution of power on the global scene. This attempt is naturally being made in the global security domain as



Fighting between rebels and army forces in Idlib, Syria. The UN response to the crisis has been stalled by difficulty in reaching agreement on intervention

well. At the Deauville Summit in 2011, the G8 members agreed to respond positively to the shifting political dynamics in the broader Middle East and tackle all nuclear-related issues through the sustained progress of the G8 Global Partnership against Weapons and Materials of Mass Destruction.

Similarly, a meeting of G20 foreign ministers was convened for the first time in Mexico in February 2012. This was a positive development, for it offered a window of

opportunity for great powers and emerging powers alike to respond, hand in hand, to the dangers of instability. The G7 similarly started out as an economic forum, but ultimately G7 foreign ministers' meetings offered a useful safety net as the world struggled to overcome the political fallout from the collapse of the Cold War structure.

The advantages of the G20 foreign ministers' meeting will only be redoubled this year, for a series of leadership transitions

around the world will fuel uncertainties, let alone those caused by the turbulence already apparent in the Middle East.

The G8 has recently become revitalised, and the G20 is broadening its sphere of international responsibilities. In this vein, how these two forums efficiently establish a constructive division of labour in the global security arena is bound to become a pivotal political question for global peace and prosperity in the future. ■

Building the new Arab world

Drive and commitment is needed to take forward the spirit of the Arab Spring and establish long-lasting peace and prosperity across the Middle East

By Hisham El Sherif, IT Ventures

The view of the future of the Arab world needs a paradigm shift. It should focus on development, democracy and knowledge, rather than on crisis management, religion and conflict. In simple terms, the view should be on how to build a new Europe or a new West in the Arab world while integrating its particular cultural harmony. For a long time, the world has focused on states, rulers and political power. But the Arab Spring is based on people, democracy, freedom and hope. For too long, the region has been run by dictators, military regimes and corrupt governments. Democracy, freedom and political opinion, which are taught and practised in the West, have been almost non-existent. Wealth is for the few who are close to the ruling minority, and poverty is for the large, silent majority. A basic level of education and healthcare has become almost a luxury in the region. Unemployment and job creation have been challenges for decades.

Democracy and harmony

The Arab revolutions were triggered by Mohamed Bouazizi, a young man in a small town in Tunisia who was striving for a job, like so many in the Arab world, and by Khaled Saeed, a young Egyptian blogger who was beaten to death. Empowered by the internet, social media and television, over the past few years the people of the Arab world have collectively created waves calling for change, freedom and justice.

The Arab world needs a new vision and programme for development and growth. It needs a vision based on people and on building prosperity. The region's population exceeds 380 million today and will reach 435 million by 2020; it will reach 530 million by 2030 and 790 million by 2050.

In 40 years, the population of the Arab world will double. This means that a region that was built over 4,000 years must be rebuilt in the next 40 years. By 2030, the Middle East will need to generate 100 million new jobs. At \$30,000 per job, this will require \$3 trillion.

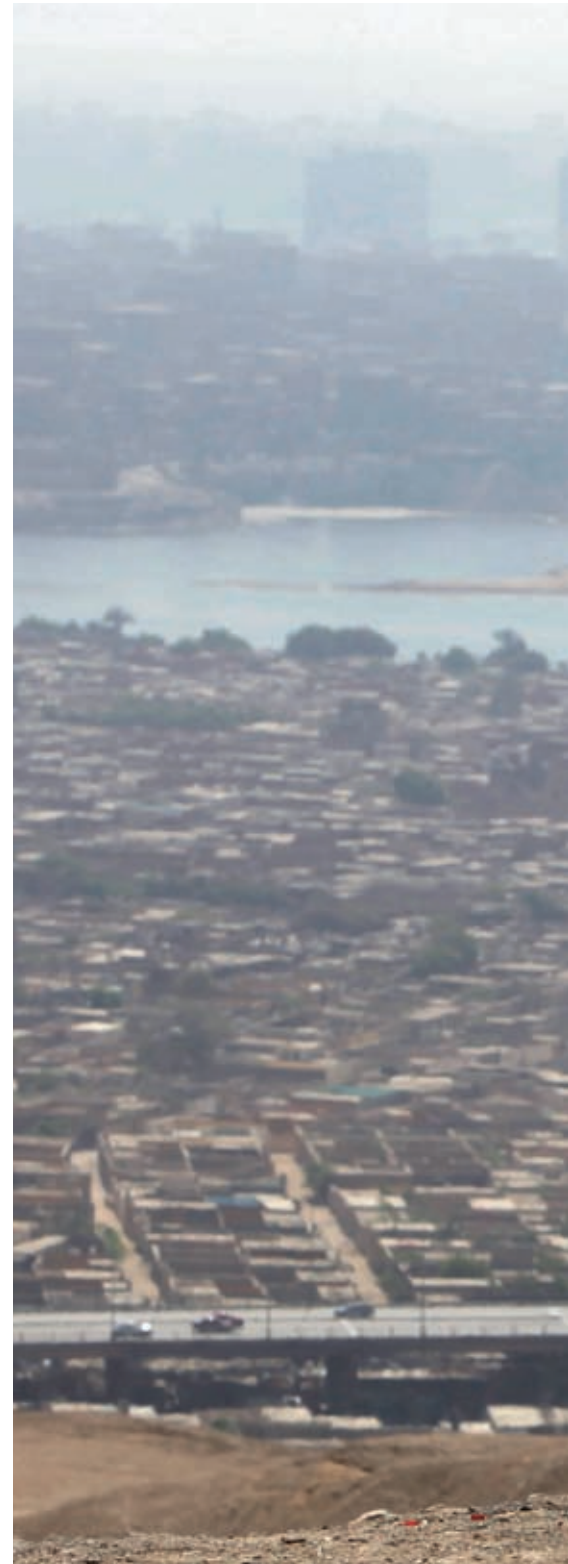
Similarly, the region will need 100,000 schools. At \$10 million each, this will call for another trillion dollars just for schools alone. To build a competitive region, the Arab world requires major investment in education and knowledge. This transformation into an information and knowledge society will require another trillion dollars for universities, life-long learning, cultural preservation, and communication and technology infrastructure. The region will also need 100 new cities, each with a million inhabitants, or 200 cities of half a million each. This requires designing and implementing new road networks and a proper transportation system, trade facilities, industrial cities, services, tourist destinations and efficient governments. The total estimated investments needed to

The Arab world needs a new vision and programme for development and growth

build the new Arab world exceeds \$8 trillion. This is an attractive market for companies and countries in the region and around the world.

In addition, today's Arab world urgently needs to finance the bill for the revolutions and the setback to where countries are today. The cost is becoming higher than any one country can afford. Egypt's losses to date exceed £400 billion (\$660 million) and each day the country loses more than £1 billion (\$165 million).

Throughout the Arab world, the setback is significant due to the cry for power and emerging monopolies by Islamists. Urgent investment needs for Egypt, Libya, Tunisia, Yemen, Syria and Iraq exceed \$200 billion. These investments are needed to recover from the losses and destruction, to rebuild infrastructure and social sustainability for food, jobs and health, to re-energise production and to cover the opportunity cost



The G8 can help to deliver peace, development and prosperity in partnership with the Arab countries, establishing a master plan for growth





The minaret of a mosque rises above houses with satellite dishes on their roofs in the town of Jerma, Libya

to date. The Western world, the G8 and other leading partners, if they have the will, can help get the region out of the ongoing crises and build a base for a new Arab world in partnership with its people and countries.

The vision is conceptually simple, but it is extremely challenging in its implementation. It should focus on the development and sustainable growth of the region, rather than on short-term political compromise – which can lead to new dictatorships or religious states or empires that replicate the model of Iran or a violent environment such as Iraq. The question is how to shift from managing the daily crises in the region to constructing the base for a new developed, peaceful and democratic Arab world.

The starting point should be knowledge, democracy and harmony. Knowledge is the greatest power for humanity: it is the basis for development and peace. If people are empowered by education and they have jobs and services and enjoy justice, the region will be less violent and more prosperous.

The outcome of decades of corrupt dictatorships is significant. In more than a third of Arab countries, poverty exceeds 40 per cent and unemployment is in the double digits. These are key factors in fuelling extremism. Conflicts, fights and terror are created by lack of food and work and by illiteracy, and not only because of religious fanatics.

Need for commitment and drive

To transform the Arab world from the daily scenes on television to a vision of development and growth, and from that vision to reality, requires the commitment and drive to establish long-lasting peace and security for the people and countries of the region. The G8 can help in delivering, in partnership with the Arab countries, peace, development, prosperity and growth. The prerequisites are an implementation plan for peace and a master plan for growth.

Three specific actions are needed to prepare the Arab world for this reality. First, the G8

can help lead and support the formulation of the regional Marshall Plan required to build a new Middle East that is peaceful, modern, economically integrated, socially developed and just. A trillion dollars in investment is needed over 10 years to initiate and energise such a plan – \$100 billion a year. This is not a classical stimulus package, but a catalytic direct investment fund to stimulate, build and generate an \$8 trillion market by 2030, in the form of multinational public-private partnerships.

It would transform a fragmented, vulnerable, poor, divided and unstable Middle East into a more prosperous one. Can the countries of the region, G8 countries and emerging economies partner in this plan?

Second, all the G8 leaders gathering at Camp David can consider holding a G8-Arab world summit on development, democracy and knowledge.

Third, the G8 needs to help implement a long-lasting peace to help create a new, dynamic and prosperous Middle East. ■

After the Arab Spring: will leaders lead leaders?

In the wake of revolution, world governments face new challenges in helping to establish fairer power structures and protecting the human rights of all

By Lindsay Lloyd, Freedom Collection, George W Bush Presidential Center, and Christopher Sands, Senior Fellow, Hudson Institute

In 2011, when G8 and G20 leaders met in France, the events in North Africa dubbed an ‘Arab Spring’ captured imaginations. The question then was how the leaders of the world’s largest economies could help to foster stable, democratic transitions from authoritarianism. The mood was one of genuine sympathy with the people of Tunisia and Egypt, and of grave concern for the fate of those who took to the streets to demand change in Libya, Syria, Bahrain and Yemen.

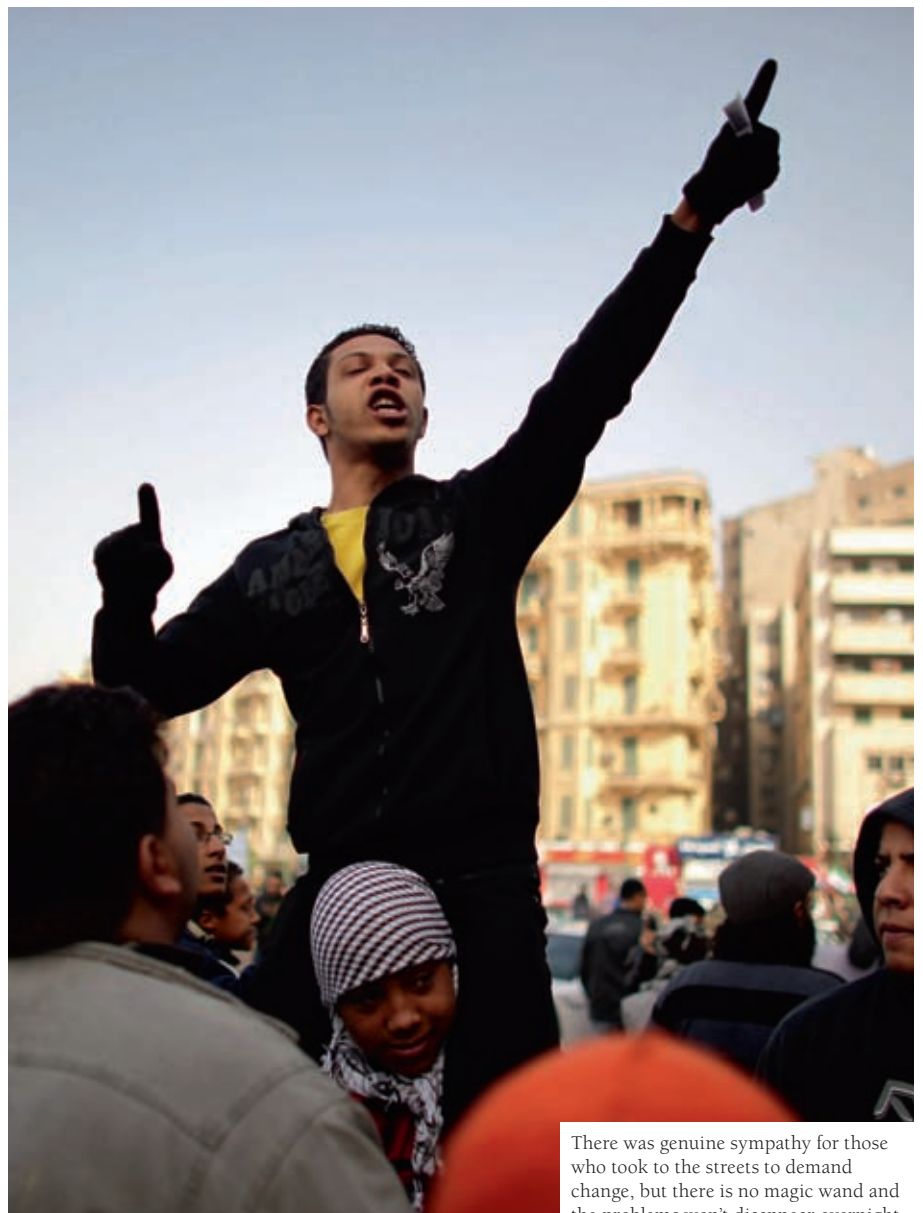
A year later, as the G8 meets in the United States and Mexico hosts the G20, the sympathy remains, but the concerns are mounting. In the wake of political upheaval in the region, human freedom and basic rights of free expression and assembly, conscience and confession have yet to be secured. The violent persecution of religious and ethnic minorities has been met with silence from those best positioned to come to power.

Continued violence

In Egypt, where protestors in Tahrir Square in 2011 captured the hearts of people around the world, the outbreak of violence against Coptic Christians has been shocking. Few among the victors in parliamentary elections have spoken out against this, even as the country prepares for the presidential elections in May.

Nicolas Sarkozy and David Cameron persuaded Barack Obama to support an

If economic prosperity is to return to the countries of the Arab Spring, the world’s leading economies must not stand idly by until economic sanctions are the only option



There was genuine sympathy for those who took to the streets to demand change, but there is no magic wand and the problems won’t disappear overnight

intervention by the North Atlantic Treaty Organization (NATO) in Libya, to which Canada, Italy and Turkey contributed.

The Gaddafi regime fell, but the country is now dominated by regional militias that threaten to undermine attempts to hold elections this year.

Many of the G8 and G20 leaders have condemned the violence in Syria as Bashar Assad unleashed the armed forces against protestors and civilian populations. The recent mission of United Nations special envoy (and former UN secretary-general) Kofi Annan had wide support among the G20 members, but made little progress.

A healthy and open civil society

For a gathering of the world's largest economies, the denouement of the Arab Spring may seem to be a strange concern. After all, the combined economies of Libya, Egypt and Syria amounted to just three-tenths of one per cent of the global economy in 2010, according to World Bank figures.

Yet this is precisely why, at last year's meetings, G8 and G20 leaders took such an interest in the Arab Spring: decades of authoritarian misrule has stunted economic growth and development in these once-rich countries. The hope of 2011 was that, with better governments that respected human rights and freedoms, economic reform and growth would be possible, beginning the slow process of lifting millions out of poverty.

This hope was not misplaced. In Central and Eastern Europe, in Latin America, in Africa and in Asia the transition to democratic pluralism supported by a healthy and open civil society helped to boost the economic fortunes of households across those regions. According to the International Monetary Fund, the gross domestic product (GDP) per capita rose in Korea from \$4,570, in current prices, when democracy was restored in 1988 to \$22,777 in 2011.

In Poland, GDP per capita rose from \$1,675 in 1990 to \$13,539 in 2011. And the economic growth prospects of many G20 members rely on the dynamism of people liberated by the rule of law and respect for basic economic freedoms.

How can the leaders of the G8 and G20 foster this kind of positive economic outcome in the Arab world? By speaking out for human rights and economic freedom during the post-authoritarian transitions where turmoil can cloud perspectives and even democratic activists can lose their way. Current leaders must lead new leaders forward.

The evidence for this prescription can be found in the testimony of the dissidents and democratic activists who were eyewitnesses to past transitions, and know their pitfalls.

After leaving the White House, former US president George W Bush began an effort to capture the testimony of those activists in the Freedom Collection at his presidential library in Dallas, Texas. This growing repository of video, audio and text records illustrates how important the voices of leaders inside and outside government speaking to principle can be to those grappling with the hard issues of establishing new governments.

In her interview for the Freedom Collection, Liberian president Ellen Johnson Sirleaf discussed the challenges that she faced when assuming office as Africa's first democratically elected female head of state: "We inherited a devastated country, dysfunctional institutions, destroyed infrastructure – a debt overhang, a debt-distressed country. Everything was a priority. People think that their lives are going to change immediately, and that there's going to be a magic wand."

There are similar expectations today in countries such as Tunisia, Egypt and Libya, where the initial hopes for miraculous economic transitions are being replaced with rather more sombre perspectives.

Many of those who suffered during dictatorships in the Arab world are still suffering in the nascent

political struggles of the region. The old power structures of the past do not disappear overnight.

Siheem Bensedrine, a longtime democracy and human rights activist from Tunisia, notes, "But we have the right to do mistakes, and to change, and to correct our mistakes. We are learning from people from abroad. We are learning from other experiences – from Poles, from Hungarians, from South Africans, from Latin Americans. We are trying to learn how they did this transition. Because it's not easy at all, the old regime is still there.

"Because the people against this revolution are still in the administration. And we also need [to know] how to do it."

Revolutions are, of course, a messy business. This is part of the darker side of human nature, and common to past transitions as participants contributing their stories to the Freedom Collection admit.

Yet if economic prosperity is to return to the countries of the Arab Spring, the world's leading economies must not stand idly by until conditions worsen and economic sanctions are the only option.

Speaking out for human freedom is less costly in the short and medium terms, as well as the long run. As a contribution from the G8 and G20 leaders to the future leaders of the Arab world, it is also priceless. ■

Many of those who suffered during dictatorships in the Arab world are still suffering



Thousands of Tunisians rallied in celebration of the first anniversary of the popular uprising that toppled their long-standing dictator



Reaching nuclear global zero: a Japanese view on the G8's role

Japan's robust stance against nuclear proliferation cannot be taken for granted indefinitely, in the light of a growing arms build-up among its neighbours

By Mataka Kamiya, National Defence Academy of Japan

For many years, Japan has faced a difficult dilemma between its non-nuclear ideal and the nuclear reality surrounding it. Since the Second World War, Japan has been an earnest advocate of nuclear disarmament as the only country ever to have experienced nuclear devastation. At the same time, Japan has faced the nuclear arsenals of its neighbours for many decades.

Many in the world believe that US president Barack Obama was the first person to use the phrase "a world without nuclear weapons". In fact, Japan has held up the goal of aiming for a world without nuclear weapons for many years. Every year since 1994, the Japanese government has submitted a resolution calling for the abolition of nuclear

combination of its alliance with the United States (including its nuclear umbrella) and the limited acquisition of conventional military forces under its policy of "exclusively defence-oriented defence".

An increasingly serious situation

Since the end of the Cold War, the nuclear situation surrounding Japan has become increasingly serious. North Korea has obtained nuclear weapons and developed the ballistic missiles to deliver them. China has been modernising and enhancing its own nuclear weapons and ballistic missile capabilities. Russia remains a significant nuclear power, second only to the United States. Confronted with these kinds of nuclear threats, non-nuclear Japan can only respond

Every year since 1994, Japan has submitted a resolution to the United Nations General Assembly, calling for the abolition of nuclear weapons, and has received overwhelming support

weapons to the United Nations General Assembly, and has received overwhelming support from international society.

To be consistent with this goal, Japan has stuck to its policy of not possessing nuclear weapons, despite having the financial and technological resources to develop such arms. Since the early days of the Cold War, Japan has coexisted peacefully with its nuclear neighbours without acquiring nuclear arms. This peaceful coexistence, however, does not mean that Japan has renounced efforts to defend itself from the threat of nuclear weapons. Holding firm to its non-nuclear policy in a troubled environment, Japan has maintained its own security through a

by improving its conventional military capacity (including missile defence) and strengthening its alliance with the US.

Meanwhile, Japan has tried to ease this dilemma through various international bodies. The G8 has been considered one of the most important. Unlike the United Nations Security Council, where non-permanent members are not eligible for immediate re-election, Japan always has a say at the G8 table.

Unlike the G20, where the agenda to be discussed is largely limited to economic and financial issues, the G8, which originally started as a top-level meeting to discuss possible ways of handling the serious

economic and financial situation of the mid 1970s, has broadened its agenda to include a variety of political-security issues, ranging from human rights through regional and global security to the issues of arms control and non-proliferation.

The nature of G8 as a group of like-minded leading liberal democracies in the world has made consensus-building among the members relatively easy (although the inclusion of Russia has somewhat blurred this characteristic). And most of the G8 members have been sincere supporters of nuclear non-proliferation and nuclear arms reduction for many years, particularly since President Obama's speech in Prague on 5 April 2009.

However, the G8's actual performance in the field of nuclear issues has been mixed, from the Japanese point of view. Japan had hoped that the G8 would perform two types of functions in this field simultaneously: first, to lead the world in promoting the ideals of nuclear non-proliferation and nuclear arms reduction; and second, to lead the world in taking actions against nuclear proliferators and those countries that do not stop their nuclear military build-up.

As for the first role, the Japanese have been mostly satisfied with what the G8 has done. The G8 has repeatedly put nuclear non-proliferation on the table and has adopted many statements and commitments related to this issue. At the 2009 L'Aquila Summit, the leaders echoed President Obama's words by stating that they "are all committed to seeking a safer world for all and to creating the conditions for a world without nuclear weapons, in accordance with the goals of the NPT [Treaty on the Non-Proliferation of Nuclear Weapons]".

Frustration over nuclear proliferation

As for the second role, however, Japanese frustration has been increasing. With regards to North Korea's nuclear development and nuclear tests, the G8 has made many statements. Beyond the rhetorical level however, the members, except for Japan and the United States, have been unenthusiastic about acting to halt Pyongyang's ambition.

With regards to China's nuclear build-up and modernisation, Japanese irritation is even stronger, because many G8 members are reluctant to put this issue on the agenda in case it might provoke China. In the past year,

Advanced capability land-to-air ground-based interceptors in place in Tokyo in April, to counter any possible threat from missiles launched by North Korea





A soldier stands guard in front of the Unha-3 rocket on a launch pad near Pyongyang: North Korea's nuclear ambitions are causing concern in Japan

The essential prerequisite for the international community in pursuing the road to 'global zero' is the stability of the nuclear order

some Japanese diplomats have complained that the G8 agenda has been dominated by the issues concerning North Africa and the Middle East. Although they recognise the importance of recent developments in these regions, they believe that the G8 should pay more attention to the Asia-Pacific region and spend more time discussing nuclear issues in Northeast Asia.

The essential prerequisite for the international community in pursuing the road to 'global zero' is the stability of the nuclear order, regionally and globally. In Northeast Asia, stability has rested on Japan's nuclear self-restraint. It is, however, incorrect and dangerous for the international community to take Japan's non-nuclear stance for granted. Despite its extremely strong desire to remain non-nuclear, Japan would have to make new cost-benefit calculations when international developments cause it to consider important foreign and security policy decisions, as every other country does.

The decision with regard to nuclear weaponry is no exception. In other words, Japan's current decision to remain non-nuclear would not inevitably continue automatically, but would be affected by the international environment.

For example, if the international community keeps failing to respond adequately to North Korea's nuclearisation, it could have an undesirable effect on Japan's cost-benefit analysis of remaining non-nuclear. Up to the present, such calculations by Japan has been based on an assumption that any country that violates the NPT and develops nuclear weapons would have to face tough reactions from the international community. But in the eyes of the Japanese, the international response to Pyongyang's acquisition of nuclear weapons has been lukewarm at best.

In order to get closer to global zero, the world needs a non-nuclear Japan. In order to maintain its non-nuclear policy, Japan needs cooperation from the world. Many in Japan believe that the attitudes of the G8 countries, which are the core members of international society, are particularly important. They are watching closely to see what the G8 can do to promote nuclear non-proliferation and nuclear arms reduction, not only by word, but also by deeds. ■

The views expressed are the author's own and do not represent those of either the National Defence Academy of Japan or of Japan's Ministry of Defence



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**-Senator Chuck Hagel
Atlantic Council Chairman**



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Finding a middle way to curb Iran's nuclear ambitions

Fears that Iran is spearheading a nuclear arms race in the Gulf have caused huge international tensions, but a resolution to the impasse may now be in sight

By Graham Allison, director, Belfer Center for Science and International Affairs, Harvard University's John F Kennedy School of Government

When the G8 meets at Camp David, one can be certain that Iran's nuclear challenge will be at or near the top of the agenda. In March 2012, negotiations between Iran and the Permanent Five members of the United Nations Security Council plus Germany (P5+1) were due to restart in mid April; Iran was producing an additional 250 pounds of low enriched uranium (LEU, enriched up to five per cent) and 16 pounds of medium-enriched uranium (MEU, enriched to 20 per cent) per month; and American and European pressure on Iran's financial and energy sectors was steadily increasing. Speculation that either the United States or Israel would be forced to bomb Iran or accept Iran with a bomb was rampant.

Both under President Barack Obama and his predecessor, the US has stubbornly resisted Israeli pressure to attack Iran, fearing a wider war in the region and dubious that setting the Iranian nuclear project back two or three years would justify these costs.

The US would much prefer to make a deal that achieved the majority of its non-proliferation objectives without violence. Recent reappointments of pragmatic politicians in Tehran are encouraging; although their significance may have been overstated, they may signal a willingness by the Supreme Leader to come to some form of face-saving deal. If so, this shift within Iranian politics could prove crucial.

A story of failed negotiations

In international relations, it takes three agreements to make a deal between two states. The first is agreement among contending views within State A; the second, within State B. Then the two states need to find a 'zone of agreement' between these first

two agreements. In recent history, internal differences within Iran and the United States have often been as extreme as differences between them. Moreover, when differences within one state were sufficiently resolved for it to propose a deal that should have been in the zone of agreement of the other one, differences within the second state remained too great to reach that point, and vice versa.

The story of failed negotiations between the US and Iran offers many instances of this phenomenon. In 2003–04 Iran was clearly interested in reaching an agreement that could have limited its enrichment of uranium to a research facility. In the aftermath of the swift dismantlement of Saddam's regime, fearful

Both under President Barack Obama and his predecessor, the US has stubbornly resisted Israeli pressure to attack Iran, fearing a wider war

mullahs had a clear incentive to make a deal. The Bush administration did not. Many of its members subscribed to the slogan seen on T-shirts at the Pentagon: 'Real men go to Tehran'. But when Obama entered office determined to offer Iran an open hand for negotiations without preconditions, Iran was in its electoral season. Demonstrations against the rigging of the vote in Ahmadinejad's favour were crushed by a thuggish response that brought the Revolutionary Guard to the rescue of the regime and scuppered any prospects for negotiations.

The question remains: can either side say yes to a deal? I am hopeful, but sceptical. The



most promising possibility in the near term is the proposal suggested by Ahmadinejad in September 2011: Iran would stop the enrichment of uranium beyond levels used in civilian power plants (LEU) if it is able to buy fuel enriched at 20 per cent (MEU) for use in the Tehran Research Reactor that produces medical isotopes to treat cancer patients.

The significance of a red line capping Iranian enrichment at LEU is hard to exaggerate. If Iran amasses MEU, its potential timeline for breaking out to bomb material would shrink from months to weeks. In the metaphor of American football, having uranium enriched at 20 per cent takes Iran 90 yards along the field to bomb-grade material. Capping enrichment at five per cent would, in effect, move Tehran back to the

Iran has claimed it wants to be a peaceful nuclear power; there have been widespread fears that it is also developing weapons capabilities



30-yard line. Even more importantly, a commitment to a five per cent enrichment cap would stop those in the Islamic Republic who hope to move beyond 20 per cent to 60 per cent enrichment and then 90 per cent.

Arguments against the US and its allies testing this offer are easy to make. An embattled Ahmadinejad may not be able to deliver. Iran could use negotiations to seek to relax or escape sanctions. If a deal were reached, it would be more difficult to win international support for new sanctions. An agreement that stops only the 20 per cent enrichment could imply acceptance of Iran's enrichment up to five per cent and is not, in itself, a solution to its nuclear threat.

Given all of these negatives, the policy question remains: would the likelihood

of stopping Iran short of a nuclear bomb without bombing be improved if Iran made an unambiguous, verifiable commitment to no uranium enrichment beyond LEU for civilian nuclear fuel – in exchange for the right to purchase MEU fuel for its research reactor? The answer is yes.

A solution is possible

The fuel required for such research reactors is highly specialised, and often entails a significant delay between ordering and delivery. The US should ensure that the few countries able to produce these specialised fuel types (such as France) begin preparation of a fuel load for the Tehran reactor so that, if a deal were reached, the P5+1 would be able to fulfil Iran's requirements immediately and

give it no easy excuse to back out of the deal. Such a deal would be an excellent starting point for a more comprehensive agreement that acknowledged Iran's right to enrich uranium to five per cent to fuel its civilian nuclear energy plants and made explicit and unequivocal an Iranian commitment not to enrich beyond this level.

It would need to include specific arrangements for International Atomic Energy Agency inspectors and other transparency measures to maximise the likelihood that any Iranian government that stepped across the five per cent red line would be discovered, and lock in an unambiguous US threat to act decisively were Iran to be caught doing so. Such a deal would be ugly, but clearly preferable to war or a nuclear-armed Iran. ■

Working to prevent nuclear proliferation in the Gulf

Iran's nuclear ambitions have provoked widespread condemnation. The latest sanctions – spearheaded by the US and the EU – may finally pay dividends

By David Shorr, The Stanley Foundation

When it comes to topics of discussion at summits such as the G8, some items are the product of months of careful planning while others arise on the spot – or with a few days' or weeks' warning at most.

At one level, the G8 is a distinct multilateral body, with certain sets of issues or initiatives falling squarely within its ambit. In an echo of the old joke about where an elephant sits, however, it is a truism about summit meetings that world leaders talk about whatever they want. This is not necessarily a comment on the leaders' capriciousness, but instead a nod to their political and diplomatic imperatives. Presented with the chance to do business directly with their counterparts, it is only natural for them to focus on their own foreign-policy priorities and the crush of current events, and not be confined to a multilateral forum's particular agenda.

These are the impulses that often spur leaders at summits to issue collective statements on the day's urgent crises or just discuss them quietly, either as a group or in bilateral side meetings.

A question of multiple forums

Just as the attention of political leaders ranges across issues irrespective of mandates or agendas, conversely those issues are handled in multiple forums. Depending on the nature of the diplomatic or technical problem at a given moment, the heart of the action will be the corresponding multilateral venue. But for issues of the utmost political sensitivity, world leaders always reserve the option to work things out directly with each other, wherever their paths may cross.

As the controversy over Iran's nuclear programme has intensified, the international discussion of how to respond is constant

– in the United Nations Security Council, the International Atomic Energy Agency and bilateral channels (particularly over the specifics of economic sanctions).

So it is safe to assume that Iran will be discussed at Camp David. If the most significant activity at the summit is the attempt to harmonise the positions of, say, the United States and Russia, it may or may not be reflected in the summit communiqué.

The latest phase of sanctions has been aimed at constraining Iranian oil exports and disconnecting its financial institutions

As of early April, the main international contact group for negotiations over Iran's nuclear programme (the P5+1) was slated to meet on 13–14 April. But with the Iranian government resisting the meeting's proposed venue, the plan was not yet firm.

The P5+1 is composed of the Security Council's five permanent members (United States, United Kingdom, France, Russia and China) plus Germany. Interestingly, Iran is balking at meeting in Turkey, which was the site of the last round of talks in January 2011. More to the point, Turkish prime minister Tayyip Erdoğan served as an important bridge builder with Iranian leaders in 2010, brokering an agreement with Tehran that was rejected by the P5.

Two years later, Iran's government no longer sees Turkey as a hospitable site; it countered by suggesting China or Iraq. Most recently, US president Barack Obama relied on

Erdoğan to serve as a go-between with Iran's Supreme Leader Ayatollah Ali Khamenei.

Negotiations on how to guarantee the civilian character of Iran's nuclear activities pose a dilemma for the key powers, as they search for a peaceful solution. The longer the process drags on, the further Iran progresses in its enrichment of uranium that it could use for a nuclear weapon. From the Iranian vantage point, a drawn-out negotiation gives more time to hone its enrichment technology – a classic strategy of running out the clock.

The P5+1 is thus wary of being strung along by the Iranians, with diplomatic talks merely helping shield Iran from pressure. This is the point of economic sanctions: to prod Iran towards serious negotiations after it has already run the clock down for several years.

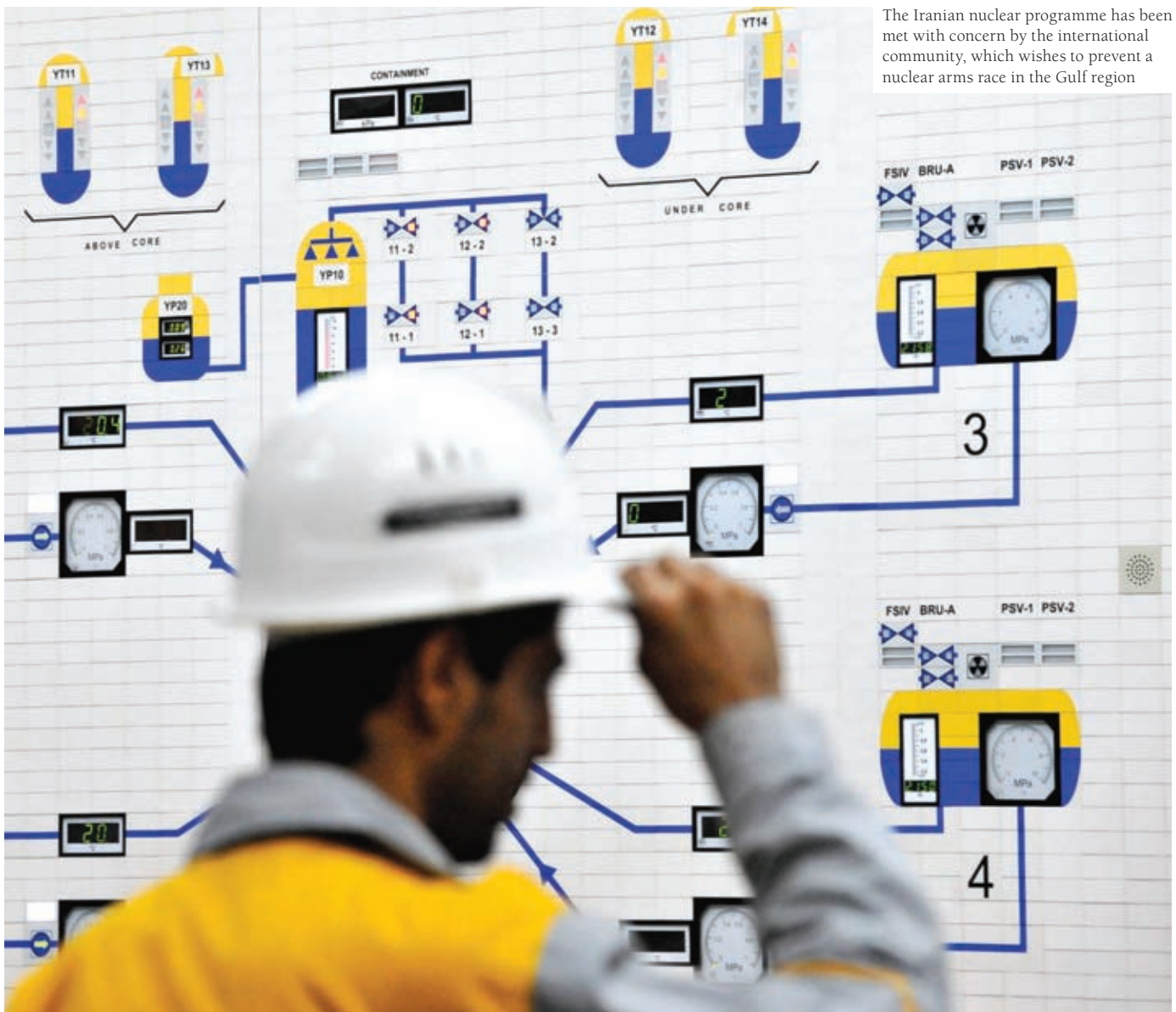
The weight of sanctions

In June 2010, the Security Council enacted the toughest sanctions ever imposed on Iran, the culmination of a major diplomatic push by the Obama administration. Russian support for these sanctions was the main pay-off of Obama's 'reset' with Moscow.

The thrust was to clamp down on any dealings between Iranians and the rest of the world that could help the nuclear programme. Eight months earlier, the P5+1 process had reached a hopeful moment, hammering out a fuel-swap deal to move the bulk of Iran's low-enriched uranium out of the country in exchange for foreign-milled civilian nuclear fuel. When Iran balked, the Obama administration started to line up support for a new sanctions resolution.

The latest phase of sanctions has been aimed at constraining Iranian oil exports and disconnecting its financial institutions, including the Central Bank of Iran (CBI), from the global financial system. The two key levers have been a European Union oil embargo due to take effect on 1 July 2012 and a law passed by the US Congress in December 2011. For all banks operating in the United States – after all, the very hub of global finance – the new law imposes strict limits on any transactions with the CBI other than oil purchases.

Specifically, for the import of oil from Iran, the US will also crack down on any bank doing such business unless the bank's parent country is reducing its imports. This exception was opened to minimise the economic harm to American allies such as



The Iranian nuclear programme has been met with concern by the international community, which wishes to prevent a nuclear arms race in the Gulf region

Japan and Korea. Of course, America's fragile recovery is itself threatened by rising global oil prices, which in turn have been fed by fears of a potentially escalating conflict with Iran. Meanwhile, Obama's political opponents stoke those fears while simultaneously blaming the president for high prices at the pump.

The European Union and its key members have taken an increasingly tough line with the

Iranian regime. In addition to the impending European Union oil embargo, the Belgium-based SWIFT system announced in February 2012 that it would also stop processing transactions with many Iranian banks.

The European leaders in the P5+1 have even outflanked Obama in their rejection of any future uranium enrichment in Iran – a stance that puts a cloud over the negotiations.

As an interesting footnote to the brinkmanship of recent years, one of the most dramatic revelations about Iran's nuclear programme (the hidden Fordow facility near Qom) was announced in the margins of the G20 Pittsburgh Summit in September 2009. This kind of diplomatic fireworks is unlikely to be seen at the Camp David Summit but, of course, one never knows. ■

Helping Afghanistan to make the transition to peace

As Afghans prepare for the move towards greater autonomy, the international community needs to consider the three most likely potential outcomes

By Omar Samad, senior Afghanistan expert, United States Institute of Peace; former ambassador of Afghanistan to France and Canada

Sustaining progress in the areas of Afghanistan's economic and social development is closely linked to the country's security and political stability, which are, in turn, subject to regional geopolitical developments and the impact of international aid.

As Afghanistan approaches the two critical timelines of transition to an Afghan lead by 2014 and the start of a new decade of transformation, which aims at establishing considerable self-reliance by the 2020s – three scenarios can be identified, in the light of the decision by the international community to significantly cut back its military footprint and financial contributions.

First, the worst-case scenario assumes an escalation in conflict as the North Atlantic Treaty Organization (NATO) withdraws, which leads to the failure of the transition processes to Afghan ownership and undermines the nascent constitutional order.

Under such conditions, international funding of major development work would be suspended, while the paradigm shifts to an economy of war and subsistence, not too dissimilar from the situation in the 1990s, when failed national and subnational institutions emerged, and new alignments – some along ethnic lines – either sided with or against an oppressive re-Talibanisation effort.

Consequently, such a vacuum would spur an international humanitarian response, spearheaded by non-governmental organisations, with the primary purpose of providing emergency assistance to the vulnerable and the displaced. The illicit narcotics sector, reliant on cultivation, production and smuggling, would re-emerge as the country's primary generator of income.

Emboldened transnational terrorist groups, allied with local militants, would leave their Pakistani sanctuaries and re-establish encampments on the Afghan side of the border, reconstituting a South-Central Asia axis. Other regional players, including Iran, would attempt to hedge their bets, accentuating proxy rivalries and reversing gains made in regional cooperation. Central Asia would seek insulation from the twin evils of drugs and radicalism.

This scenario would not only eviscerate the monumental investment and effort made by the international community since 2001 in trying to fight terrorism and to stabilise

The best-case scenario assumes that not only are the main insurgent groups reconciled, but that the country has experienced a trouble-free and legitimate political transition

and rebuild Afghanistan, but may also provoke regional confrontation and threaten international security as well.

The second, intermediate scenario, envisages conditions similar to today's, minus the strong NATO footprint. Some elements of the insurgency would be reconciled, but others would opt to pursue their objectives through violent means, continuing to enjoy sanctuaries and covert support outside Afghanistan.

The menace, however, will not alter the strategic balance, as NATO-trained Afghan security forces will most probably be able to remain cohesive and protect major cities, communications arteries and strategic assets.

Thus, a peaceful and legitimate political transition in 2014 would become a focal

point to assure continuity, especially in terms of sustainable democratic governance and development activity. If dysfunctional institutions continue to undermine service delivery, good governance and the rule of law, and if cronyism, patronage and corruption continue to plague state structures, the questions relating to aid conditionality, accountability and effectiveness would become even more pressing.

In a low-intensity conflict, it would become harder to attract foreign investment, to prevent substantial capital outflows (estimated at more than \$40 billion in 2011) or to turn the economy around and engage in long-term planning. The country would be more reliant on quick-impact projects and high-risk loans for small- to medium-scale infrastructure development. Job creation would suffer as an environment of ambivalence would feed uncertainty and push more young Afghans into leaving the country.

The key challenges ahead

The third, most optimistic and best-case scenario assumes that not only are the main insurgent groups reconciled, but that the country has experienced a trouble-free and legitimate political transition, enabling national and local institutions to undergo reform and improve service delivery. It would also suppose that most of the key regional players are on board with the Afghan transitions, seeing their respective interests best served through Afghan stability and expanded economic activity.

This scenario would require a strong engagement by the international community to consolidate the gains made since 2002 and assure that new development efforts are sustainable, while maintaining pressure to prevent a security or political relapse for another decade. Bilateral strategic security partnerships offer a degree of risk mitigation if the political order were to face coercion.

While the first scenario forces an emergency humanitarian response, the other two alternatives offer varying degrees of risk and opportunity to advance the development agenda. To spur growth in both the public and private sectors, the key challenges faced by the country's leaders and their international



Women in Afghanistan have been prevented from playing a full role in society, and the development agenda will need to include reform in this area

partners will include strengthening political stability by adhering to principles of inclusivity, democratic governance and constitutional reforms; overseeing reforms to assure better governance, more accountability and the rule of law; developing strategies that prioritise agricultural output, coupled with water management and responsible extractive industries as the main economic drivers, both in terms of revenue generation and job creation; and fighting endemic poverty and the poor deployment of human capacity.

The 2010 Afghanistan National Development Strategy (ANDS), which sets overambitious benchmarks for measuring progress, needs to be revised to better reflect development needs. Finance, however, will need to continue to be aligned behind reformed, Afghan-led priority programmes.

Encouraging private investment

To put development on the right track, better coordination is essential between Afghans and donors, and also among donors. Serious emphasis on public financial management, procurement and anti-corruption measures would also improve Afghanistan's poor record in directing development aid.

Diminished political risks backed by a reform agenda would undoubtedly regenerate business confidence and help to attract private-sector investment, directly from foreign investors and from indigenous sources. These are essential components of the engines of growth and job creation.

Development also means strengthening the growth, effectiveness and sustainability of civil society organisations as critical defenders of rights and as a pillar of a system of checks and balances, with special attention given to the freedom of the press and in allowing women to participate in all areas of society.

Finally, for those who believe in the realisation of the best-case scenario, the proposition offers win-win opportunities for all stakeholders. Failure would not be an option, if and when Afghanistan takes its natural place as the connecting hub for trade, transit and communications for Central Asia, South Asia and the Middle East. This would allow for regional interaction in sectors as diverse as energy, transport and natural resources, spurring economic growth, creating wealth and offering a better future for generations to come. ■

G8 action against terrorism and transnational organised crime

Specialist G8 forums are devising effective measures for dealing with terrorism and organised crime, while guarding against the erosion of civil liberties

By Amandine Scherrer, OPIAS Consulting

Since the 1990s, the threat of transnational organised crime has led to many discussions on the urgency of cooperation at the international level. The facilitation and harmonisation of police and judicial practices have been at the core of international mobilisation in the fields of investigation and prosecution. The intensification of expert-level exchanges on the international stage – within the United Nations, the European Union, the Organisation for Economic Co-operation and Development (OECD) and the G8 – over questions concerning enhancing cooperation to deal with transnational organised crime and terrorism has led to an impressive set of international standards.

In 1995, the G8 created the experts group known as the Lyon Group. After the 9/11 attacks, this merged with the Roma Group on counterterrorism that the G8 set up in the 1980s. Two sets of recommendations (in 1996 and 2002) have been negotiated and elaborated in these forums. In the aftermath of 9/11, additional recommendations and updated best practices were issued by the Roma/Lyon Group and others.

Sharing information

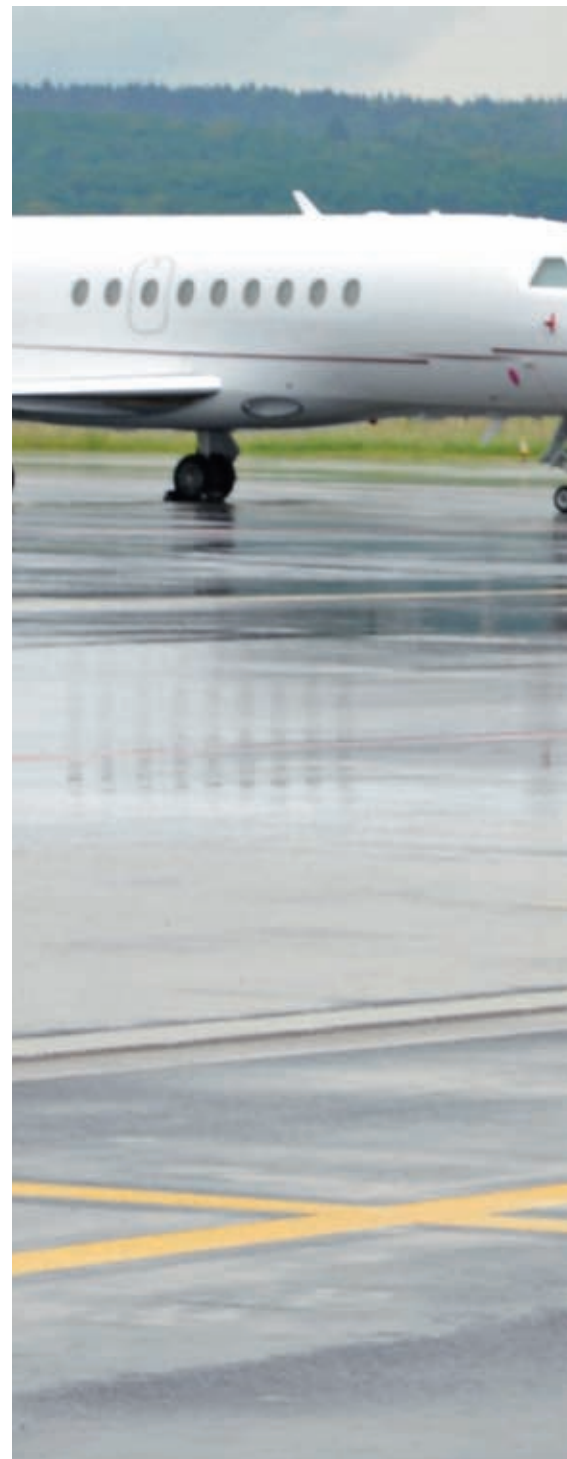
G8 recommendations seek to enhance international cooperation through education and exchanges, mutual legal assistance and law-enforcement channels and to strengthen investigative capabilities through the promotion of specific investigative techniques and the protection and cooperation of witnesses and other participants in criminal proceedings. Numerous best practices have been produced that address the development of biometrics and their use in travel documents, the enhancement of special techniques of investigation, the sharing of information and databases, including

DNA information, and the fight against terrorist financing. On the sidelines of the Roma/Lyon Group's activities, the G8 also organises meetings of the Counter-Terrorism Action Group (CTAG), which is essentially a diplomatic forum that incorporates not just the G8 countries, but Spain, Australia and Switzerland as well. The group concerns itself with issues linked to the struggle against international terrorism, as well as devising technical and professional assistance programmes for the benefit of police forces in third countries.

Supporting international efforts

Recent G8 presidencies have been consistent in addressing these priorities. With respect to counterterrorism, the G8 experts groups have focused on radicalisation processes and terrorist finance. In the 2011 Deauville declaration, the G8 leaders supported the newly created Global Counter-Terrorism Forum (GCTF), which aims to strengthen the international consensus in the fight against terrorism, creating new opportunities for cooperation and ensuring that the UN Global Counter-Terrorism Strategy is implemented. This forum will provide a platform for senior counterterrorism policymakers and experts from around the world to work together on identifying urgent needs, devising solutions and mobilising resources to address key challenges. The G8 thus underscores the central role that the UN must play in global counterterrorism efforts and commits itself to ensuring that efficient UN tools continue to remain relevant in the future.

In the field of organised crime, the G8 has followed up collective mobilisation against international drug trafficking. Indeed, transatlantic cocaine trafficking was one of the top security priorities of the French G8 presidency in 2011. The



The G8's Counter-Terrorism Action Group devises technical assistance programmes for police forces on the front line of the fight against terrorism



G8 has also addressed illegal immigration, currency counterfeiting and the exploitation of minors as the result of sex tourism.

Cybersecurity has also become a significant concern for the G8. In Deauville in 2011, G8 leaders agreed, in the presence of representatives of the internet economy, on several key principles, including freedom, respect for privacy and intellectual property, and protection from crime. The e-G8 Forum held in Paris on 24-25 May was welcomed as a useful contribution to these debates.

The 2012 Camp David Summit will follow up these issues. As host, the United States has strongly supported the Global Counterterrorism Forum launched by secretary of state Hillary Clinton on 22 September 2011, which comprises

27 EU countries, 11 Muslim countries, China, India and Russia alongside regional representation from South America and Africa. In supporting international mobilisation against crime and terrorism, the G8 should also seek to guarantee the protection of democratic values and rights.

Since 9/11, numerous non-governmental organisations have objected to antiterrorism policies. The establishment of domestic

and international DNA databases for law-enforcement purposes, the use of electronic surveillance or other forms of technology during investigations and the tracing of networked communications are methods that are often not consistent with the protection of civil liberties and individual privacy. In the main fields of action deemed to be efficient in preventing and fighting transnational crime and terrorism, policies concerning communication and travel surveillance, immigration, DNA databases and data sharing raise questions about the

in some EU countries, but also in the European Parliament. These groups have asked for more clarity and legal certainty for both citizens and airlines, better information sharing between US authorities and law enforcement and judicial authorities from the EU, and the establishment of clear limits on what purposes PNR data may be used for, as well as strong guarantees on data protection. The fight against organised crime and terrorism inevitably lends legitimacy to some procedures that have previously encountered many political obstacles,

specifically with respect to civil liberties. These difficulties were pointed out in the G8 recommendations, as the experts advised the G8 countries to maintain an

In the field of organised crime, the G8 has followed up on collective mobilisation against international drug trafficking and has also addressed illegal immigration, currency counterfeiting and the exploitation of minors as the result of sex tourism

accountability of practices of exception regarding the rule of law and the respect for human rights. Law-enforcement practices that escape control by the judiciary, let alone parliamentary accountability, have been at the core of the concerns of civil liberties defenders over the past decade. Heated controversies surrounding the passenger-name record (PNR) agreements between the US and the EU have led parliamentarians to mobilise

appropriate balance between protecting individual privacy and democratic values and maintaining law enforcement's capacity to protect public safety. Nevertheless, no control mechanisms have been promoted to make sure those liberties are fully respected. The G8 countries and their experts groups could play a significant role here. The US presidency of the G8 should promote these critical values in the new Global Counter-Terrorism Forum. ■



One of the G8's main priorities regarding organised crime is to support international efforts to fight global drug trafficking



BRICS RESEARCH GROUP



The BRICS Research Group

The concept of the “BRICS” was first created by Jim O’Neill to refer to the investment opportunities in the large emerging economies. Today, the annual meetings of the leaders of Brazil, Russia, India, China, and now South Africa, which started in 2008, transcend that economic context to embrace a broad range of high-level issues requiring global governance, such as trade and investment, health, food and agriculture, development, energy, environment, climate change, social progress, peace, security and international institutional reform.

Led by Marina Larionova of Russia’s National Research University Higher School of Economics and John Kirton of Canada’s University of Toronto, the BRICS Research Group aims to serve as a leading independent source of information and analysis on the BRICS institutions and underlying interactions. Documentation from the BRICS and relevant research and reports are published on the BRICS Information Centre website at www.brics.utoronto.ca and the International Organisations Research Institute at www.hse.ru/en/org/hse/iori/bric. Together with international partners from the BRICS countries, the BRICS Research Group focuses on the work of the BRICS and diplomacy within the group as a plurilateral international institution operating at the summit level. Particular attention is paid to the relationship and reciprocal influence of the BRICS with other leading global governance institutions such as the G8, the G20 and those of the United Nations galaxy. The BRICS Research Group also conducts analyses of the compliance of the BRICS members with their summit commitments.

The BRICS Research Group is proud to announce its first publication – **BRICS: The 2012 New Delhi Summit**, published by Newsdesk Media and available online at www.brics.utoronto.ca/newsdesk – with guest editor Dr. Yoginder K. Alagh, chair of the Institute of Rural Management Anand and vice-chair of the Sardar Patel Institute of Economics and Social Research and a former minister of Power, Planning, Science and Technology in the Government of India.

The Camp David Summit offers a special opportunity

President Obama's decision to call a G8 summit is a reflection of the forum's especial ability to tackle major global economic and political issues

By Nicholas Bayne, International Relations Department, London School of Economics

Barack Obama is the sixth US president to chair the G7 or G8 summit. All his predecessors have left their mark on the summit's evolution. Gerald Ford, who invited Canada to the second summit in 1976, ensured it became a regular series and stabilised the membership. Jimmy Carter, although he never held the chair, established the summit as an institution, underpinned by the sherpa process.

Ronald Reagan promoted political issues up the agenda, on equal terms with economic subjects. George H W Bush steered the summit as the Cold War ended, leading eventually to Russia's membership. Bill Clinton first focused the summit's attention on Africa, which became an abiding theme in the 2000s. George W Bush launched an agreed initiative on the Middle East, ending the divisions caused by the invasion of Iraq.

So how is President Obama likely to be remembered for his occupancy of the G8 chair? Obama has already made his mark by deciding to call a summit at all. G8 summits happen because the leader holding the rotating chair decides to hold one. In practice, Japan, Canada and the European members would never forego this opportunity. But a US president might decide a G8 summit did not offer enough advantages beyond what other international engagements could provide.

Since Bush brought the G8 to Georgia in 2004 a rival institution has arisen. The G20 summit was called into being in November 2008, when the G8 was thought incapable of responding to the financial crisis. Obama chaired the third G20 summit at Pittsburgh; by the end of 2011 he had attended five G20 summits, as well as three G8 summits. There were indications that he found the G20 process more rewarding than that of the G8. Nevertheless, Obama has decided to invite

his G8 peers to Camp David in May, just before a summit of the North Atlantic Treaty Organization (NATO) in Chicago and a month ahead of a G20 summit chaired by Mexican president Felipe Calderón.

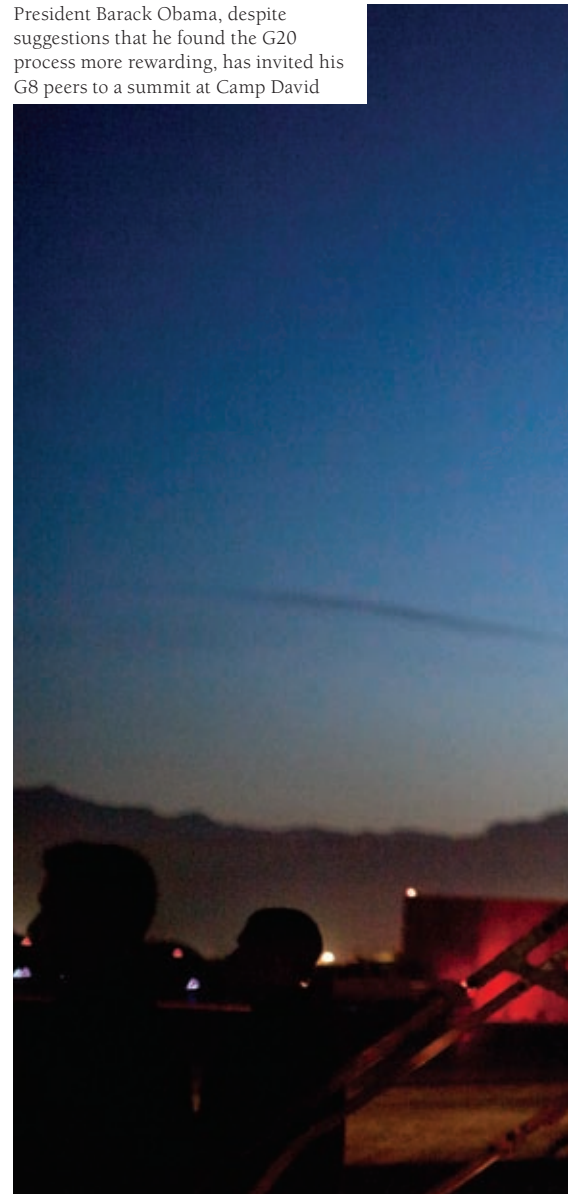
The political agenda for the NATO summit is well defined. Economic and financial issues are entrusted to the G20, thanks to the persistent crisis. With these two institutions already occupying their respective fields, what is left for the G8 summit to do?

Often the economic and political aspects of a problem need to be handled together, and the G8 summit is well equipped for this

Simply posing this question supplies the answer. NATO, prepared by foreign and defence ministers, cannot handle economic issues. The G20 summit, prepared by finance ministers, has no political competence. But international issues do not divide neatly into political and economic. Often the economic and political aspects of a problem need to be handled together, to ensure consistency and mutual effectiveness of the measures chosen. The G8 summit, unlike the other two, is well equipped for this. President Obama can make it the central feature of his tenure of the chair. British prime minister David Cameron, when he moves into the summit chair in 2013, can develop variations on this approach and help to establish it as the G8's distinctive contribution to global governance.

The G7 and G8 leaders have always had the capacity to integrate political and

President Barack Obama, despite suggestions that he found the G20 process more rewarding, has invited his G8 peers to a summit at Camp David



economic themes. This is a reflection of the supreme authority exercised by heads of state and government. At first, the G7 chose not to exercise this capacity and preferred to treat economic and political issues separately. But when the Cold War in Europe was ending, the summit coordinated measures to promote both working democracies and market economies in the countries escaping from



communism, first in Central Europe and then in Russia. Once the G8 leaders began meeting on their own, with Russia as a full member, they often chose themes that integrated economic and political issues.

This became a regular feature of the summit's work during the 2000s and the source of its major achievements. Two themes deserve particular attention. The first was

the renaissance of Africa. The G8 members were powerfully impressed by the initiative of a group of African leaders to launch the New Partnership for Africa's Development (NEPAD). This combined traditional aspects of economic development with moves to improve political governance and strengthen peace and security throughout the continent. Because of the clear commitment by the

Africans themselves, the G8 pledged to underpin all parts of the programme. The backing from the G8, combined with the Africans' own efforts, has led to major advances in both political standards and economic performance. In consequence, sub-Saharan Africa has survived the current crisis much better than expected.

The second theme was counter-terrorism in all its aspects, in the wake of the 9/11 attacks. Politics motivated the choice of themes, but economics often determined the measures adopted. The G8 developed techniques to improve transport security, by air and sea, and to inhibit the financing of terrorist activities. The summits worked to clean up nuclear installations and chemical weapons in the former Soviet Union. They agreed measures to intercept weapons of mass destruction being transported by sea, which led Libya to renounce such weapons.

The aftermath of the Arab Spring

Both these themes, especially Africa, remain current for the G8. But new subjects have emerged that deserve treatment at Camp David. The G8 programme of economic help and political encouragement for the Middle East and North Africa, launched in 2004, struggled to make progress while the old regimes persisted. But the arrival of the so-called Arab Spring early in 2011 made this a natural topic for the G8's Deauville summit last May, which was attended by leaders from Egypt and Tunisia. Further developments in those two countries, the overthrow of Mu'ammar Gaddafi in Libya and the tense struggle in Syria mean that this should remain high on the G8's agenda. The political upheavals are leading to economic problems that will need to be addressed if democracy is to take firm root in the Arab world.

Meanwhile, the NATO summit will certainly have military issues in Afghanistan as a major subject. The G8 should look at the scale and pattern of civil support that would be most valuable for the country as the security situation changes shape.

Africa, Afghanistan and the Arab Spring are all issues that require integrated political and economic measures. Neither NATO nor the G20 can embrace the totality of these subjects. For the treatment of themes such as these, the G8 summit will continue to be the most appropriate forum. ■

African accountability on food and development

The G8 members could help to ensure that more development assistance in Africa actually reaches the grassroots level where it is needed most

By Archbishop Njongonkulu Ndungane, president and founder of African Monitor

The growth experienced in Africa's economic and social development, peace and security, democratisation and governance during the past decade has been encouraging, and there is much cause for optimism. Africa is a continent filled with people who want to be in control of their own destiny and who continually push the boundaries in sports and the arts, economics, human rights and world peace.

Over the past decade, six of the world's 10 fastest-growing economies were in sub-Saharan Africa – a figure expected to increase to seven in the next five years. During the height of the recent financial crisis, while many countries were collapsing, Africa was able to record a growth rate of 2.8 per cent in 2009 and pick up momentum in 2010 with growth of 4.9 per cent.

Nevertheless, commitments on food and development by the G8 members are imperative. It is critical that these commitments – such as those of the L'Aquila Food Security Initiative (AFSI) – are met.

The importance of accountability

In spite of indications that Africa is on the cusp of realising its potential, reports by the United Nations, Oxfam and other agencies make it clear that food insecurity and chronic poverty are increasing. There remains a great need for G8 members to meet their commitments to the continent.

However, commitments to food and development in general should be targeted less at handouts and more at providing economic services that trigger additional entrepreneurship at the grassroots level. African Monitor's interaction with grassroots communities through poverty hearings, citizen consultation and capacity-building projects has shown that what the people

want is not food and development handouts, but the means to make a living.

Hunger in Africa must end in the next 15 years. In the next 20 years, global hunger should become a thing of the past. G8 leaders therefore need a holistic understanding of the agricultural and livelihoods situation in developing countries. It is not just the need for food that is pressing, but also the need to support agriculture and its role in supporting livelihoods, nutrition and health.

Commitments to food and development in general should be targeted less at handouts and more at providing economic services

Thus it is vitally important that accountability structures are improved, as it is clear that money spent on rural and small-scale farmers can be better utilised. As such, the provision of food aid and measures that are aimed at raising productivity should not be viewed just as an end in themselves, but as a means to an end.

In 2009, African Monitor hosted a high-level policy forum on agriculture and food security. This policy forum made a case for an increase in targeted investment in smallholder agriculture in Africa that could reduce poverty and ensure food security within a short time.

The organisation has also been working with grassroots communities in selected African countries to build their capacity to effectively and efficiently monitor the commitments made by their governments to improve food security and also to

accelerate the development process. African governments, through the New Partnership for Africa's Development (NEPAD), have set ambitious commitments, particularly in agricultural development, in the form of the Comprehensive Africa Agriculture Development Programme (CAADP).

In support of this programme, African leaders committed 10 per cent of public spending to agriculture. The development partners, through the G8, supported the CAADP initiatives and launched the AFSI in 2009. Apart from the 10 per cent committed to agriculture, African governments committed 0.5 per cent of their national budgets to infrastructure, 15 per cent to health and 20 per cent to education.

African Monitor's grassroots work

African Monitor tracks these commitments through the Development Support Monitor (DSM), which is used by civil society organisations and other initiatives to hold their national governments accountable.

African Monitor's work enables it to listen more to the people on the ground in terms of their voice, realities and aspirations. This allows it not only to assess impact, but also to understand people's aspirations. Through African Monitor's Grassroots Focus Index project, the people on the ground have indicated that what is essential to them is the alignment of policy and practice to their realities and aspirations, including infrastructure, information provision, agriculture and food security.

The main challenge has been a lack of transparency from both African governments and G8 members. African Monitor's own experience has been that data availability diminishes and eventually disappears the closer one gets to the ultimate destination of the resources, by which time one depends on proxies and anecdotal evidence.

It is important for the G8 leaders to increase transparency in terms of their commitments to development and also to report regularly on the level of attainment of those commitments. In addition, there is a need for G8 leaders to invite civil society organisations and other development stakeholders to attend their meetings as observers. They need to have access to more information that will enable them to hold the G8 leaders accountable.

Although African leaders committed to allocating 10 per cent of their public spending on agriculture, so far only 10 countries are meeting that target



The importance of civil society having such access to information is underlined by the tardiness of African countries in meeting the target of allocating 10 per cent of their national budgets to agriculture. Recent data indicate that only 10 – Burkina Faso, Ethiopia, Ghana, Guinea, Mali, Malawi, Niger, Senegal, Uganda and Nigeria – are spending more than the 10 per cent. Another nine countries are spending between five and 10 per cent.

However, the median expenditure in the agricultural sector is only 5.5 per cent. Seventeen countries spend less than five per cent of their total expenditure on agriculture.

The AFSI adopted the Rome Principles, which aim to channel resources into well-designed, results-based programmes. African Monitor's work with grassroots communities, as well as citizen consultations, has shown that the ways resources are accessed are malfunctioning at the grassroots level.

The accountability channels should examine the extent to which these commitments are effective in allowing lower-level and grassroots access to resources, as opposed to concentrating access at the top.

To date, African Monitor has worked with partners to empower the grassroots to highlight such blockages, as well as mobilise their levels to address the blockages.

Constantly auditing G8 policies

It is also important that a mechanism for constantly auditing the G8's policies and the initiatives of grassroots voices, realities and aspirations be developed. This will ensure that they are focused on the grassroots in their policies and practice.

G8 accountability should go beyond balancing the books in terms of delivering what is committed, but should deliver development. Accountability should extend

to the ability of the resources committed to deliver development. Delivering development requires more inputs and efforts beyond announcing policies and money. It also requires listening and acting in good faith to the realities and aspirations of people.

In addition, the scope of accountability should be broadened to include direct mechanisms where the members of the G8 family can report on the progress of their resolutions. Analyses of commitments and progress should not just be reserved for the G8 meetings or encountered through protests but need to be formalised within countries' own governance structures.

Finally, G8 countries need to do more on delivery on commitments. According to the G8's Deauville Accountability Report, the delivery on AFSI is only 21 per cent. The significance of the commitments made will therefore depend upon delivery. ■

Do G8 summits make a real difference?

At last year's summit, members pledged more transparency over meeting the targets agreed on; compliance scores show what has been achieved

By Marina Larionova, National Research University Higher School of Economics, and Ella Kokotsis, G8 Research Group

For the past 37 years, the annual G8 summits have generated a wide breadth of declarations and communiqués binding the leaders to hard commitments across a diverse range of global policy issues. The extent to which the G8 members comply with their annual commitments has, in recent years, become a hotly contested topic, pitting academics, politicians, policy wonks and newsmakers against each other in an effort to understand whether commitments by the G8 do, in fact, matter. Given this era of ongoing domestic political constraints and conflicting global demands, does the G8 have the ability and, indeed, the capacity not only to make, but also to keep the commitments its members collectively generate at their annual summits?

The G8's ability to do so does matter, for it demonstrates the summit's legitimacy and credibility as an effective centre of global governance. The release of the G8's first systematic, comprehensive accountability report in Muskoka 2010 recognised that effective leadership begins with promises being kept, and that regular, clear and transparent reporting is an important first step in this process.

More modest accountability reports were released by the G8 on anti-corruption in 2008 and food security, water, health and education in 2009. But it was not until 2010 that the G8 undertook, for the first time, to assess its own accountability comprehensively. By systematically reporting on a wide range of development commitments, the G8 members collectively expressed their ongoing commitment to strengthen the effectiveness of their actions.

This trend continued in Deauville, France, in 2011, with the release of the Deauville Accountability Report on health and food security. Noting that the G8 members "remain

strongly committed to meeting our commitments and to tracking their implementation in a fully transparent and consistent manner", the Deauville Accountability Report tracked progress on a number of commitments related to health, including those from the 2010 Muskoka Initiative for Maternal, Newborn and Child Health as well as the 2009 LAquila Food Security Initiative.

With a year gone by since the release of the Deauville Accountability Report, the eve of the 2012 Camp David Summit offers an opportune time to reflect on the outcome of the Deauville commitments in an effort to understand whether the G8's new accountability reporting mechanism does, in fact, make a difference.

Deauville results: a work in progress

Although the leaders recommitted to improve the rigour of G8 accounting in meeting commitments and to redouble efforts to promote transparency and accountability, by April 2012 there was still no formal information on the accountability process or data on the G8 members' progress in meeting their Deauville pledges.

The G8 Research Group's preliminary interim analysis of compliance by the G8 and the European Union with 18 priority commitments made at Deauville provides some insight into the G8's compliance performance trends. These assessments are made on the basis of publicly available information, with individual scores assigned on a scale where +1 indicates full compliance with the stated commitment, 0 is awarded for partial compliance or a work in progress, and -1 indicates a failure to comply.

The average score of +0.46 is similar to the 2010 Muskoka final result but lower than the 2009 LAquila final score of +0.63.



Compliance performance on macroeconomic commitments remains strong, with +0.67 for LAquila, +0.89 for Muskoka and +0.78 thus far for Deauville. Trade received a score of +0.33, which continues the upward trend from 2010's +0.22 and 2009's -0.78. The average performance on development has been improving from +0.31 in 2009 to +0.62 in 2010 and 2011 respectively. Compliance was strongest with those commitments focused on good governance, with support to the transition process in Afghanistan receiving a compliance score of +1.00 by all G8 members.

There was a slight increase on the Muskoka Initiative on, increasing from -0.56 in 2010 to -0.22 in 2011, although it remains below zero. All members scored between 0 and

Leaders of the G8 members with other statesmen at the Deauville Summit last year. At the meeting, members expressed the intention to boost transparency



+1.00 on commitments to improve the transparency of aid information, with an average score of +0.44.

Compliance was strong on commitments on nuclear non-proliferation, where the G8 members received a combined average score of +0.78 for their actions in reinforcing the non-proliferation and comprehensive test ban treaties and increasing national system effectiveness respectively. However, performance on other security commitments was significantly lower, with a score of +0.11 for engagement on regional security and +0.33 for support for building capacities to help fight terrorism.

Members' compliance with climate change commitments was higher than average for the last three years, reaching a score of +0.67 in

2011 for emissions reductions. The G8's commitment to foster green growth as a promising source of jobs scored only +0.33.

A new commitment to ensure effective actions against violations of intellectual property rights in the digital arena was fully implemented by most G8 members, while in others actions are under way for improving global frameworks for addressing online intellectual property right infringements.

A downward trend in compliance results is observed on food security and agriculture, with the highest level of +0.89 for L'Aquila, +0.22 for Muskoka and 0 for Deauville. G8 members had failed by the start of 2012 to meet their targeted contributions to the L'Aquila Food Security Initiative since the 2011 Deauville Summit. They also failed to

comply with commitments to secure the return of stolen assets.

Overall, G8 compliance performance varies significantly by commitment and issue. Delivery on macroeconomic, development, climate change and security pledges have proven to be consistent with the G8's previous track record. On the Muskoka and L'Aquila signature initiatives, there continues to be a need to consolidate efforts. Work on the fight against terrorism and the recovery of stolen assets needs to be stepped up as well. Further progress will be assessed when the G8 Research Group releases its final compliance assessment for Deauville, taking into account stakeholders' feedback, just before the Camp David Summit begins.

The promise of Camp David

As the G8 leadership prepares for its annual summit gathering at Camp David, the momentum on accountability cannot be lost. With the G8 so heavily focused on transparency and the delivery of results, the 2012 Camp David Summit offers an excellent opportunity to move the accountability agenda forward. To do so, however, the Accountability Working Group (AWG) will

By systematically reporting on a wide range of development commitments, the G8 members expressed their commitment to strengthen the effectiveness of their actions

have to ensure that the work done to date stays on track. This means that a number of issues in the G8's reporting mechanism will need to be further refined.

First, measurable objectives included in summit commitments will ensure that future tracking and reporting on results are less difficult and complex.

Second, data limitations will need to be addressed in a more comprehensive manner, as baseline data and consistent methodologies allow for more rigorous assessments. Third, monitoring systems on the ground will need to be improved, allowing for timely and reliable information to enhance results-oriented reporting.

Finally, the G8 will need to rely more on the support of its partner organisations – foundations, civil society, private-sector associations and non-governmental organisations – to ensure the successful delivery of its commitments.

The Camp David Summit thus offers a significant opportunity for the leaders to demonstrate the credibility of the G8 as an effective centre of global governance through an ongoing commitment to improved transparency and candid self-reporting. ■

The open spiral: the ongoing moral commitments of faith leaders



The meetings of religious leaders in the lead-up to the G8 summits will continue, as much remains to be done on key global justice and compassion issues

By the Reverend Doctor Karen Hamilton, general secretary, Canadian Council of Churches, and the Reverend Bud Heckman, executive director, Religions for Peace – USA

Eight G8 countries. Eight years of InterFaith Leaders' Summits. With the G8 meeting in the United States in May 2012, the 'open spiral' that is the parallel InterFaith Leaders' Summits is, in a sense, complete, because the full cycle of eight country hosts is finished. At the same

time, the InterFaith Leaders' Summits are continuing, because there is much work yet to be done and the G8 will continue to meet.

Since 2005, when the G8 met in the United Kingdom, there have been parallel summits of religious leaders meeting each year. In the days leading up to each of the G8 meetings, international and host-country national

religious leaders gather to discuss the G8 agenda, recommit themselves to such key global justice and compassion issues as the Millennium Development Goals (MDGs) and Care for Creation, and issue a statement to the G8, to each other and to the world.

The record of these parallel summits and the ongoing life of their statements can be found online at www.faithchallengeg8.com. It is an eight-year record of consistency and persistency, of speaking together in commitment and challenge about the issues of today's world – the neglect of which causes great suffering to so many; the fulfilment of which would bring healing and an enhanced life to so many.

While each G8 summit can have a unique focus, based on the host country's interests and the urgent needs of the world, there are overlapping themes. Faith leaders



Commemorating Martin Luther King Day at a Baptist church in Washington, DC. Leaders from many religious traditions will bring together the international and the local

at each summit aim to have recognisable continuity in their engagement.

The 2012 gathering of faith leaders in the US is not just a closing of the eight-year cycle. Rather, it is part of the open spiral, continuing to build on the parallel faith leaders' summits that have gone before. It moves forward the commitment and challenge of the faith leaders to each other and to governments. There is, therefore, a consistent and unwavering character in the moral voice of religious leaders to the G8.

Human security concerns

This ongoing moral voice speaks to issues of shared security. The 2012 InterFaith Leaders' Summit will give particular focus to human security concerns, such as the Muskoka Initiative on Maternal, Newborn and Child Health and the LAquila Food Security

Initiative. In order to achieve this, the leaders will work with the international economic affairs staff of the US National Security Council, the White House Office of Public Engagement and the White House Office of Faith-Based and Neighborhood Partnerships.

The faith leaders who participate in these summits come from many traditions – Baha'i, Buddhist, Chinese Traditional, Christian, Hindu, Indigenous, Jain, Jewish, Muslim, Shinto, Sikh, Zoroastrian and other traditions. They bring together the religious and the political, the international and the local, and the heart and the head with their common witness.

Regional, representational delegations – some of whom have been acting jointly for a period longer than the cycle of G8 meetings – are hosted by partnerships or collaborative efforts of faith leaders and communities in the G8 host country. Interfaith relationships and social cohesion are built in several ways through this process, which then gives strength to the passion and commitment necessary to make global policy changes that will affect millions of individuals' lives.

The 2012 InterFaith Leaders' Summit meets in Washington, DC, on 17 May, just in advance of the G8 Camp David Summit. It is very much continuous with the open spiral pattern, but will add its own twist. At the request of religious leaders from Latin America, and owing to the proximity of the G8 and G20 summits, it will also pick up a shared focus on the G20 summit, which takes place in Los Cabos, Mexico, one month later. Religious leaders from the US and other G8 countries will exchange actions with leaders from the wider G20 country set, including Argentina, Brazil and Mexico. A representative joint delegation will present the combined actions and commitments to the US administration in Washington on 17 May and at Mexico's Foreign Ministry in Mexico City in the week before the G20 summit.

The shared objectives and processes of the 2012 InterFaith Leaders' Summit include issuing a moral statement, creating religiously

sensitive background documents on key initiatives for the G8 and G20, requesting an intervention with the administrations and their leaders' sherpas, holding focused discussions on relevant issues, engaging the media through a press briefing and newspaper articles, providing an interfaith worship or observance opportunity, and providing individual and integrated organisational time.

'Hard' and 'soft' advocacy

The American partnership of faith groups planning the parallel summit to the 2012 G8 and G20 summits has come together under the name 'Joint Religious Leadership Coordination for the G8 and G20 Summits'. The focus is building collaboration and unity for common witness on shared moral concerns ('soft' advocacy), as well as, for some of the partners, working in specific ways to influence the policy agenda ('hard' advocacy).

The Council of Religious Leaders of Metro Chicago, the Chicago Theological Seminary and its students, and the Tony Blair Faith Foundation and its Faiths Act Fellows were originally part of the formula for a Chicago G8

Religious communities can advocate for the vulnerable and help to ensure that policies are grounded in shared moral values

location. But with a late-in-the-game shift by the US administration to a smaller, more private meeting at Camp David on an earlier date, several of the participating faith organisations adjusted their strategy and a DC venue was settled upon. Additionally, new partners had to be found, including the Berkley Center for Religion, Peace and World Affairs at Georgetown University, which will play host to the meeting.

The G8 (and G20) summits present a unique way for the faith community to contribute to global development, peace and human enrichment. Through direct engagement with political administrations, religious communities can advocate for the vulnerable and help to ensure that policies are grounded in shared moral values. The 2012 meeting of the InterFaith Leaders' Summits is both an end and a new beginning in this open process. It is a continued unveiling of the open spiral. ■

The G8-BRICS relationship: moving from competitive avoidance to cooperative engagement

The G8 and BRICS groups have so far not recognised each other's existence, but it would make sense for them to start interacting on an issue-specific basis

By Andrew F Cooper, University of Waterloo/Balsillie School of International Affairs; Distinguished Fellow, the Centre for International Governance Innovation (CIGI), Canada

The relationship between the G8 and the BRICS grouping of Brazil, Russia, India, China and South Africa can be depicted as one of competitive avoidance. That is to say, the transition of the BRICS group from a construct invented by Goldman Sachs in 2001 to a formalised summit of leaders in 2009 from a variety of perspectives fits the image of 'rival parallelism' to the G8. Akin to the G8, the BRICS summit process pivots on a leader-centred meeting on a self-selected basis. Akin to the G8, with the addition of Russia in 1997, the BRICS group has extended its membership – South Africa being formally added at the April 2011 Sanya Summit in Hainan, China. Akin to the G8, the group can make a claim concerning its importance by reference to impressive structural capabilities – its size of population (one-third of the world's population), nominal gross domestic product (more than \$13 trillion) and foreign reserves (above \$4 trillion). Akin to the G8, the BRICS leaders' declarations have been progressively longer with references to a wide spectrum of global issues. And finally, akin to the G8, meetings of the BRICS countries have been stretched to include forums of agriculture ministers, finance ministers, foreign ministers, health ministers and trade ministers.

This image of 'competitive avoidance', or rival parallelism, is reinforced by the complete lack of dialogue or any sense of engagement between the two processes. Neither the G8 nor the BRICS countries have referenced or acknowledged one other in any explicit fashion in their respective summit documents.

One way to interpret this exclusion is to privilege the G20, with the G8 and

BRICS countries becoming constitutive groups or even caucuses within the larger global summit 'steering group' established in November 2008. To be sure, this image of caucusing conforms to the pattern in which both G8 countries and BRICS countries meet before G20 summits.

Yet such a pattern of rival parallelism is not without controversy and complications. Does the image of caucusing reproduce the old polarisation of politics between an old establishment and a cluster of 'rising' countries along a mainly North-West/global South divide? Moreover, where does this pattern leave the 'missing middle' – countries such as Korea, Mexico, Australia, Turkey and Indonesia that have a huge stake in belonging to the G20, and have increased their capabilities as hosts and agenda-setters in the G20?

Frustrations over inequality

Another way of interpreting this gap is to regard the G8-BRICS competitive avoidance emerging out of the difficulties with the older and asymmetrical 'outreach' culture of the G8 – epitomised by the ultimate failure of the Heiligendamm Process. In many ways, that process can be seen as the catalyst for the coming together of the BRICS countries, as opposed to the grouping being invented by

Goldman Sachs. After all, this was a process that brought the core BRICS countries (China, India and Brazil) together in a summit setting for several years up to the G8's L'Aquila Summit in 2009. However, notwithstanding the constructive components, the Heiligendamm Process also exacerbated the frustrations of the rising states about the lack of equality in terms of standing with the G8.

Both of these interpretations, though, point in other ways to the need for some renewed thinking about the ongoing relationship between the G8 and the BRICS group. Despite the G20's ascendancy, the G8 has not disappeared. Rather, it has consolidated its position in both some 'hard' security and 'soft' social areas of the international agenda. The adjacent summits of the G8 at Camp David and the North Atlantic Treaty Organization at Chicago in 2012 highlight the hard component, with a likely focus on Iran and nuclear proliferation, Syria and Afghanistan. The soft component extends from assistance to the Middle East and North Africa to expressed concerns with food security.

Return to core agenda

In such an environment, there is a new, compelling logic for the G8 and the BRICS countries to start a new process of engagement on an issue-specific basis. In part, this logic is one of default, with the G20 returning under the stresses of the eurozone debt crisis and other ongoing reverberations from the 2008 financial shocks to its original core finance and regulatory agenda. In part, however, it should also be by design. In the post-Heiligendamm Process era, the G8 and BRICS countries can meet on the basis of equality on issues that both groups have as urgent priorities – especially in those domains where there are big gaps in terms of the overloaded G20 agenda – including key functional and architectural questions on global governance.

This image of 'competitive avoidance', or rival parallelism, is reinforced by the complete lack of dialogue or any sense of engagement between the G8 and BRICS group processes



The leaders of the five BRICS countries at the New Delhi summit in March

There are, of course, considerable obstacles and risks attached to any movement along these lines – especially if this movement was to take any bold form, such as an invitation for the BRICS group to take part in some or all of the G8 Camp David process.

At one level, it accentuates the impression – already visible in the G20 – that global governance is returning to a concert model as in previous times of crisis and rupture, such as 1814-15, 1919 and at the end of the Second World War. Because of this impression, there must be a visible willingness on the part of the G8 to operate on the basis of equality in any such engagement.

At another level, there is the question of identity. In the run-up to the BRICS New Delhi Summit in March, the five countries acknowledged that the time has come for

them to “assume a more important role in global governance and engage more deeply on key areas”. Nonetheless, the approach has been in practice to seek solutions to global governance issues and challenges, not through following the West, but through communication and coordination among the BRICS countries. Still, each member put domestic priorities and problems ahead of institutional solidarity. The April 2010 BRICS Brasilia Summit was shortened to a one-day event when Chinese president Hu Jintao went home early to deal with a major earthquake in western China. And in June 2010, another summit on the margins of the Toronto G20 was cancelled completely when President Luiz Inácio Lula da Silva stayed home because of massive floods in northeast Brazil. Nor have the members been able to put together a

collective strategy on key issues such as the selection of a new managing director of the International Monetary Fund or a rescue package for the eurozone. Building a dialogue – not estrangement – with the G8 may, paradoxically, help extend the collective identity of the BRICS group.

The rationale for moving forward with this new form of engagement will be inevitably increased – if not immediately, then at least when Russia hosts the G8 in 2014. As a straddling country, with membership in both the G8 and BRICS groups, Russia will have an added incentive to move towards a constructive and mature dialogue between these parallel institutions. Such anticipation, nevertheless, should not stop the creation of building blocks to facilitate the process being put in place now. ■



Canada
Stephen Harper

Stephen Harper was elected prime minister of Canada in January 2006, assuming office from Paul Martin in February with a minority government. Harper ran for re-election in 2008 and again on 2 May 2011, when he returned to the House of Commons with a majority. Before running for parliament he served as a policy advisor for the Reform Party, and was first elected as a member of parliament in 1993. He served as leader of the opposition for several years before becoming prime minister.

Harper was born in Toronto, Ontario, on 30 April 1959. He studied at the University of Toronto and the University of Calgary, earning his master's degree in economics in 1991. He and his wife, Laureen, have two children. This will be the seventh G8 summit that Harper has attended.

Sherpa: *Gérald Cossette*



France
François Hollande

François Hollande was recently elected president of France, taking over from Nicolas Sarkozy, whom he defeated in the run-off of the French presidential election on 6 May 2012. Hollande served as first secretary of the Socialist Party from 1997 to 2008. He has been the Deputy of the National Assembly of France for Corrèze from 1988 to 1993 and again since 1997, and was also the mayor of Tulle from 2001 to 2008. He joined the Socialist party in 1979, and was an economic advisor for François Mitterrand.

Born in Rouen on 12 August 1954, Hollande holds degrees from École nationale d'administration (ENA), and the Institut d'Études Politiques de Paris (Sciences Po). His partner is Valérie Trierweiler, and he has four children with his previous partner, Ségolène Royal. This will be Hollande's first G8 summit.

Sherpa: *Jean-David Levitte*



Germany
Angela Merkel

Angela Merkel became chancellor of Germany in 2005, replacing Gerhard Schröder, who had been in power since 1998. Before entering politics she worked as a researcher and physicist. She was first elected to the Bundestag in 1990 and has held the cabinet portfolios for women and youth, environment, nature conservation and nuclear safety. She was born in Hamburg on 17 July 1956 and received her doctorate in physics from the University of Leipzig in 1978. She is married to Joachim Sauer and has no children. This will be Merkel's seventh G8 summit.

Sherpa: *Lars-Hendrik Röller*



Italy
Mario Monti

Mario Monti was sworn in as prime minister of Italy on 16 November 2011 to lead a technocratic government after the resignation of Silvio Berlusconi. He also serves as Minister of the Economy and Finance. He was a member of the European Commission for a decade, as commissioner for the Internal Market, Financial Services and Financial Integration Customs, and Taxation from 1995 to 1999, and then for Competition from 1999 to 2004. Prior to joining the European Commission, he was a professor of economics at Bocconi University and its rector from 1989 to 1994.

Born in Varese on 19 March 1943, Monti received a degree in economics and business from Bocconi University and did his postgraduate studies at Yale University under James Tobin. He and his wife, Elsa, have two children. This will be Monti's first G8 summit.

Sherpa: *Pasquale Terracciano*

European Union



Herman Van Rompuy

Herman Van Rompuy was elected the first full-time president of the European Council on 19 November 2010. He was previously prime minister of Belgium from 2008 to 2009. Before entering politics, he was a lecturer. Born in Etterbeek, Belgium, on 31 October 1947, he holds a bachelor's degree in philosophy and a master's in applied economics from Katholieke Universiteit Leuven. He is married to Geertrui Windels and has four children. This will be Van Rompuy's third G8 summit.

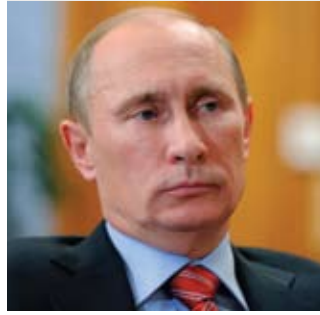


Japan
Yoshihiko Noda

Yoshihiko Noda was appointed prime minister of Japan on 2 September 2011, following the resignation of Naoto Kan in August. Noda served as finance minister from June 2010, and senior vice finance minister in 2009. He was first elected to public office in 1987 in Chiba prefecture and then, in 1993, to the national Diet.

Born in Funabashi, Chiba prefecture, on 20 May 1957, Noda is a graduate of the School of Political Science and Economics at Waseda University. He is married and has two children. This will be Noda's first G8 summit.

Sherpa: *Shinichi Nishimaya*



Russia
Vladimir Putin

Vladimir Putin assumed the position of president of the Russian Federation on 7 May 2012. He succeeds Dmitri Medvedev who had been president since 2008. Putin served as prime minister under Medvedev, having earlier been elected president in 2000 and re-elected in 2004, but being unable to seek a third term under the Russian constitution.

Putin became acting president on 31 December 1999 after Boris Yeltsin resigned. A member of the United Russia party since its establishment in 2001, he led the party from 2008 until April 2012. From 1998 to 1999, he was director of the Federal Security Service, the successor to the KGB, having worked for the KGB from 1975 to 1991. He also first deputy chair of the St Petersburg city government and chair of its external relations committee, as well as secretary of the Russian Security Council.

Putin was born on 7 October 1952, in Leningrad (now St Petersburg) and graduated from Leningrad State University's law faculty. He and his wife, Ludmila, have two daughters. Camp David will be Putin's ninth summit.

Sherpa: *Arkady Dvorkovich*



United Kingdom
David Cameron

David Cameron became prime minister of the United Kingdom of Great Britain and Northern Ireland on 11 May 2010. He was first elected to parliament in 2001 as representative for Witney. Before becoming a politician he worked for the Conservative Research Department, and served as a political strategist and advisor to the Conservative Party. He has served as the leader of the Conservative Party since December 2005.

Born in London, England, on 9 October 1966, he received his bachelor's degree in philosophy, politics and economics at the University of Oxford. He is married to Samantha Cameron and has two children. This will be Cameron's third G8 summit.

Sherpa: *Ivan Rogers*



United States of America
Barack Obama

Barack Obama became president of the United States in January 2009, replacing George W Bush, who had held the presidency since 2002. In 2005, Obama was elected to the Senate, having previously worked as a community organiser, a civil rights lawyer and a state legislator for Illinois.

He was born on 4 August 1961 in Honolulu, Hawaii, to a Kenyan father and American mother. He received a bachelor's degree from Columbia University in 1983 and a law degree from Harvard University in 1991. He is married to Michelle Obama and they have two children. This will be Obama's fourth G8 summit and his first as host.

Sherpa: *Michael Froman*



José Manuel Barroso

José Manuel Barroso became president of the European Commission in November 2004. Previously, he was prime minister of Portugal from 2002 to 2004. Before entering politics, he was an academic. He studied law at the University of Lisbon, holds a master's degree in economics and social sciences from the University of Geneva, and received his doctorate from Georgetown University in 1998. He is married to Maria Margarida Pinto Ribeiro de Sousa Uva and has three children. This is Barroso's eighth G8 summit.

Sherpa:
Franciskus van Daele

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Global Health

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Global Health 2012, edited by the Graduate Institute's Ilona Kickbusch and the University of Toronto's James Orbinski and John Kirton, will be published in May 2012.

Global health needs new approaches and solutions. The past ten years have seen many new agreements and commitments, innovations in global health governance and an unprecedented growth of resources for global health initiatives. But fragmentation, competing agendas, slow economic growth and fiscal consolidation make coherent global governance a pressing challenge. The United Nations High-Level Meeting in 2011 on addressing the major non-communicable diseases has given prominence to additional threats to economic development. Global health advocates underline the need for equity-based approaches to health from society and government as a whole. And there is a growing recognition that civil society and the business community play a critical role. There are high expectations of the World Health Organization's ambitious programme of reform to address today's challenges to bring relevant stakeholders together in ways that maximize the contributions of all.

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ACE

The Africa Coast to Europe (ACE) optical fiber submarine cable is a 17,000 kilometre long high bandwidth system that will connect 21 countries from France to South Africa.

- ✓ ACE will be operational **Q4 2012**
- ✓ Will connect 21 territories, including **18 African countries**
- ✓ **7 countries in Africa** will be served for the first time by a high bandwidth international cable system
- ✓ ACE connectivity will be **extended to landlocked countries : Mali and Niger**
- ✓ Will **secure** and **diversify** the international broadband traffic routing
- ✓ Will provide **seamless interconnection** with existing high bandwidth cable systems connecting **Europe, Asia, North and South America**
- ✓ Designed to provide **5.12 Tbps**, will benefit from state-of-the-art submarine technology



ACE, with its large bandwidth and high quality transmission technology, will support the present and future growth in telecommunications traffic between Africa and the rest of the world, reduce digital divide and drive economic and social growth.