

G8

ITALY JULY 2009

Contributors include

Silvio Berlusconi • Taro Aso
Stephen Harper • Lee Myung-bak
Angel Gurría • Nobuo Tanaka
Margaret Chan • Jacques Diouf
Kamlesh Sharma • Haruhiko Kuroda
Donald Kaberuka • Hamadoun Touré

FROM LA MADDALENA TO L'AQUILA



THE INTERNATIONAL BANK OF AZERBAIJAN

FUELLING CASPIAN GROWTH





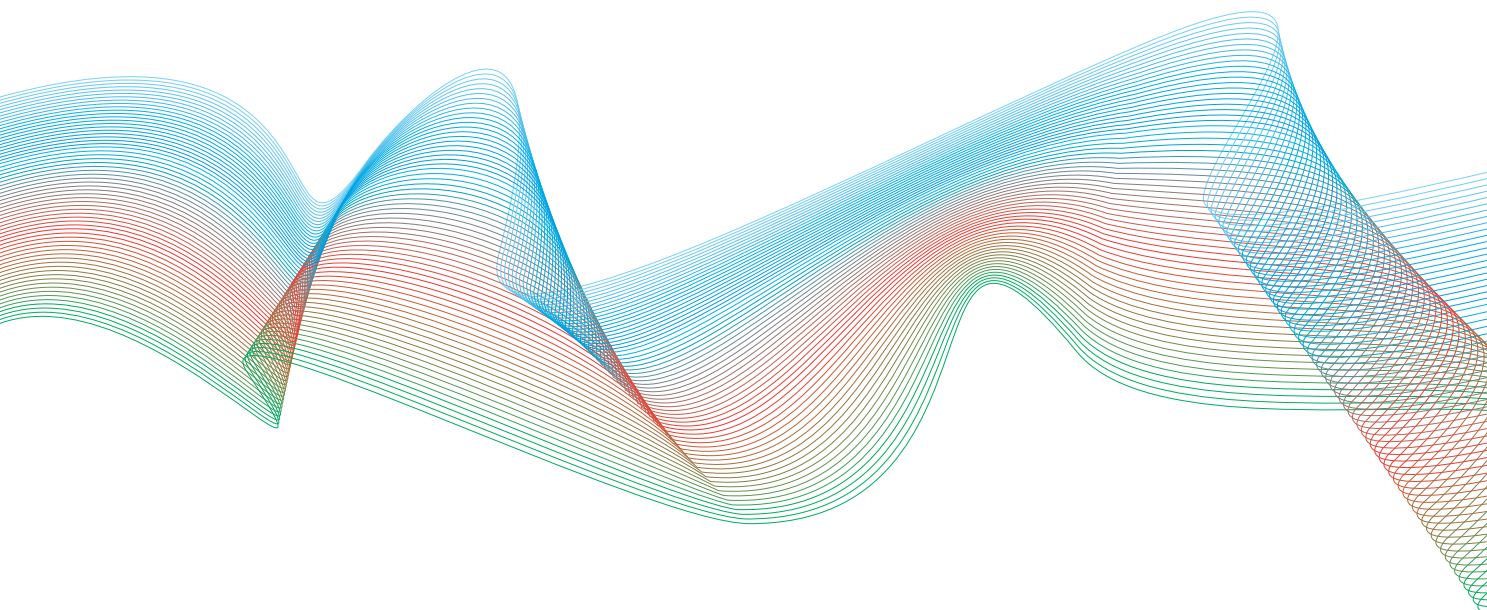
AZERBAIJAN'S NATIONAL DEVELOPMENT BANK

FitchRatings
KNOW YOUR RISK
BB+



Moody's Investors Service
Baa2

THE INTERNATIONAL BANK OF AZERBAIJAN



The International Bank of Azerbaijan offers a wide range of global banking services through its headquarters in Baku, major subsidiary banks in the Russian Federation and the Republic of Georgia, and international offices in Frankfurt, London, Luxembourg, Dubai and New York.

The International Bank of Azerbaijan – Moscow

IBA-Moscow is a registered full-service bank in Russia founded in 2002 with 100% foreign capital. It maintains regional offices in Saint Petersburg and Ekaterinburg and provides a diversified range of banking services to international and domestic corporate and individual clients. In 2008 IBA-Moscow was nominated “Best Bank With Foreign Capital, Contributed Significantly to the Development of the Economy of Russia” by National Bank Magazine of Russia.

The International Bank of Azerbaijan – Georgia

IBA-Georgia is a registered full-service bank in Georgia that was founded in 2007 to provide a full range of banking and finance services.

The International Insurance Company

The International Insurance Company, is the leading insurance and reinsurance underwriter in Azerbaijan and has transformed the domestic market with a wide portfolio of innovative products and services. IIC was founded in 2002 and is a wholly-owned subsidiary of IBA.

AzeriCard

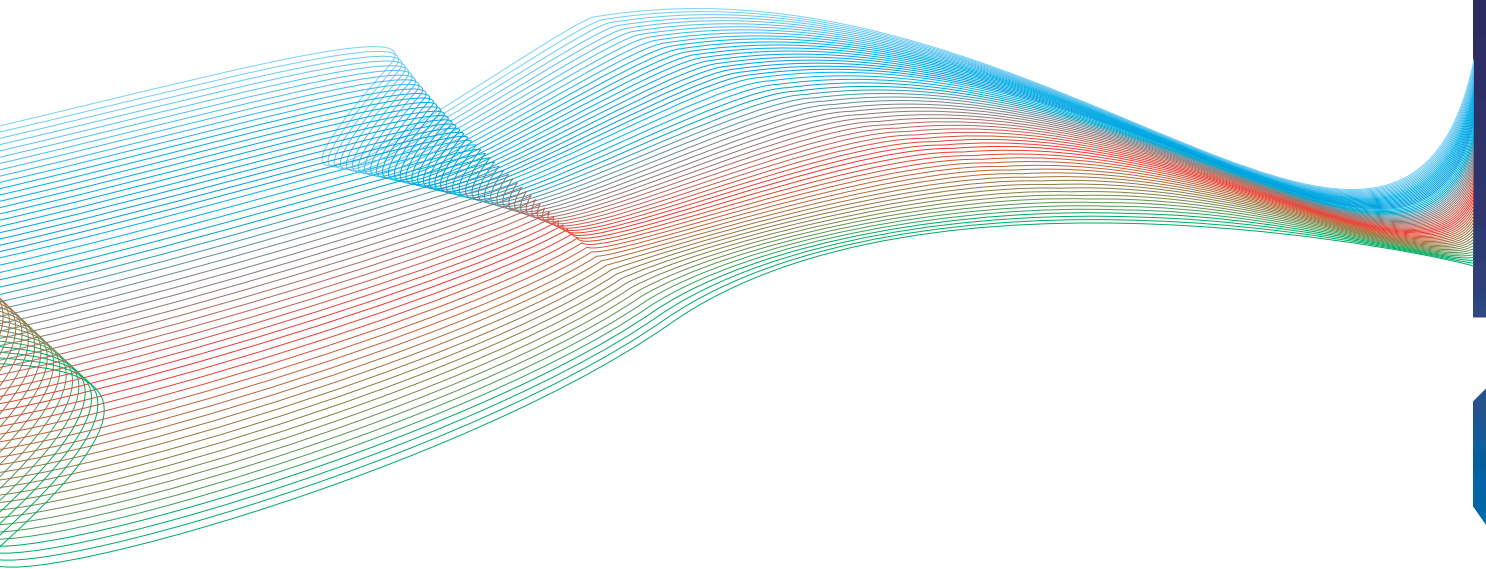
AzeriCard is the leading credit card provider and clearing agent in the Caucasus region. AzeriCard is the largest certified payment system provider partnering with VISA International, MasterCard International and American Express and serves 26 banks in Azerbaijan and abroad.



THE INTERNATIONAL BANK
OF AZERBAIJAN

67, Nizami Street, Baku, AZ1005; +994 12 493 0091; www.ibar.az

The International Bank of Azerbaijan is the leading financial institution in Azerbaijan and plays a vital role facilitating Azerbaijan's integration with the world economy



As a National Development Bank, IBA contributes significantly to the strength, stability and transparency of Azerbaijan's banking system and fundamentally supports Azerbaijan's socio-economic development.

IBA is a universal bank and full-service financial services firm that creates opportunities for enterprises, investors and individuals to realize their business visions within Azerbaijan and abroad. IBA offers world-class investment services and advanced technology solutions and has become the premier banking platform in the region.

Achievements in 2008

- Total **assets** exceed \$5.2 billion
- IBA holds **24.5% of the total capital** in the national banking system and **41.8% of assets**
- **Loan portfolio** represents **42.6%** of total domestic volume
- Entrusted with **48.6%** of domestic **customer deposits**
- **Credit card** market share rose to **44.1%**
- **National service network** grew to 36 branches, more than 90 service divisions, over 600 ATMs (market share of **45.1%**) and 2500 POS-machines (market share of **45.7%**)
- IBA has the highest ratings in the national banking system: **Baa2** from **Moody's Investors Services** and **BB+** from **Fitch Ratings**, equivalent to Azerbaijan's sovereign rating





How do we make no difference?

New technologies help make the entire energy business more environmentally compatible than ever before.

The need for environmentally compatible technology, especially in the field of energy, has never been greater. But the real challenge is to turn this need into opportunity. That's why we are focused on supplying highly efficient, reliable, and sustainable products, solutions, and services across the entire energy conversion chain. Our NetConverter® power conversion system, for example, helps ensure a more constant power output from wind turbines. And our innovative carbon capture and storage (CCS) solutions pave the way for increased CO₂ reduction in fossil power generation.

www.siemens.com/energy

Answers for energy.

SIEMENS

G8

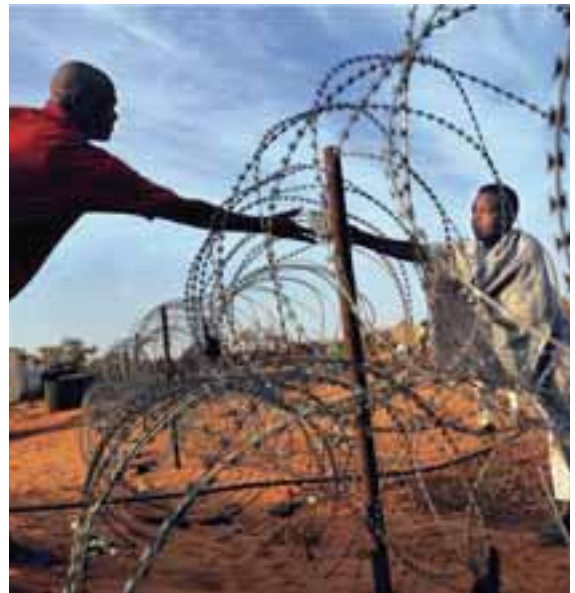
THE ITALIAN SUMMIT 2009

Editors	John Kirton Madeline Koch
Senior researcher	Jenilee M Guebert
Group editorial director	Claire Manuel
Managing editors	Suzy Robinson Lauren Rose-Smith
Sub-editor	Nick Gordon
Group art director	David Cooper
Art editors	Nicky Macro James White
Designer	Zac Casey
Group production director	Tim Richards
Group sales director	Andrew Howard
Sales manager	Robi Harper
Sales executives	Fabien Beullens Melanie Lambert
Client relations director	Natalie Spencer
Deputy chief executive	Hugh Robinson
Publisher and chief executive	Alan Spence

Pictures Corbis, Getty, PA Photos, Photolibrary, Reuters
Printed by Buxton Press
ISBN 978-1-906940-03-4

Published by Newsdesk Communications Ltd
5th Floor, 130 City Road, London, EC1V 2NW, UK
Tel: +44 (0) 20 7650 1600 Fax: +44 (0) 20 7650 1609
www.newsdeskmedia.com

On behalf of the G8 Research Group
University of Toronto, 1 Devonshire Place, Room 209N,
Toronto ON M5S 3K7, Canada
Tel: +1 416 946 8953
www.g8.utoronto.ca



Newsdesk Communications Ltd publishes a wide range of business and customer publications. For further information please contact Natalie Spencer, client relations director, or Alan Spence, chief executive. Newsdesk Communications Ltd is a Newsdesk Media Group company.

© 2009. The entire contents of this publication are protected by copyright. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means: electronic, mechanical, photocopying, recording or otherwise, without the prior permission of the publisher. The views and opinions expressed by independent authors and contributors in this publication are provided in the writers' personal capacities and are their sole responsibility. Their publication does not imply that they represent the views or opinions of Newsdesk Communications Ltd and must neither be regarded as constituting advice on any matter whatsoever, nor be interpreted as such. The reproduction of advertisements in this publication does not in any way imply endorsement by Newsdesk Communications Ltd of products or services referred to therein.



Contents

Foreword

- 12 **Da La Maddalena a L'Aquila**
Silvio Berlusconi, Presidente del Consiglio dei Ministri, Italia
- 16 **For better global governance**
Taro Aso, prime minister, Japan
- 18 **The 2010 Muskoka Summit**
Stephen Harper, prime minister, Canada
- 20 **The G8: complementing the G20**
Lee Myung-bak, president, Republic of Korea

Introduction

- 22 **Prospects for the 2009 L'Aquila G8 Summit**
John Kirton, director, G8 Research Group

From G20 to G8: joint action

- 24 **Recovery and reform**
Daniel Price, partner at Sidley Austin LLP

Economics, finance and trade

- 28 **Call to action**
Angel Gurría, secretary general, Organisation for Economic Co-operation and Development
- 34 **Restoring growth**
Robert Fauver, former US under secretary of state for economic affairs and former G7 sherpa
- 38 **Mapping the route to recovery**
Paola Subacchi, Chatham House
- 42 **Regulation and reform**
Jim O'Neill, Goldman Sachs
- 46 **Challenges for the global economy**
Paolo Savona, professor emeritus, geopolitical economy, and chair, Unicredit Banca di Roma
- 50 **Under pressure**
Domenico Lombardi, president, Oxford Institute for Economic Policy, and non-resident senior fellow, Brookings Institution



52	<p>The common purse Pietro Alessandrini, Università Politecnica delle Marche, and Michele Fratianni, Indiana University and Università Politecnica delle Marche</p>
55	<p>Facing up to responsibility Kimon Valaskakis, New School of Athens</p>
<i>Environment and climate change</i>	
62	<p>The environment-health axis Achim Steiner, under secretary general, United Nations, and executive director, United Nations Environment Programme</p>
68	<p>A climate of change Frank Loy, former US under secretary of state for global affairs and chief climate negotiator</p>
75	<p>Securing the future Tobias Feakin, director, National Security and Resilience, Royal United Services Institute</p>
78	<p>Trading our way out of climate change Henry Derwent, president and CEO, International Emissions Trading Association</p>

82	<p>Toward Copenhagen Björn Stigson, president, World Business Council for Sustainable Development</p>
86	<p>On thin ice Christopher Wright, Grantham Institute on Climate Change, LSE, and Centre for Development and Environment, University of Oslo</p>

Energy

91	<p>The energy challenge Nobuo Tanaka, executive director, International Energy Agency</p>
98	<p>Renewing efforts Sergey Koblov, executive director, and Victoria Panova, chief of strategic planning and partnerships, International Sustainable Energy Development Centre</p>

Health

104	<p>The global health challenge Margaret Chan, director general, World Health Organization</p>
-----	--

Climate Change: A Development Issue for Africa



The evidence is clear. Climate change in Africa is a development issue and not the exclusive domain of Ministers of the Environment. This was re-emphasized at the Third Meeting of African Ministers of Finance for Development in Kigali, Rwanda, organized by the African Development Bank, DfID and UNECA.

Important impacts include a drop in agriculture yields by as much as 50% by 2020, another 70-200 million Africans may be at risk of increased water stress, rising sea levels, and so on. Drying lands heightens the risks of extended drought, loss of life, and conflicts over resources. Global warming will increase water borne diseases such as malaria, cholera, and yellow fever. Women will be affected inordinately by climate change, as they are the ones who primarily ensure family subsistence, seek water, collect firewood, and work in the fields. While the consequences are most severe in Africa, the continent has contributed least to the problem. Reacting to this situation, the final communiqué of the meeting emphasized the following:

- Existing financial mechanisms to combat climate change are inadequate, complex and fragmented and have constrained African countries from gaining full access to these resources.
- Addressing climate change requires more funds; such aid should be additional, adequate, predictable and sustainable, and come primarily in the form of grants. (Africa needs \$200 billion to reduce its emissions and adapt to climate change.)
- Africa does not participate in the carbon market largely because the rules exclude forests and sustainable land management that leads to carbon sequestration.
- The Clean Development Mechanism should be modified to encourage the participation of African countries with potential for mitigation in the agriculture and forestry sectors, including through REDD activities, which are not currently allowed under the Kyoto Protocol CDM and largely untapped.

What is the African Development Bank Doing?

The African Development Bank is extremely aware that climate change can reverse the progress in Africa's economic growth, poverty reduction and gender equality. We have undertaken a program to 'climate-proof' our investment portfolio and to integrate climate change adaptation and mitigation into investment due diligence and project design. On April 29, the Bank launched its Climate Risk Management and Adaptation Strategy, outlining support in climate proofing investments; in policy, legal and regulatory reforms, and in knowledge generation capacity building. The Bank is also supporting the Climate Information for African Development program to generate useful information for national environmental policies.

The Bank is helping its member countries adapt to and mitigate the effects of climate change while taking advantage of low-carbon opportunities. In early 2008, the Bank adopted the clean energy investment framework to provide reliable, affordable energy supplies and increase self-sufficiency. Clean development mechanism opportunities are being integrated into all lending and non-lending work to help member countries take advantage of abundant land and geo-thermal resources. The Bank is also promoting reforestation and sustainable management. The Congo Basin Forest Fund, housed at the Bank, enables basin countries to sustain their forests and earn carbon credits through access to clean energy.

Climate change is a global, economic issue and political challenge that requires a truly global solution. It requires a level playing field for all to react effectively. This will require true leadership to arrive at such a global consensus. For Africa, this entails developing a common negotiating position that incorporates the real challenges faced by the African continent.



- 111 **Finding the cure**
Michel Kazatchkine, executive director,
Global Fund to Fight AIDS, Tuberculosis
and Malaria
- 120 **Delivering on promises**
James Orbinski, St Michael's Hospital, and
Jenilee M Guebert, Program on Global
Health Governance, University of Toronto

Water, food and agriculture

- 126 **Out of our depth**
Loïc Fauchon, president,
World Water Council
- 132 **A roadmap for global food security**
Jacques Diouf, director general, Food and
Agriculture Organization
- 138 **A green revolution**
Kanayo F Nwanze, president, International
Fund for Agriculture and Development
- 146 **The food and energy challenge**
C Ford Runge, distinguished
McKnight University professor of
applied economics and law, University
of Minnesota

Development, investment and emerging economies

- 150 **The war on want**
Kamalesh Sharma,
Commonwealth secretary general
- 156 **Opportunity out of crisis**
Lars H Thunell, executive vice-president
and CEO, International Finance
Corporation
- 158 **Asia's paradox**
Haruhiko Kuroda, president, Asian
Development Bank
- 160 **Rediscovering the Americas**
Alicia Bárcena, executive secretary, United
Nations Economic Commission for Latin
America and the Caribbean
- 163 **The hour of need**
Donald Kaberuka, president, African
Development Bank
- 168 **Restructuring development**
Diéry Seck, director, Centre for Research
on Political Economy

- 170 **Looking east**
Hisham El-Sherif, chair, Nile Capital

IT and telecommunications

- 173 **Only connect**
Hamadoun Touré, secretary general,
International Telecommunication Union
- 178 **A better Web for a better society**
Tim Berners-Lee, Steve Bratt and Daniel
Dardailler, World Wide Web Foundation
and World Wide Web Consortium

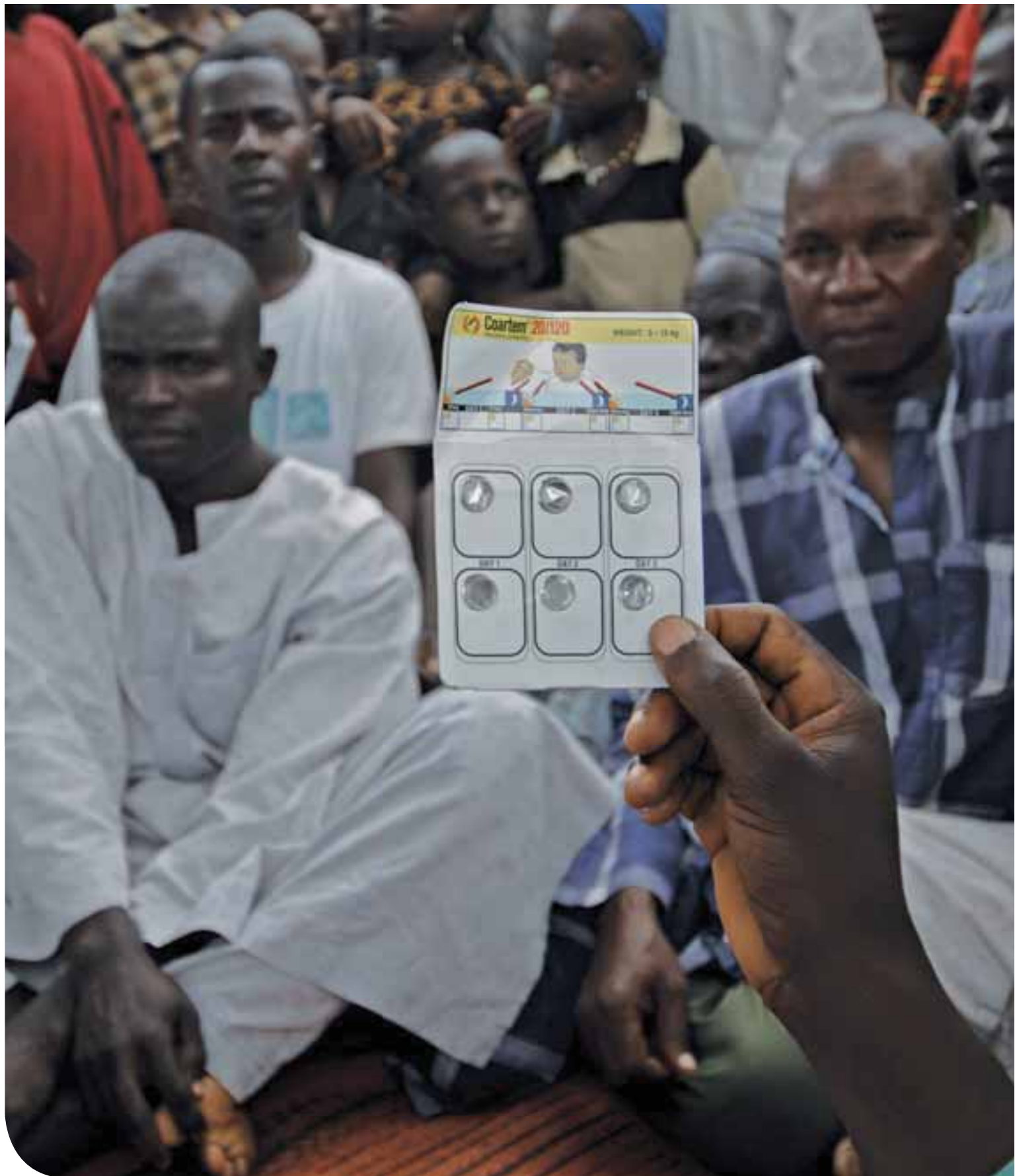
Global governance and the growing G8

- 184 **Down but not out**
Andrew F Cooper, The Centre for
International Governance Innovation
- 186 **A civil society**
Peter I Hajnal and Jenilee M Guebert
G8 Research Group
- 188 **Profiles**
- 192 **Interim compliance report**
- 194 **Advertiser index**

Sponsored features

G8 Summit 2009 welcomes the participation of:

Accordia Global Health Foundation	102
Banco Central do Brasil	40
Bank of Ghana	166
BASF	114
Central Bank of Barbados	45
CSIR Meraka Institute	181
Eidesvik	85
ESRIN – ESA	72
Evonik	80
Fincorp	153
Ford Foundation	118
Halcrow	129
Henkel	149
IFDC	144
International Bank of Azerbaijan	37
IITA	140
Kuwait Fund for Arab Economic Development	58
Maestrle Green Energy	71
Merloni Progetti	101
myclimate	89
Roche	108
Seacom	182
Standard Bank	137
Tällberg Foundation	66
Telecom Italia Sparkle	15
Viterra	131
World Diabetes Foundation	124





Health innovation for development – TDR's research collaborations make a difference

African communities which doubled malaria treatments and bednet usage.

Countries developing disease elimination campaigns, using rapid diagnostic tests that are quality assured and provided at low WHO-negotiated prices.

The African Network for Drugs and Diagnostics Innovation (ANDI) to build capacity, infrastructure and new tools, including those based on natural products and traditional medicines.

TDR helps make innovation happen. Our work is:

- Driven by research
- Led by local people and communities where diseases have the biggest impact
- Provided with coordinated support by donors

Learn more at www.who.int/tdr

Da La Maddalena a L'Aquila

Da Silvio Berlusconi,
Presidente del Consiglio
dei Ministri, Italia

Mai come oggi la crescita e lo sviluppo globali dipendono dal senso di responsabilità e dalla volontà di cooperazione dei principali attori dello scacchiere internazionale. Ci troviamo di fronte a fenomeni che costituiscono per tutti noi una sfida e al tempo stesso un'opportunità: una crisi finanziaria ed economica di portata storica, la necessità di porre un freno ai cambiamenti climatici e quella di rilanciare la lotta contro la povertà dell'Africa. Solo nell'impegno congiunto la comunità internazionale può trovare la strada per costruire un futuro su basi solide e sicure.

È in questo contesto che l'Italia ha quest'anno l'onore e l'onere della Presidenza del G8. Sono convinto che seppure in uno scenario internazionale profondamente mutato, l'incontro franco e diretto tra i leader dei maggiori Paesi industrializzati mantenga ancora oggi la sua validità e possa dare un impulso rilevante alla costruzione di una nuova governance globale. Lo diciamo con l'esperienza di chi ha partecipato a sette Vertici G8, ne ha presieduti due e si appresta a presiedere il terzo.

Dopo gli incontri riservati ai leader del G8, vi sarà spazio per i lavori con Cina, India, Sudafrica, Egitto, Messico e Brasile.

A L'Aquila ci occuperemo di ripresa dell'economia globale, di lotta ai cambiamenti climatici, di sviluppo dell'Africa e di alcuni dossier di politica internazionale legati alla pace e alla sicurezza.

Sul fronte dell'economia, al G20 di Londra di inizio aprile abbiamo affrontato la crisi finanziaria, adottando le misure per rispondere all'emergenza. Già a Londra l'Italia aveva dato un contributo decisivo perché fosse riservata attenzione agli aspetti sociali della crisi. Nel quadro del G8 lavoreremo per assicurare ai cittadini e alle imprese un sistema di nuove regole per il mondo della finanza e dell'economia.

Anche sul fronte della lotta ai cambiamenti climatici, il Vertice de L'Aquila costituirà un momento importante di discussione e confronto in vista dell'accordo che dovremo raggiungere a Copenaghen alla fine del 2009. Per questo abbiamo concordato con il Presidente Obama di tenere a L'Aquila i lavori del Major Economies Forum, il gruppo dei sedici principali paesi emettitori di gas serra.

Riguardo all'Africa, si dovrà far di tutto per sostenere un Partenariato Globale per la sicurezza alimentare ed evitare così che possano ripetersi situazioni di grave



emergenza come quella che lo scorso anno ha colpito molti Paesi del Continente Africano.

L'accesso all'acqua sarà un altro di quei bisogni primari su cui sarà necessario intervenire e su cui per la prima volta dovrà essere inviato un forte messaggio politico insieme ai Paesi africani.

Altri temi sul tavolo saranno la salute, l'istruzione, l'accesso all'acqua, temi irrinunciabili per costruire uno sviluppo più solido.

Infine, il G8 affronterà anche temi politici internazionali di attualità come la lotta al terrorismo, il disarmo, la non proliferazione delle armi nucleari, le crisi regionali, nella convinzione che pace e sicurezza siano beni che non si ottengono una volta per tutte, ma che vanno sempre preservati e difesi.

Affrontando questi temi e rafforzando la partecipazione delle economie emergenti, il G8 de L'Aquila potrà diventare un momento rilevante nel percorso verso un mondo più prospero e più sicuro. ♦

“

Sono convinto che l'incontro franco e diretto tra i leader dei maggiori Paesi industrializzati mantenga ancora oggi la sua validità

”

From La Maddalena to L'Aquila

By Silvio Berlusconi,
prime minister, Italy

Global growth and development depend as never before upon the responsibility of and the willingness to co-operate among leading players on the international scene. The events we are witnessing pose challenges and, at the same time, provide opportunities for all of us: an unprecedented financial and economic crisis, the need to stop climate change and the need to intensify the struggle against poverty in Africa. Only by working together will the international community pave the way for a stable and secure future.

In this context Italy has the honour and responsibility of chairing this year's G8 summit. I believe that, even in an international environment undergoing deep changes, the clear and forthright debate among the leaders of the most industrialised countries is a valuable instrument that can provide an impulse to create a new form of global governance. I say this drawing upon the experience gained through participation in seven G8 summits, the chairing of two and, soon, of a third.

In addition to the meeting of G8 leaders, there will be room for discussions with China, India, South Africa, Egypt, Mexico and Brazil.

At L'Aquila we will deal with the global economic recovery, climate change, Africa's development and international political issues relating to peace and security.

On the economy, the G20 summit held in London at the beginning of April focused on the financial crisis

Silvio Berlusconi speaks during his People of Freedom bloc congress in Rome



“ The clear and forthright debate among the leaders of the most industrialised countries is a valuable instrument ”

and the adoption of measures to face the emergency. At the London Summit, Italy made a major contribution to focusing attention on the social aspects of the crisis. In addition, during the G8 summit we will work to provide citizens and enterprises with a new system of financial and economic regulation.

With respect to climate change, the L'Aquila Summit will provide a great opportunity to discuss and share views before the Copenhagen negotiations at the end of 2009. For this reason an agreement was reached with US president Barack Obama to hold in L'Aquila the Major Economies Forum with the 16 countries with the highest emissions of greenhouse gases.

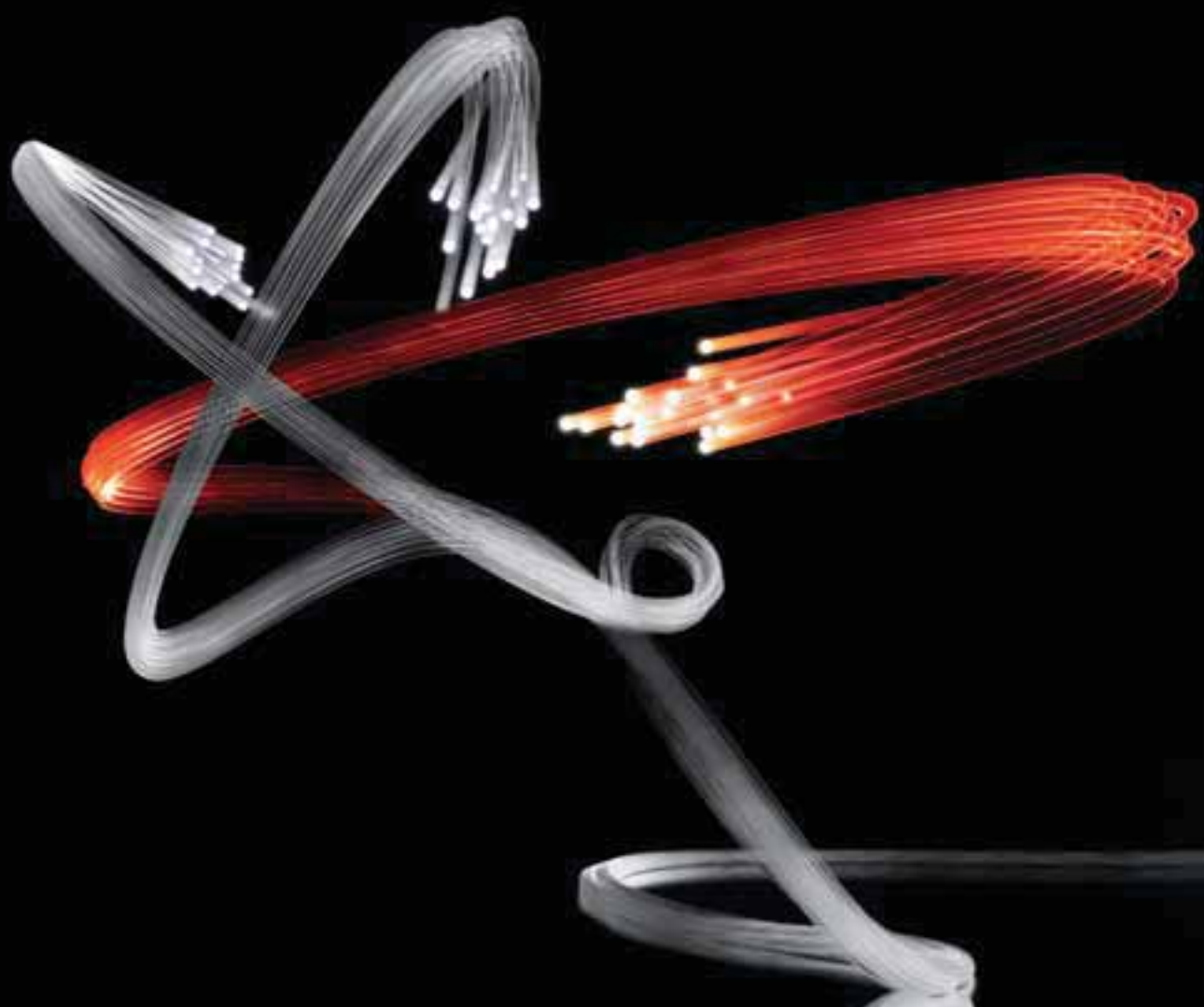
Regarding Africa, efforts will be devoted to sustaining a global partnership for food safety and preventing the recurrence of severe crisis situations such as the one that affected several countries on the African continent last year.

Access to water is another basic need awaiting action: for the first time a joint political message will be conveyed together with African countries.

Among the issues on the table are health and education, which are pivotal for promoting stronger development.

Finally, the G8 summit will focus on current international political issues such as the fight against terrorism, disarmament, non-proliferation of nuclear weapons and regional crises, in the belief that peace and security are values that cannot be achieved once and for all, but need to be continuously safeguarded.

By dealing with these issues and promoting the involvement of emerging economies, the L'Aquila Summit will become a landmark event on the way to a more prosperous and safe world. ♦



You might have no idea who we are.
But your business should.

We are a world leading company in global solutions for Communication Carriers,
Internet Service Providers, Mobile Operators and Multinational Enterprises.



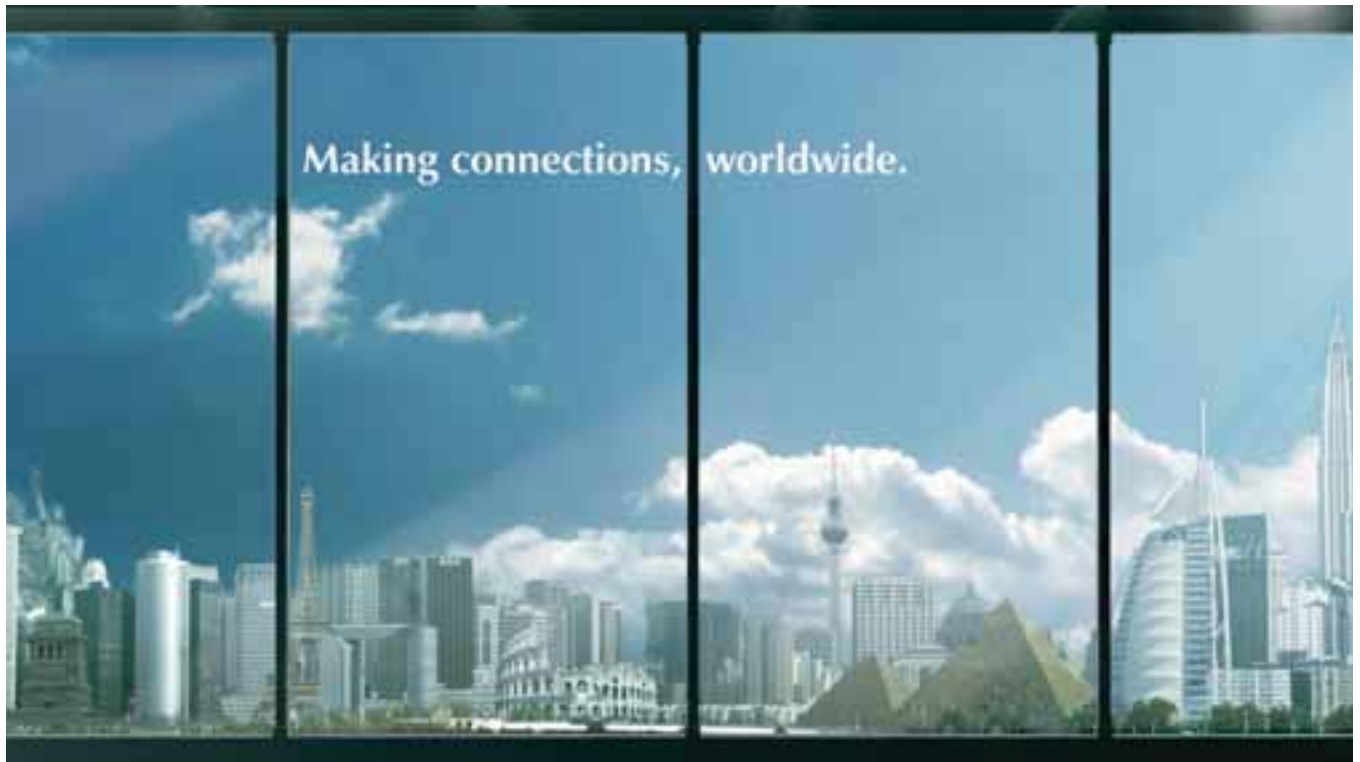
www.tisparkle.com

Making connections, worldwide.

 **SPARKLE**

TELECOM ITALIA GROUP

State-of-the-art communications



Sparkle is a fast-moving, ground-breaking player in the telecommunications world. It transports the most sophisticated communications with the highest quality and reliability through a system of unmatched state-of-the-art networks. Sparkle provides global coverage spanning from Europe and the Mediterranean Basin to Asia, from North to South America.

Sparkle is certainly a leader in the international Voice, IP & Data and mobile markets, with its strength and vitality deriving from its experience and know-how gained over the years. With an international workforce of over 1,000 and a worldwide presence in 36 countries, Sparkle transports over 19 billion voice minutes, sells over 1.6 Terabit of IP & Data capacity and has established around 4,000 corporate circuits worldwide. Furthermore, Sparkle Consulting provides hands-on expertise in starting up, operating and developing advanced telecommunications services.

Born to communicate in a fast-moving, ever-evolving world, Sparkle constantly creates new solutions to remove barriers and serve its customers globally, everyday. Sparkle is a truly global operator with a local outlook, putting its vast technological resources to their best use: anticipating and serving the real needs of real people.

With its unparalleled experience and know-how in a multiplicity of diverse markets, Sparkle offers a complete range of voice, mobile, data and IP services designed to meet the requirements of international fixed and mobile operators, ISPs, media and content providers and global multinational customers.

Sparkle is at the forefront of technological advances, investing considerable resources in developing new infrastructure and

scientific solution, while always remaining true to its original aspiration: to maintain the human side of things, and to serve man's instinctive need to communicate.

Among top European wholesale operators, Sparkle is one of the major players worldwide ranking in the top five for wholesale voice traffic. Furthermore, Sparkle IP Backbone, Seabone, ranks number one in the Mediterranean, three in Europe, and 13 globally. As a result, the Sparkle node in Palermo has been recognised as the leading internet hub for Africa. Sparkle is committed to structural expansion, with innovative, daring choices and investments to serve ever-growing, emerging markets. Thanks to its dense, capillary network, Sparkle operates successfully in the multi-regional wholesale market environment by focusing on different market segments and on geographic areas with a high potential for development.

In Europe, the Middle East, Africa, Asia and the USA, Sparkle is strengthening its global role in the IP market. Additionally, Sparkle is consolidating its own positioning as Asia's natural gateway to Europe. In all its operations, and in every market, Sparkle is committed to pursuing the highest level of success and a shining future as a global service provider.

www.tisparkle.com

 **SPARKLE**

TELECOM ITALIA GROUP



For better global governance

Global issues need global action. The combined forces of the G8 are best placed to effect this

By Taro Aso, prime minister, Japan

Last year, as the G8 host, Japan led the discussions on global issues such as the environment, development and Africa, as well as the issues directly linked to everyday life, including steep rises in oil and food prices. As a result, the G8 succeeded in sending a strong and effective message to address these issues.

The world has changed dramatically since then. We are now facing the greatest challenge to the world economy, and we need to join forces to overcome this economic crisis. This crisis has also been negatively affecting developing countries and we are expected to further intensify our efforts on development. At the same time, this is a crucial year for taking effective action to combat climate change, as we negotiate for a post-2012 framework by the end of this year.

In the midst of this rapid and far-reaching change, what group of countries is best suited to address the global challenges facing the world economy, environment and development? In my opinion, striking a good balance between effectiveness and legitimacy is key to good global governance. No single country can resolve global issues alone. It is necessary for countries to join forces to meet global challenges as a group. To this end, it is important to enhance legitimacy by engaging many stakeholders. At the same time, it is equally important for the countries willing and able to meet the responsibility of global governance to take effective action and play leading roles.

Some say the G8 is outliving its usefulness as a global framework and should be replaced by a forum such as the G20. This is not the way I see the G8.

At the G8, serious discussions take place among the countries ready to assume full responsibility for solving the most pressing global issues. Such discussions have resulted in initiatives that have significantly contributed to meeting global challenges. For example, at the Kyushu-Okinawa Summit in 2000, Japan called for the need to fight infectious diseases, and under the subsequent Italian presidency, the Global Fund to Fight HIV/AIDS, Tuberculosis and Malaria was founded at the Genoa Summit. This is a great accomplishment made possible by close co-operation between the Japanese and Italian presidencies.

The G8 is becoming increasingly relevant to global governance as the G8 countries, sharing basic values such as democracy, human rights and a market economy, have contributed to responsibly addressing any global issue.

Of course, there is no doubt that the importance of engaging emerging economies to solve global problems is rapidly increasing. The Heiligendamm Process, established at the 2007 G8 summit to strengthen the dialogue with the five emerging market economies of Brazil, China, India, Mexico and South Africa, has provided a good opportunity to enhance a sense of co-responsibility among the participating countries. Through efforts such as this, emerging economies will work toward common perspectives and purposes and share responsibility with the G8. Working together with the emerging economies toward this goal is the way to better global governance in the 21st century. When we achieve the goal, we will be much more effective in taking on a global agenda.

There are global frameworks other than the G8. The Major Economies Forum addresses the issue of climate change. The G20 summits were held in Washington DC and London to face the current financial and economic crisis. The G8 on its own cannot deal with several issues that the world faces. The G8 must work together through these frameworks with the emerging economies that can prove, by action, their willingness and capability to shoulder the responsibility of global governance, thereby exploring ways to enhance effectiveness and legitimacy. I would like to emphasise that Japan is ready to enhance ways to strengthen, with the G8 at the core, international dialogue and co-operation with emerging economies and other stakeholders.

We have reached the point where we need to find a new system that reflects new realities in the international community in the 21st century. This applies to the reform of the United Nations Security Council. Since 1965, when the number of non-permanent members was increased from six to ten, the structure of the Security Council has remained unchanged, even though the number of UN member states has tripled since its inception. The political and economic power balance in the international community has shifted dramatically. We must reform the structure of the Security Council by adjusting it to the current reality, thus strengthening its operation. I would like to stress my determination to aim for the expeditious reform of the Security Council through increasing the number of its permanent and non-permanent members, and for Japan to contribute continually to addressing issues regarding international peace and security as a permanent member of a reformed Security Council. ♦

“

At the G8, serious discussions take place among countries ready to assume full responsibility for solving the most pressing global issues

”

The 2010 Muskoka Summit

International co-operation has tackled the 2008 economic crisis head on. Looking forward to 2010, Canada will take the lead on continuing global action to secure the future for all of us

By Stephen Harper,
prime minister,
Canada

The 2010 G8 Summit, which will be hosted by Canada in Muskoka, Ontario, will be the 36th such gathering and Canada's fifth as host. For many years, the G8 has proved itself to be a highly successful group. It provides like-minded countries with the opportunity to build momentum to address the issues that matter for millions of the world's people and marshal the resources necessary to tackle some of humanity's most pressing challenges. Canada greatly values the role the G8 has played in world affairs. Next year's Muskoka Summit will be a tremendous opportunity to advance the G8's work: to advocate for open markets and free trade at a time of economic turmoil, to insist on truly global action against global warming and to champion freedom, democracy, human rights and the rule of law.

In my view, there are four broad areas where the G8 can continue to move the agenda forward in 2010: the global economy, climate change, development and democratic governance.

The level of international co-operation following the 2008 economic crisis has been unprecedented. Through the G8 and G20 working together, governments acted quickly, and in concert, to stabilise the financial system and stimulate slowing economies. They collectively committed to resist protectionist pressures. Although Canada's financial sector was clearly sound, we undertook significant economic stimulus measures to counter a broader global slowdown. And Canada went further, by unilaterally cutting tariffs and pursuing an ambitious programme of free trade and economic partnership agreements.

It is my expectation that by the summer of 2010, when world leaders gather in Muskoka, the global economy will have begun to turn the corner and renewed growth will be in sight. Nevertheless, economic issues will be front and centre at the Muskoka Summit. Leaders will need to co-ordinate actions to lift some of the temporary policy responses put in place to deal with the crisis. Leaders will also have to look for ways to speed recovery, particularly on employment. Canada will use its G8 chair next year to generate momentum to support sustainable recovery.

The international negotiations in the United Nations on climate change will culminate in Copenhagen this December. Canada is working actively and constructively to achieve an ambitious and comprehensive new agreement, one that covers the vast majority of global emissions and includes binding commitments by all major economies. At the same time, a successful agreement in Copenhagen must also support and enable sustainable growth, including through the expansion of secure and affordable global supplies of clean energy.

Achieving this goal will require leadership from Canada and its G8 partners, as well as from the other countries participating in the US-led Major Economies Forum (MEF) on Energy and Climate. A new partnership will be required among major developed and developing countries if real progress is to be achieved in the coming months. The MEF provides an important new process in this regard, one designed to provide political momentum to the UN climate change negotiations while also deepening global collaboration on the development and commercial deployment of clean energy technologies.

The G8 has long played a leadership role in international development. It includes some of the world's largest donors, which account for approximately two thirds of official development assistance. The G8 has also provided about 80 per cent of all funds for the Global Fund to Fight AIDS, Tuberculosis and Malaria and 50 per cent of all funds to the Global Polio Eradication Initiative (including

“ Through the G8 and G20 working together, governments acted quickly, and in concert, to stabilise the financial system ”



98 per cent of all national contributions). In the short term and in the context of the global economic crisis, the G8 can help free up resources for development to restore the economic growth that is essential for sustained poverty reduction. The G8 can also continue to maintain international attention on the social dimensions of development – health, education and the critical areas of maternal and childhood wellbeing.

Advancing freedom, democracy, human rights and the rule of law have been at the G8's core since its inception at the Rambouillet Summit in 1975. Major G8 initiatives on democracy have included the 1984 Declaration on Democratic Values, the 1990 Political Declaration: Securing Democracy and the 1997 Communiqué's section on democracy and human rights.

Shared values have been at the heart of the G8's success. They have helped make it an effective body that is capable of taking action quickly and in a coordinated fashion. These values will be a key theme of the Muskoka Summit because we believe they form the

foundation of just and stable societies. And we think that improved governance more generally can go a long way to strengthening fragile states at risk of failure.

The G8 is an institution with a proven record of moving agendas forward, of drawing attention to overlooked issues and, perhaps most importantly, of being able to mobilise resources to meet global challenges.

For all these reasons, I am delighted to welcome the world to Muskoka next year. Muskoka is quintessentially Canadian – a landscape that has inspired generations of poets and painters. Several thriving First Nations communities call it home. It has a bounty of natural resources, including vast forests and more than 600 lakes, bounded by rocky shores, and all just 200 kilometres north of Toronto, our largest urban centre. Not surprisingly, Muskoka has long been a peaceful refuge for city dwellers and is now a centre for eco-tourism. My hope is that in this tranquil setting, world leaders will find renewed inspiration to tackle the many pressing global issues before us. ♦

The G8: complementing the G20

Emerging and developed economies are increasingly interdependent. Strengthening global governance is a key role of both G8 and G20 leaders

By Lee Myung-bak,
president, Republic
of Korea

There is no doubt that the current global financial and economic crisis is unprecedented in its magnitude and severity. It thus requires unprecedented, globally co-ordinated policy responses. To this end, the leaders of the G20 countries – not only the G7/8 leaders, but also leaders from major emerging economies – have met twice, in Washington DC in November last year and London in April this year.

Some argue that the Washington G20 Summit marked a ‘historic power shift’. However, I maintain that it was a rather belated global recognition of the shift in the balance of global economic power that had already taken place in the last few decades. Indeed, it was a significant historical event for global governance, especially since the voices of the emerging world could be better heard in the process of addressing global issues. In fact, Korea, knowing best about the difficulties of these countries in times of crises through its recent experiences of development and of financial crisis, made a good effort to represent the interests of non-G20 countries from the emerging and developing world.

The G20 leaders in London strived to produce deliverables, with a special emphasis on assisting those crisis-stricken emerging and developing economies. For this purpose they committed an additional \$1.1 trillion to enhance the resources of the international financial institutions, to be utilised primarily for those economies and to help stimulate global demand as well.

At London, the leaders also committed themselves to a standstill and a rollback of protectionist measures. The commitment itself will certainly help the whole world, in particular the emerging and developing countries. At the third G20 summit in Pittsburgh on 24-25 September 2009, the leaders will have to devote a substantial amount of their time to see if the agreements made in London have been followed up properly. In the follow-up process, I emphasise that the leaders should pay special attention to the needs and interests of emerging and developing economies. By doing so, the credibility of the G20 summit process will be further enhanced.

Critics may point to the fact that, according to the World Trade Organization (WTO), 17 of the 20 countries in the G20 introduced protectionist measures in one form or another immediately after the Washington Summit. Those critics would probably

“ At London, the leaders committed themselves to a standstill and a rollback of protectionist measures ”

ask: what good can a standstill and a rollback do? I would respond to such an argument that thanks to the G20's commitments, as the WTO indicated, none of those protectionist measures is systemically damaging global trade. With their commitments in place, the leaders give sober second thought to resisting domestic political pressure to resort to protectionism in the midst of a worsening economic situation. Indeed, there are many similarities between the situation today and that of the 1930s. What makes the current situation different is the very fact that leaders from the major economies of the world agreed not to take protectionist measures and to make concerted policy efforts to address the severe crisis.

One may also wonder whether the G20 will replace the G7/8 as the informal global steering committee in near future. I do not think so. Once we find ways to have an appropriate division of work and a co-operative mechanism, the G7/8 and G20 process can be mutually reinforcing in dealing with global issues.

The real challenge is how to work out the appropriate division of work and the co-operative mechanism. There is little doubt that it will be a politically complex process to find the best possible way. Even then, the G7/8 leaders, together with the rest of the G20 members, should make sincere collective efforts toward this goal. It is my earnest hope that the G7/8 leaders at the G8 summit in L'Aquila take the initiative to launch such a collaboration between the G7/8 and the G20.

L'Aquila can be a good place to start this important co-operative process, since most of the non-G8 G20 leaders will be present as outreach countries through the Heiligendamm Process and the Major

“ The leaders should pay special attention to the needs and interests of emerging and developing economies ”



Economies Forum. The issues to be discussed with the outreach countries in LAquila include climate change, food security and trade. Discussion on these issues can be continued at the G20 meetings. In fact, these issues cannot be properly addressed unless all G20 members participate.

As we have witnessed through the current financial and economic crisis, the world is becoming ever more interdependent and is moving into deeper integration,

to the point where not only the problems of one's neighbours but also the problems of a far distant country can spread throughout the globe almost instantly. In this light, in addition to appropriate policy measures and institutional reforms at the national level, the G7/8 and the G20 together, on behalf of the whole global community, should exert leadership to strengthen global governance for sustained global stability and prosperity. ♦

Prospects for the 2009 L'Aquila G8 Summit

This is the first G8 summit since the G20 leaders met in Washington DC in November 2008 and London in April 2009. The relationship between these two groups should now be defined

By John Kirton,
director, G8
Research Group

On 8-10 July 2009, the leaders of the world's most powerful market democracies assemble at the newly selected, earthquake-scarred site of L'Aquila in central Italy for their 35th annual G8 summit. Italian prime minister Silvio Berlusconi will be at his seventh summit, as the only G8 leader to host it for a third time. He will welcome US president Barack Obama and Japanese prime minister Taro Aso to their first summit, British prime minister Gordon Brown and Russian president Dmitry Medvedev to their second, French president Nicolas Sarkozy to his third, German chancellor Angela Merkel and Canadian prime minister Stephen Harper to their fourth, and president of the European Commission José Manuel Barroso to his fifth.

For the fifth straight year the G8 heads will meet with their colleagues from the Group of Five (G5) emerging powers of China, India, Brazil, Mexico and South Africa. They will add, from democratic Asia, the leaders of South Korea, Indonesia and Australia for the second summit meeting of the Major Economies Forum (MEF) on clean energy and climate change. Among numerous other guests will be the leaders of Egypt, Libya and other African countries, Italy's fellow Europeans from the Netherlands and Spain, and the heads of multilateral organisations most relevant to the summit's work.

Preparations for the summit include a dense web of meetings of the G8 leaders' personal representatives or sherpas and of G8 ministers: for finance on 13-14 February in Rome, 24 April in Washington DC and 12-13 June in Lecce; for labour on 29-31 March in Rome; for agriculture, for the first time ever, on 18-20 April in Treviso; for environment on 22-24 April in Siracusa; for energy on 24-25 May in Rome; for justice and home affairs on 29-30 May in Rome; for development on 11-12 June in Rome; and for foreign affairs on 25-27 June in Trieste. Many G8-centred groups have been working at the level of senior officials. The most notable is the Heiligendamm Process of structured dialogue between

the G8 and G5 on investment, innovation, development and energy. It will deliver its final report at L'Aquila.

This will be the first G8 summit since the G20 leaders of systemically significant countries first met in Washington in November 2008 and then in London in April 2009. They are due to meet in Pittsburgh in September 2009 and may perhaps again, under the leadership of South Korean president Lee Myung-bak as G20 chair in 2010. The advent of G20 summitry now requires the G8 and G20 to define what the relationship between these two central clubs for global governance will be.

At L'Aquila, the G8 leaders will confront unusually large and looming global challenges. The first is the worst financial and economic crisis since the Great Depression of the 1930s and the deep recession that still has all the G8 and much of the world in its grip. The leaders will be asked to address, more seriously than ever, the issues of financial regulation and reform, macroeconomic management and trade. They will try to nurture the economic 'green shoots' now appearing in G8 economies into a reliable recovery, without letting loose unsustainable fiscal deficits, government debts, tax burdens or the inflationary spirals their predecessors conquered at such cost during the 1980s. They will also attack the trade, investment and financial protectionism now spreading and will promote further liberalisation, notably by trying to conclude the badly overdue Doha Development Agenda negotiations that were launched soon after Italy hosted its last G8 summit in 2001.

The second challenge is climate change. The incoming scientific evidence shows that this problem – of potentially existential dimensions for some countries and conceivably even human life on the planet itself – is more ominous and urgent than the most recent report of the Intergovernmental Panel on Climate Change said. With the United Nations 1997 Kyoto Protocol now a clear failure, and with the UN



system still deadlocked as its December Copenhagen conference to devise a successor draws nigh, the G8 and its MEF partners at L'Aquila will identify the key principles upon which a new, effective regime can be based. They will build on the agreement at last year's summit in Japan that all established and emerging powers must control their carbon and that bottom-up, sectoral approaches can help.

The third challenge is development, where the current economic crisis harms the poorest the most. They and the developed countries are also afflicted by shortages of affordable, accessible, safe energy, food and water, even as natural disasters and health pandemics such as H1N1 swine influenza add to the heavy burden they face. The G8 will be hard pressed to meet its many past commitments to give access to treatment to all HIV/AIDS sufferers, to cut tuberculosis and malaria in half and to eliminate polio, all by 2010. The global community will be equally hard pressed to deliver its Millennium Development Goals by 2015, unless the G8 leaders and their powerful partners at L'Aquila ambitiously take the lead.

The fourth, overarching, challenge is creating effective global governance for a world that increasingly shares a single fate. The G8 needs to help the UN grapple with nuclear proliferation in North Korea, Iran and elsewhere and with regional conflicts and high seas piracy. It needs to lead in promoting democracy and combating terrorism in the Middle East,

G8 leaders head for a group photo at the Hokkaido Toyako Summit

“ The leaders will be asked to address, more seriously than ever, the issues of financial regulation and reform, macroeconomic management and trade ”

Afghanistan, Pakistan and other struggling states. The G8 will also be needed to assist the G20 summit deliver its many bold promises on financial stability, economic growth, trade, investment, development, international financial system reform and climate change. The G8 will thus be asked to reform itself to mobilise better the power and potential of the world's rapidly rising G5 powers, as both groups get to work in L'Aquila, look forward to their Canadian-hosted summit on 25-27 June 2010 in Muskoka, Ontario, and prepare to launch a new round of G8-plus summitry in France in 2011. ♦

Recovery and reform

The G8 has a key role to play in repairing the world's broken economy. History shows that co-operation is crucial

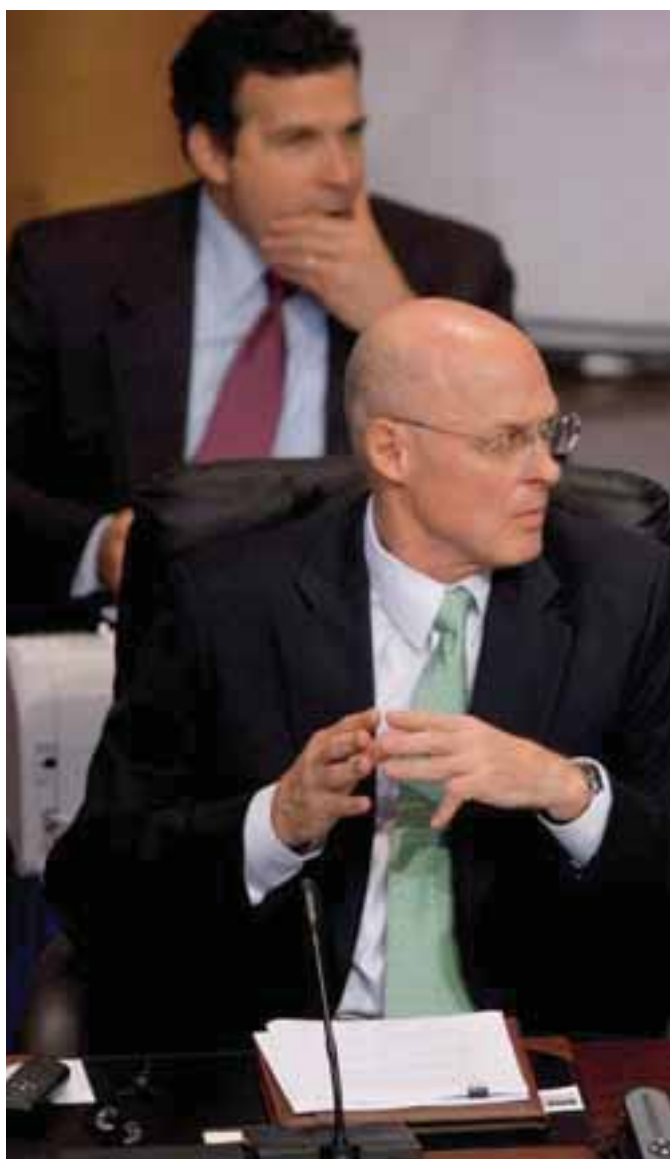
By Daniel M Price, partner at Sidley Austin LLP and former assistant to the US president for international economic affairs and former G8 and G20 sherpa

With two successful G20 summits within six months, some wonder whether the G8 can still play a meaningful role in global economic issues or whether it should instead focus on other elements of the traditional G8 agenda, such as public health, development, food security and education.

In fact, there is much the G8 can and should do to advance global economic recovery and regulatory reform. As the leading developed economies, and as hosts to the world's principal financial centres, the G8 must play a leadership role in addressing the fragmentation and protectionism already manifest in domestic stimulus actions and financial market reforms. History shows that when the G8 gets it right, prospects for broader co-operation improve. But if the G8 countries continue on their current course, the aspirations and commitments in the successive G20 leaders' statements will likely not be realised. This article looks at the two G20 summits and what the G8 should do when they gather in Italy this summer.

As the severity and breadth of the financial crisis unfolded late in 2008, US president George Bush decided to convene a meeting of leaders to fashion a global response. Some in Europe claim that they foisted the summit on an unwilling United States. This is not the case. The president saw the need and decided that a summit must include both major developed and developing countries – over the initial objections of some Europeans.

President Bush recognised that participation by a diverse group that included major emerging markets was essential for three reasons. First, the financial crisis, rapidly becoming a broader economic crisis, would significantly affect developing countries. Second, any agreement on principles and specific actions, in order to have broad legitimacy, required the support of developing countries. And third, because a critical piece of the puzzle related to reforming international institutions such as the International Monetary Fund (IMF) to enhance the voice of major



emerging markets in their governance, such countries had to be at the table.

The G8 Leaders' Statement on the Global Economy, issued on 15 October 2008, itself explicitly stated that "stabilising markets and restoring confidence [and implementing] changes to the regulatory and institutional regimes for the world's financial sectors... needed to remedy deficiencies exposed by the current crisis... must involve both developed and developing countries." In short, the crisis was global so the solutions had to be global – not just made in Europe or America.

Rather than invent a new group or proceed in an ad hoc fashion, President Bush decided to elevate the G20 from a forum for finance ministers to the leaders' level. The G20 finance ministers and central bankers, formed in the wake of the 1997-99 Asian financial crisis, was the logical body to address problems related chiefly to financial markets and institutions. It had several additional advantages: the G20 finance ministers and deputies had established working channels essential to coming to grips with the financial crisis promptly and working quickly to prepare the summit – in 24 days. And given that the G20 was an established grouping, it minimised the diplomatic difficulty of picking and choosing who should attend.

“As the severity of the financial crisis unfolded in 2008, Bush decided to convene a meeting of leaders to fashion a global response”



US treasury secretary Henry Paulson and US president George W Bush with their advisers David McCormick and Daniel Price, at the first G20 leaders' summit, Washington DC, November 2008

Even so, at the Washington event, a number of Asian countries complained that European participation was overweighted, with Spain and the Netherlands attending at the pre-emptive invitation of the European Union presidency, then held by France.

Two groups worked on the preparations for the Washington Summit: the G20 finance deputies and the leaders' representatives, or sherpas. Preparations drew on the work of the plan of action adopted by finance ministers and central bank governors and endorsed by the IMF's International Monetary and Financial Committee. That action plan committed the G7 "to continue working together to stabilise financial markets and restore the flow of credit, to support global economic growth". It included five specific steps that the G7 would take, forming the basis of both the G20's leaders' statement and the specific plan of action adopted in Washington.

In the run-up to Washington, there was much inflated language about the end of capitalism and the need for a new Bretton Woods arrangement. Indeed, as reported in the *Financial Times*, France's president, Nicolas Sarkozy, declared that capitalism must be "refounded" because "self-regulation is

finished. *Laissez-faire* is finished. The all-powerful market that is always right is finished." This approach reflected largely a rhetorical bidding war within Europe over leadership in the crisis. President Bush filtered out the noise and concentrated on achieving concrete results.

The president understood that it was impossible to fully address the unfolding crisis at a single gathering – especially one pulled together over only a little more than three weeks. Thus, he directed his officials to focus on two deliverables: first, a statement of principles to guide reform and recovery efforts, and, second, an action plan with concrete steps to be taken in the near and medium terms.

After intensive group and bilateral consultations, the US took the pen to prepare the first draft of the principles and action plan. Following face-to-face discussions, including a drafting session that ran through much of the night before the summit, the representatives of 20 diverse economies, at very different stages of development, reached agreement on a five-page leaders' declaration and a 47-point action plan. The core principles included strengthening transparency and accountability, enhancing sound regulation, promoting integrity in financial markets,



We share a conviction that by working together, we can restore the global economy to the path of long-term prosperity



reinforcing international co-operation and reforming international financial institutions.

While there was broad support for enhanced regulation, the leaders were also keenly aware of the risk of overreacting. They sounded a cautionary note not to “hamper economic growth and exacerbate the contraction of capital flows, including to developing countries”. Importantly, the leaders recognised that reform efforts would “only be successful if grounded in a commitment to free market principles, including the rule of law, respect for private property, open trade and investment, competitive markets, and efficient, effectively regulated financial markets.”

The leaders unanimously rejected protectionism. They agreed that they would not raise new barriers to investment or trade in goods and services for one year. While 17 of the 20 countries would soon backslide and erect such barriers, at the time the sentiment was sincere.

These commitments revealed a deep and broadly understood spirit of co-operation among the leaders. As President Bush remarked in his toast on the eve of the summit: “We share a determination to fix the problems that led to this turmoil. We share a conviction that by working together, we can restore the global economy to the path of long-term prosperity.”

As soon as the Washington Summit concluded, four working groups were established, built on the four core principles. Their work laid the foundation for the London Summit.

As the financial turmoil continued in the first quarter of 2009, it became readily apparent that the April London Summit would need to address both the financial crisis and the deepening economic crisis. Before the summit, press reports contributed to a sense of conflict between countries that wished further stimulus and those that wanted financial regulation reform. Some developed and developing country leaders played the “who caused the crisis” blame game or demonised certain institutions or products¹.

Despite the apparent disagreements and populist rhetoric, in London the G20 leaders built on the co-operation and goodwill that was forged in Washington in November to develop a co-ordinated approach to global economic stimulus, financial market stabilisation and regulatory reform. This included increased funding for multilateral development banks, greater resources for developing countries and enhanced support to encourage trade, including through commitments for an additional \$250 billion in trade financing.

The regulatory reform agenda also progressed in a manner consistent with the commitments made in November. These efforts included strengthening and expanding the role of the Financial Stability Forum by transforming it into the Financial Stability Board (FSB) and charging it with co-ordinating regulatory reform efforts and developing international best practices.

In addition, the G20 renewed its commitment to resist protectionism and vowed that its members “will not repeat the historic mistakes of protectionism of previous eras”. To strengthen this commitment, the G20 charged the World Trade Organization (WTO) with monitoring and reporting on the protectionist impact of recovery efforts.

In spite of successive summits where leaders pledged co-operation on regulatory reform and to refrain from protectionism, there is already evidence of contrary behaviour, particularly by members of the G8. Accordingly, the best use of the LAquila Summit is for G8 leaders to repair those measures they have themselves proposed or adopted that are protectionist, or that could result in a fragmented approach to regulatory reform.

The list, by no means short, is growing. The EU has proposed requiring that credit ratings be issued only by agencies established in the EU. Similarly, the EU has mandated that credit default swaps be cleared through EU-based central clearing parties. Other countries are considering similar territorial restrictions that would fragment the market. Recently proposed EU regulations on hedge funds and other alternative investment funds would prohibit fund managers located outside Europe from accessing the EU market, unless they operate under regulations deemed ‘equivalent’.

Europe is not alone. The US will not issue H-1B visas to recipients of certain federal funds. The Buy American provision of the stimulus bill, although ostensibly written to comport with US international obligations, has resulted in proliferating protectionist restrictions in other spending bills, as well as overreaching by both federal and state officials seeking to implement the ‘spirit’ of Buy American. And several countries are considering new leverage limits for banks that encourage local lending and discourage lending abroad. Such limits could have a devastating effect on the availability of capital in developing countries.

Other such measures may be identified by the FSB and the WTO. The G8 should address these as well. Protectionism and fragmentation hinder economic recovery and erode the spirit of co-operation that is necessary to address global problems.

The most important signal that the G8 (and the G20) can send, as always, is that countries are co-operating to respond to the global financial and economic crises. The markets will not draw confidence from grand statements or attempts to fundamentally restructure the global financial architecture in the abstract. Markets have shown that they respond favourably to efforts to address systemic problems in a thorough and co-ordinated manner.

The G8 must continue the progress begun through the G20, resolve conflicts among its members and chart a course for further progress before the next G20 leaders’ meeting. As is evident from the impact of the G8 statement last October, although G8 action does not dictate the course of the G20, it can helpfully frame and facilitate broader discussions and co-operation. ♦

¹ See *BBCNews.co.uk*: ‘Brazil’s Lula raps “white” crisis’, 27 March 2009: ‘President Lula of Brazil blamed “the irrational behaviour of white people with blue eyes”’; *Timesonline.co.uk*, ‘Sarkozy steps aside but still wants to be “Europe’s leader”’, 2 January 2009; ‘President Sarkozy called for a “new world order for capitalism”’; *Reuters.com*, ‘Italy says to host G20 leaders at July G8 summit’, 9 March 2009; ‘President Berlusconi predicted that “we will prepare a legal system, new rules to stop the phenomenon of excessive securitisation in the financial system, the use of derivatives that led to this crisis”’.

Can one week change history?



**Yes,
it can.**



From September 16-22, 2008, Vestergaard Frandsen pioneered the **Integrated Prevention Demonstration (IPD)** in Lurambi, Kenya, which combined multiple disease control interventions.

Forty-eight thousand people took part in this week-long HIV counselling and testing campaign. To encourage participation, residents received a CarePack™ containing a PermaNet® long-lasting insecticide-treated bednet (LLIN), LifeStraw® water purifier, condoms and educational materials for the prevention of malaria and both diarrhoeal and sexually transmitted diseases.

For the first time in history, a campaign provided a care package of health interventions as encouragement for voluntary HIV counselling and testing. By offering a lifesaving CarePack™, Vestergaard Frandsen has enabled a majority of the population to know their HIV status, while protecting them from three of the largest killers in Kenya: malaria, diarrhoea and HIV.

VESTERGAARD FRANDSEN

DISEASE CONTROL TEXTILES

www.vestergaard-frandsen.com

Call to action

When the leaders of the eight most industrialised countries and the five largest emerging market economies meet in L'Aquila this July, their challenge will be to set a strategy that rethinks how the world economy operates

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

The world is in the midst of the deepest and most synchronised recession of a generation. The credit squeeze, negative wealth effects and a generalised loss of confidence are dragging down economic activity everywhere. The latest economic forecasts from the Organisation for Economic Co-operation and Development (OECD) anticipate that these factors will continue to weigh heavily on economic activity before a policy-induced recovery gradually builds through 2010. The major non-OECD economies are not spared from the collapse in world trade and the lower appetite for risk. They also have an abrupt slowdown in growth.

The contraction in output is rapidly turning into an employment and social crisis. Labour market conditions are weakening throughout the world. The unemployment rate in the OECD area is projected to approach 10 per cent by 2010, compared with only 5.6 per cent in 2007. The crisis could thus swell the ranks of the unemployed in the OECD by about 25 million – the largest, most rapid increase in OECD unemployment in the post-war period. Another consequence of this highly synchronised recession is an exceptional degree of slack, which pushes inflation rates down to close to zero in several OECD countries. Some will experience falling price levels.

However, since March, signs of light at the end of the tunnel suggest that the recession is slowing down. Conditions in financial markets have improved. Recent economic indicators suggest that the pace of contraction in economic activity has lessened among OECD countries, with some non-OECD countries being further along and China already seeing some recovery. Nonetheless, confidence in the health of the banking system remains fragile: bank lending has lost further steam and there remain substantial banking capitalisation needs. In short, the recession is not yet over. Further failures of financial institutions cannot be excluded.

A policy response along two axes is required. First, the immediate priorities are to revive demand, address the social impact of the crisis and repair the financial system. Second, action to these ends should be as consistent as possible with a general reorientation of policies across a wide front, so the exit from the crisis



leads to a stronger, more sustainable economic growth paradigm. An exit toward 'business as usual' is not an option.

Macroeconomic stimulus is essential to cushion the fall in economic activity and prevent a deflationary downward spiral. Governments and their monetary authorities have already taken unprecedented action through fiscal stimulus and monetary easing, averting an even-more pronounced recession. It remains essential to maintain these expansionary policies. For maximum impact, they should be accompanied by well-designed employment and social policies to help vulnerable workers and low-income households.

In particular, income and re-employment support should be targeted at workers in greatest need.

“

The priorities are to revive demand, address the social impact of the crisis and repair the financial system

”

Simultaneously, a decisive step should be taken to scale up resources for effective active labour market programmes, to preserve the principle of mutual obligations and to ensure that disadvantaged jobseekers do not lose contact with the labour market and drift into inactivity. A rapid expansion of these measures not only contributes to stabilising aggregate demand, but also ensures that those made redundant receive help when they need it most. Advanced economies also have a duty, and self-interest, to help poorer countries tackle the problems of unemployment accentuated by the crisis.

In the longer term, however, expansionary monetary policies and the enormous liquidity now being injected may lead to inflationary pressures – if not promptly reversed once the recovery begins. Likewise, fiscal policy needs to take into account

Well-designed employment and social policies must help vulnerable workers and low-income households



long-term sustainability. Sustainability concerns are already putting upward pressure on bond yields in many countries. Keeping such pressures in check hinges on establishing credibility for a return to fiscal sustainability. Designing stimulus measures that are explicitly temporary or easily reversed, strengthening fiscal frameworks and acting now to address long-term spending pressures, such as outlays on healthcare and pensions, would support such credibility. Once a recovery is on track, actual consolidation measures should follow up.

Having an exit strategy is therefore important. Co-ordination is desirable, as countries acting alone may find it difficult to pull back, in an orderly way, the exceptional measures currently needed.

“ The OECD is working with the G8 on common standards of integrity, transparency and propriety ”

The recovery hinges on the ability and willingness of banks to extend credit. Efforts by governments and their monetary authorities to jump-start credit have been substantial. Monetary easing, liquidity injection, interbank loan guarantees and equity provision for troubled financial institutions have managed to prevent a worse meltdown in the financial system. However, more systemic financial sector stabilisation is needed. A prerequisite is to deal with impaired bank assets and concerns about bank solvency to restore credit supply and boost confidence in financial markets.

The financial system must also be reformed to prevent similar crises, while preserving the vital role of financial markets in marshalling and allocating capital and monitoring its use. This will involve strengthening and streamlining the prudential oversight of financial and capital markets, addressing the moral hazard issue and plugging the gaps and inconsistencies in regulatory regimes. It also requires adjusting those government interventions, features of compensation schemes and corporate governance arrangements that bias incentives toward excessive risk-taking and distort lending patterns.

The broader need is to rethink how the world economy operates. Here, the OECD is forging its contribution. Its *Strategic Response to the Financial and Economic Crisis* makes the case for addressing both the failures of the financial system and the policies that can make economies more resilient at several levels. It aims to identify and preserve the features of OECD economies that have worked well and brought important benefits – not least growth – while correcting those elements that have caused such large-scale problems.

This means keeping markets open and avoiding new protectionism. It is imperative to avoid the risk that the crisis leads to a tit-for-tat escalation of barriers to trade and investment. A quick, successful completion of the Doha round of trade negotiations would contribute to supporting world growth, boost confidence and demonstrate a commitment to competitive, open markets.

However, one cannot pursue market opening and growth policies if business continues as usual. There is a need to restore trust in globalisation and to strengthen the functioning of all markets. Here, the OECD is working with the G8 on the possibility of developing common principles and standards of integrity, transparency and propriety in economic and financial activities. It is also identifying best policy practices and reforms that support a better functioning market-based economy. This includes work on fighting corruption and money laundering, strengthening corporate governance and combating tax evasion. Indeed, the OECD's framework for exchanging tax information is the benchmark used by an increasing number of governments.

Finally, the crisis should not be an excuse to relax or weaken efforts to tackle global challenges such as climate change. Economic stimulus packages must not lock in inefficient or polluting energy technologies, but must instead promote clean alternatives. At the same time, the reduction of greenhouse gas emissions through revenue-generating instruments, such as carbon taxes and auctioned tradable emission permits, can assist the fiscal consolidation that will be necessary once the crisis has passed. ♦

The shadow of Crown Prince Alois von und zu Liechtenstein: Liechtenstein has agreed to ease its strict bank secrecy law by committing to OECD standards on tax transparency and data exchange





INVESTING IN PARTNERSHIPS TO STOP MALNUTRITION

Development in Africa is one of the priorities of this G8 meeting in L'Aquila.

Since 2001 when African leaders first attended the G8 Summit to present their ideas for a New Partnership for Africa's Development much progress has been made in terms of economic growth, poverty reduction and the spread of democracy. That progress is now threatened by global financial turmoil. Africa has fallen behind in its efforts to meet the Millennium Development Goals set by the global community in 2000 in an effort to end extreme poverty, hunger and malnutrition.

The G8 has made key commitments to development in the past particularly in the area of health. The Global Fund to fight HIV-AIDS, TB and Malaria was initiated at an earlier Summit as was the innovative approach to funding vaccine research and access to immunisation that led to the creation of GAVI.

Yet there is one innovation which has huge potential to improve the health of millions of people

that has not yet received the attention it deserves from the G8.

It is time that the G8 turned its attention to malnutrition. It causes the deaths of 3.5 million children each year. It accounts for 11 percent of the global burden of disease. About 178 million children are stunted as a result of insufficient food, a vitamin and mineral poor diet and disease. The effects of malnutrition impact negatively on performance at school and in later life.

Malnutrition is estimated to cost developing countries 2 to 3 percent of GDP annually. Micronutrient supplements and food fortification to fight malnutrition cost very little. They took two of the top three places on the Copenhagen Consensus list of cost effective development investments. They have tremendously high benefit compared to costs!

We owe it to our children and to future generations to invest the relatively small sums required to ensure that vulnerable populations, in particular women and children have access to nutritious foods and healthier lives.



Marc Van Ameringen
Executive Director
GAIN - Global Alliance for Improved Nutrition

Some of the best business opportunities are in Brazil. And so is the best investment partner: Itaú.

Itaú is the largest private bank in the southern hemisphere and one of the 20 largest banks in the world. We are committed to providing state-of-the-art services to our clients and to building long-term relationships based on transparency and trust.

Itaú. The best investment partner in Brazil.

- Best Managed Company in the Banking and Financial Sector in Latin America for the third consecutive time, and the bank with the Best Corporate Governance in Brazil – Euromoney
- The Best Brazilian Bank for the last 20 years – Latin Finance
- The only Latin American bank in the Dow Jones Sustainability World Index since its inception, for the ninth consecutive time
- Emerging Markets Sustainable Bank of the Year –Financial Times



São Paulo - 55 11 3073 3515 New York - 1 212 207 9056
 Tokyo - 81 3 3539 3838 Hong Kong - 852 3657 2388
 Shanghai - 86 21 3311 3466 London - 44 207 663 7845
 Lisbon - 351 21 381 1000 Frankfurt - 49 69 9592 5365
 Madrid - 34 91 411 7867 Paris - 33 1 5343 2750
 Dubai - 971 4 381 0650





Restoring growth

G8 leaders are faced this year with the worst economic outlook since the oil crisis of the mid-1970s. They need to face their responsibilities with equanimity

By Robert Fauver, former US under secretary of state for economic affairs and former G7 sherpa

The G8 summit in Italy takes place during the most difficult economic period in summit history. The heads of state and government will meet at a crossroads of economic policy making. They can choose either to go it alone or to work together. Given the recent rise of the G20 as a forum for addressing economic problems, the G8 must display its unique value as a policy co-ordinating body, or it will continue its recent decline as a key forum for industrial country leaders.

The International Monetary Fund (IMF) opened its April 2009 World Economic Outlook with the following statement:

“The global economy is in a severe recession inflicted by a massive financial crisis and acute loss of confidence. While the rate of contraction should moderate from the second quarter onward, world output is projected to decline by 1.3 per cent in 2009 as a whole and to recover only gradually in 2010, growing by 1.9 per cent. Achieving this turnaround will depend on stepping up efforts to heal the financial sector, while continuing to



support demand with monetary and fiscal easing.”

On the real growth side, this year the IMF sees the first negative world growth rate in decades, with only a modest 2 per cent growth in 2010. That modest growth occurs outside of the industrial countries. No growth is anticipated for the industrial countries as a group. Furthermore, the projected gradual recovery in 2010 is predicated on increased efforts by governments to stimulate their respective economies.

Given these circumstances, the leaders go to the Italian G8 summit facing the most serious global economic situation since the first oil crisis of 1974-75. Recession in industrial countries, significant growth slowdown in the developing world, declining rates of world trade growth coupled with creeping protectionism, rising unemployment and significant external imbalances will all need to be addressed.

In the early days of summitry, the leaders addressed directly – and jointly – the macroeconomic challenges they faced. During the 1970s and early '80s, the G7 finance ministers and central bank governors led their leaders into the annual economic summits focused on shared responsibilities and co-ordinated macroeconomic approaches to existing economic

Recession in industrial countries, rising unemployment and significant external imbalances will all need to be addressed

“ Joint actions provided greater results than ‘go it alone’ approaches to economic imbalances ”

problems. These early summit meetings concentrated on the concept of co-ordinated and co-operative economic policy formation. While this does not imply that countries gave up their national sovereignty, it does indicate that they worked hard to assure that their individual policy approaches were synchronised with those of other major industrial countries. Leaders recognised that joint actions provided greater results than ‘go it alone’ approaches to economic imbalances. They understood that they shared responsibility for managing the world economy – and shared blame for



Leaders must address the expected growth imbalances by adopting a co-ordinated approach



its failings. Macroeconomic and exchange rate policies thus tended to be more or less in line with the global requirements of the times.

From the early 1990s onward, the G7 finance ministers and central bankers tended to move away from this co-operative and shared approach to formulating domestic economic policies. And leaders followed suit. While the annual summit communiqués grew in length, the attention to co-ordinated and co-operative macroeconomic policy formulation became essentially non-existent. Leaders widened the nature of the summit discussions, by including a broad range of new issues, but they significantly reduced their attention to macroeconomic conditions and the required policy adjustments. It is time for leaders to go back to the earlier approach.

In the absence of a co-ordinated approach – with shared responsibilities – to stimulating economies in

around the world – both in the developed world and in the developing world. The world is on the cusp of nationalistic trade policies that – if adopted – will lead the world into a considerably more difficult situation. Industrial country leadership on the macroeconomic front can work to prevent this costly outcome.

Leaders must address the expected growth imbalances by adopting a co-ordinated approach to monetary and fiscal policies. According to IMF data, the output gap in both 2009 and 2010 is roughly the same in the United States as in Europe. Yet the fiscal stimulus provided by the US is more than twice that provided in Europe.

The US and Japan are putting in place significant fiscal policy stimulus combined with monetary policies aimed at injecting liquidity into the economy. As a result, the US will likely begin to emerge from the current recession in late 2009 or early 2010. And Japan should follow closely behind.



Without a shared expansion effort, growth imbalances will result in systemic instability in both financial and foreign exchange markets

the industrial world, the major countries will witness an uneven and slow global economic recovery. Some countries that have adopted fiscal and monetary stimulus programmes will lead the real economy recovery. Other major countries will continue to reject monetary and fiscal policy easing and will sit back and rely on export growth to re-stimulate their domestic economies. Such an outcome will inevitably cause already large external imbalances to grow even wider. Additionally, the employment performance will be uneven, with rising employment in the stimulating countries and lagging employment growth in the ‘waiting’ countries. Furthermore, foreign exchange market pressures will likely emerge as a major problem in the next year or so. Without a shared expansion effort, growth imbalances will result in systemic instability in both financial and foreign exchange markets.

The LAquila G8 Summit has the opportunity to prove to the world community that the industrial country leaders accept the responsibility for setting the stage for a global recovery. By leading, the G8 leaders can also help prevent a return to protectionist trade policies

On the other hand, Europe has been less committed to enacting fiscal policy stimulus. Germany in particular is expected to experience a sharp economic downturn during 2009 with little likelihood of a recovery in 2010. At the April G20 meeting in London, Europe – led by Germany – blocked efforts at reaching a group commitment to fiscal stimulus. Should Europe fail to recover in 2010, the world should expect that external imbalances will deteriorate, especially in the United States. And rising external imbalances tend to increase foreign exchange market pressures and instability.

It is very important for the G8 leaders, first, to endorse co-operative and co-ordinated fiscal policy stimulus packages at their upcoming summit. Second, the leaders must commit to monetary policy easing in support of the fiscal stimulus. Third, they need to reject trade protectionist policies. Fourth, leaders need to help restore confidence in the global economy by endorsing a significant increase in IMF capital and lending capabilities. And, finally, leaders need to be leaders. They must take active ownership of the economic problems they face and work in harmony to solve them. ♦

Azerbaijan: Stable growth amidst challenges

Dr. Jahangir F. Hajiyevev, Chairman of the Board, International Bank of Azerbaijan

Azerbaijan and its banking system have fared well during the global financial crisis. Early moves to reduce debt, prudential government policies and conservative asset management have all helped Baku avoid the twin deficits of debt and export imbalances hobbling most emerging markets. Azerbaijan's financial system and economy remain stable and growth oriented. Baku's leadership has managed to maintain strong liquidity and bolster national reserves as market stabilisers, if needed. Initially insulated by its less mature financial systems, the crisis, ironically, has helped create a healthy slowdown of rapid economic growth and stem double-digit inflation.

Economic pressures, nevertheless, have downsized record growth rates in the fastest-growing economy in the world by half. The IMF projects 6 per cent growth in non-oil sector real gross domestic product and 18 per cent in the energy sector for 2009, but this is against 2 per cent expected growth for the Central Asia and Caucasus region, and 0 per cent worldwide. Azerbaijan remains poised for growth but at a more measured and fiscally-disciplined pace amid global market challenges.

The International Bank of Azerbaijan (IBA) is doing its part to contribute to stability, growth and job creation. The bank manages \$5.2 billion in total assets and is the largest bank in Azerbaijan and the region. As the National Development Bank of Azerbaijan, IBA is deeply committed to the accelerated pace of economic diversification in non-oil sector growth and of the private sector reforms that helped earn Azerbaijan the World Bank's ranking as the "top business reformer globally" in its *Doing Business Report 2009* annual index of 181 countries. Improvements in the ease of doing business are enhancing the development of an entrepreneurial culture and the small- to medium-sized businesses that give true dynamism and resiliency to markets.

Baku is navigating the crisis and is committed to developing its infrastructure as a financial and business hub for the region. IBA paid \$800,000 million of \$1 billion in debt in 2008 on schedule and without assistance. We offer domestic and international investors strategic advantages:

- Stable performance and a customer base that continues to grow;
- Status as the largest creditor of the national economy;
- Confirmed ratings from Fitch's of BB+ and Moody's at Baa2;
- A well diversified asset base;
- 42 per cent of the country's bank assets and 50 per cent of its customers;
- The strong support and trust of its customers, investors and shareholders;
- Continued expansion of branch networks and international offices.

IBA invests in strategic and sustainable assets that enhance economic stability and job creation for the long term. We are beginning to move beyond an energy-dependent economy. Large- and medium-scale infrastructure finance of regional



railroads, airports and roads in many areas are reaching completion and opening up remote regions, as well as the first direct rail links from Baku to London, through Georgia and Turkey, for the first time since the 19th Century. IBA's investments in agriculture have revitalised or created new farming industries.

These investments will soon bring 42,000 hectares of new land under cultivation among cotton, hazelnut, tobacco and silk production projects, creating thousands of jobs. These sectors create critical supply chains of employment for skilled and unskilled labor. The region's first Methanol and fertilizer plant will soon become operational as well as the region's first biofuel venture to produce cottonseed oil. Environmental rehabilitation, through both brownfield and greenfield projects, under the State Oil Company of Azerbaijan (SOCAR) and the World Bank, are bringing very new state-of-the-art technologies to the clean up of the Bay of Baku on the Caspian Sea.

Azerbaijan has fared well but this amplifies our responsibility to use resources vigilantly. At IBA, we believe that bankers are guarantors of the public trust and that Azerbaijan can serve as the anchor for economic stability in the region.



**THE INTERNATIONAL BANK
OF AZERBAIJAN**

www.ibar.az

Mapping the route to recovery

A week in politics is a long time, but in economics it is even longer. Is the G20 London Summit fading from memory?

By Paola Subacchi,
Chatham House

It seems like ages since the G20 leaders gathered in London on 2 April to “face the greatest challenge to the world economy in modern times”. Even if the London Summit is separated from the G8’s LAquila Summit by only three months, it feels as though there is a wider and deeper division between the two. This is not only a matter of shifting agendas and upgrading one forum at the expense of the other. What has changed is the declining sense of the need for urgent action to halt the crisis and stop any rise in protectionism. The world economic outlook, however, is no better intrinsically than it was a few months ago. The main developed economies are still contracting, and this has prompted both the International Monetary Fund (IMF) and the European Commission to downgrade their most recent forecasts sharply. Japan is the world’s most troubled economy, with a projected contraction of 6.2 per cent in 2009 according to the IMF’s spring forecasts – a substantial revision from the projected 2.8 per cent drop made back in January. The euro-area is also under considerable stress, with the economy expected to contract between 4 per cent (according to the European Commission) and 4.2 per cent (according to the IMF) in 2009. Again, these numbers are substantial downward revisions of the more optimistic forecasts made earlier by the commission (-1.9 per cent) and the IMF (-2 per cent). According to the IMF the US economy will contract by 2.8 per cent this year – instead of 1.6 per cent as earlier forecast.

The picture is bleak. Most economists agree that economic growth will return to positive territory only in mid to late 2010. The outlook could be even bleaker as a result of the existing problems in the US banking system. However, the most recent confidence indicators signal more optimism. As economies seem no longer in freefall and the pace of contraction has slowed down, this is already a good reason for feeling more positive. It is the sense that the worst may be over, rather than any precocious ‘green shoots’, that makes the difference between the preparation for the LAquila Summit and the weeks before the G20 in London.

There was a tangible sense of relief after the London Summit. Because of the many interests involved,

divergent views and a rather novel format, with developed as well as developing countries at the table, the risk of derailment was high. This was especially so given the insistence of the United States, the United Kingdom and Japan on the G20 committing to fiscal stimulus packages to stop the crisis and restore growth. In the end, G20 leaders focused on sharing the burden and co-ordination, rather than insisting on specific fiscal policy measures. As for concrete action, they focused on immediately increasing systemic capacity for crisis management through the expansion of the IMF lending facilities and the creation of a flexible credit line that grants rapid upfront financing in large amounts for “strongly performing economies that needed insurance to protect them from crisis fallout”. In addition, they agreed to make the IMF’s lending and conditionality framework more flexible, to address “effectively the underlying causes of countries’ balance of payments financing needs”.

The need for greater resources for the international financial institutions had increased since November 2008, given the intensity of the crisis and the growing number of emerging economies in vulnerable positions. The agreement in London is innovative as it combines various proposals – new arrangements to borrow, special drawing rights, gold sales and market borrowing for the IMF. Actual numbers, however, remain ambiguous, particularly the breakdown of the financial resources allocated to the IMF. Some countries or regions, such as Japan and the European Union, have committed resources directly to the IMF. The amount of funds so far raised is not yet near the total \$500 billion that the G20 leaders indicated as necessary to provide appropriate assistance to countries in financial need.

The fact that other G20 countries, notably China, are considering contributing to IMF liquidity is a significant consequence of the London Summit. In November, China had made it clear that supporting its domestic economies was the most pressing policy priority and that it was therefore unwilling to contribute funds to IMF liquidity. Such a change of direction is critical both in terms of resources for the IMF and China’s engagement in multilateral institutions.

“The main developed economies are still contracting, and this has prompted both the IMF and the European Commission to downgrade their forecasts sharply

”



The London Summit achieved two critical outcomes: providing the resources to help countries in serious trouble and so avoid further contagion, and showing that co-operation is achievable – provided that the goals are manageable. These two outcomes not only helped restore confidence, but also turned the G20 meeting into an ongoing dialogue – a process rather than an event. Moreover, because of its broader inclusive nature, the G20 is now set to become the most relevant multilateral forum in the years to come, eventually embracing a much broader agenda than just financial affairs.

This has clear implications for the G8 Summit in L'Aquila. It forces G8 leaders to rethink the group's future role, objectives and format. The Italian presidency could seize the opportunity and effectively steer the process back to the G7's original mandate and restore its role as the informal forum for

Japan is the world's most troubled economy, with a projected contraction of 6.2 per cent in 2009, according to the IMF's spring forecasts

the most developed economies. Some members of the G7 would support this more than others. As all G7 members face a sharp deterioration in government finances and widening public debt, there is certainly scope for information sharing and policy co-operation. Currency and trade imbalances similarly could feature on the agenda – along with enlarging the discussion to the main exporters and foreign exchange reserve holders. Most of all, a reformed G8 should advance the dialogue on global governance, by looking at the future relationship and interaction between G8 and emerging countries along the lines of the Heiligendamm Process. In the new map of global power the G8 should aim at dialogue with regional forums and institutions as well as with global ones. It should be one of the actors, rather than a sort of private club that leaves out many of the emerging economic powers. ♦

Brazil: Reaping the benefits of a well established policy

Brazil's economy has been affected by the global crisis. In fact, our economy has faced several crises after the stabilisation in the mid-90's. However, for the first time, an external crisis has reached a resilient domestic economy. As a matter of fact, no change in the policy regime was necessary to face the current crisis; only specific policies were warranted.

In the past, the externally or domestically driven crises meant disruption in the balance of payments, financial deterioration of the public sector, higher inflation, distrust in the policy framework, and so on. None of them occurred. On the contrary, Brazil has surged as one of the strongest economies in face of the crisis.

The current policy framework is built in three pillars. First, a sound fiscal regime. The large primary surpluses in the last ten year have led to a reduction in the public debt as a percentage of GDP. Second, the adoption of a floating exchange rate system, after a history of managed systems that eventually turned into a balance of payments crises. Third, but not least, the implementation of the inflation targeting regime in 1999, in the aftermath of the exchange crisis. The regime has been successful. Last year's inflation in Brazil was one of the lowest among emerging market economies. The regime has brought about higher transparency and accountability, as well. The result was the construction of stronger and better monetary and fiscal institutions.

This framework was reinforced by policies to reduce historical external fragilities of the economy. In 2004, the Central Bank of Brazil announced a policy of accumulation of international

reserves. They went from US\$ 49.3 billion in December 2003 to US\$ 206.5 billion in September 2008. For the first time in Brazil's history, the net public external debt turned negative. Internally, the dollar-linked domestic debt was eliminated and, through reserve swap operations (swap of interbank rate-linked cash flow for exchange rate-linked cash flow), the Central Bank became net long in US\$.

So, we have broken down the historical feedback mechanism through which a domestic currency depreciation, triggered by an external shock and confidence deterioration, raised public debt and fed into further confidence deterioration and currency depreciation, and so on.

The Brazilian financial system was also ready to face those turbulences, after having undergone a large adjustment in the 90's. For instance, looking at capital ratio requirements, the actual rates are significantly higher than the minimum regulatory ones, which, in turn, are higher than those recommended by Basel.

The global crisis affected the Brazilian economy through three transmission channels: external and domestic credit, external trade and confidence. External credit was shortened, and domestic liquidity, hoarded. Banking spreads increased. Exports decreased, as well, accompanied by similar reduction in imports. Business and consumer confidence deteriorated. In the financial markets, stock market plunged, the country-risk premium increased, and the exchange rate soared. The GDP contracted, after growing at a high speed (6.3 per cent four-quarter growth in 2008 Q3).





The Brazilian government took several measures to face the crisis. The objective was to enhance liquidity flows, restore the health of the credit market, and ultimately boost the economy. The Central Bank of Brazil has supplied credit to exports, sold foreign currency, and resumed swap operations. The international reserves, however, were used parsimoniously. In the cash concept, the reduction was less than 5 per cent, and in the liquidity concept, less than 1 per cent. The swap operations, in turn, allowed the Central Bank to net out its position in US\$. Note that, in past experiences, we would be talking about large losses of reserves and the Central Bank short in US\$.

Regarding domestic liquidity, the priority was to restore the normal flows among institutions and recover the credit. The banking reserve requirements were largely reduced, the discount window was eased, and stimuli to interbank purchase of credit assets were given.

Fiscal and monetary policies were also responsive to the crisis. Several fiscal stimuli were provided to the economy, such as the successful reduction in the tax rates on cars. The Central Bank, in turn, cut the policy interest rate by 450 basis points, leading to the lowest Selic interest rate in history.

Those policies have already shown their effectiveness. The economy is already recovering, and domestic credit is strong again. At the same time, market inflation expectations are well anchored around the targets. As a matter of fact, there is a widespread confidence that the economy is already overcoming the effects of the global crisis.

Therefore, in contrast to previous external crises, the current crisis did not warrant changes in the domestic regime, or lead to a fragile economy. It only required specific policies. This shows the appropriateness of the current regime and of the policies implemented in previous years.



Regulation and reform

While the G20 may be the forum best suited to solving the world's economic challenges, the G8 also has an important role to play in regulation and reform

By Jim O'Neill,
Goldman Sachs

The G20 summit came and went with gathering excitement. The world now returns to the perhaps more humdrum G8. With the increased awareness of the relevance of the G20, this next G8 meeting needs to prove why it is still an effective forum and worthy of existence. Many feel that the G20 is a more appropriate forum for trying to deal with the major challenges in the world today and in the future.

China and other large emerging market economies have not only become integral parts of the world economy, but their cyclical performance in the next few years is likely to help lift the world out of this severe recession. By late April 2009, China's forecasts for gross domestic product (GDP) growth had been upgraded to 8.3 per cent for 2009 and 10.9 per cent for 2010, from a previous 6 per cent and 9 per cent respectively. If these forecasts are correct, hindsight will deliver a verdict that not only did China cope with this crisis, but – in fact – the crisis helped encourage China to move into a new era of development and growth leadership in the world. In addition, if this proves correct, by the start of the next decade China will probably overtake Japan as the second largest economy in the world after the United States.

India is also coping with this global recession better than most economies, including all of the current G8 countries. Because of the importance of China and India, it increasingly seems that Goldman Sachs's now well-known long-term projections for the BRIC countries of Brazil, Russia, India and China may come to fruition. According to recent estimates, the combined GDP of these four BRIC economies would be greater than that of the current G7 economies by 2027, fewer than 20 years away. If this is the prospect, one really has to ask what is the purpose of the G8 when it only includes one of the BRIC economies, Russia, which is arguably the weakest.





US treasury secretary Timothy Geithner shakes hands with Bank of Italy governor Mario Draghi

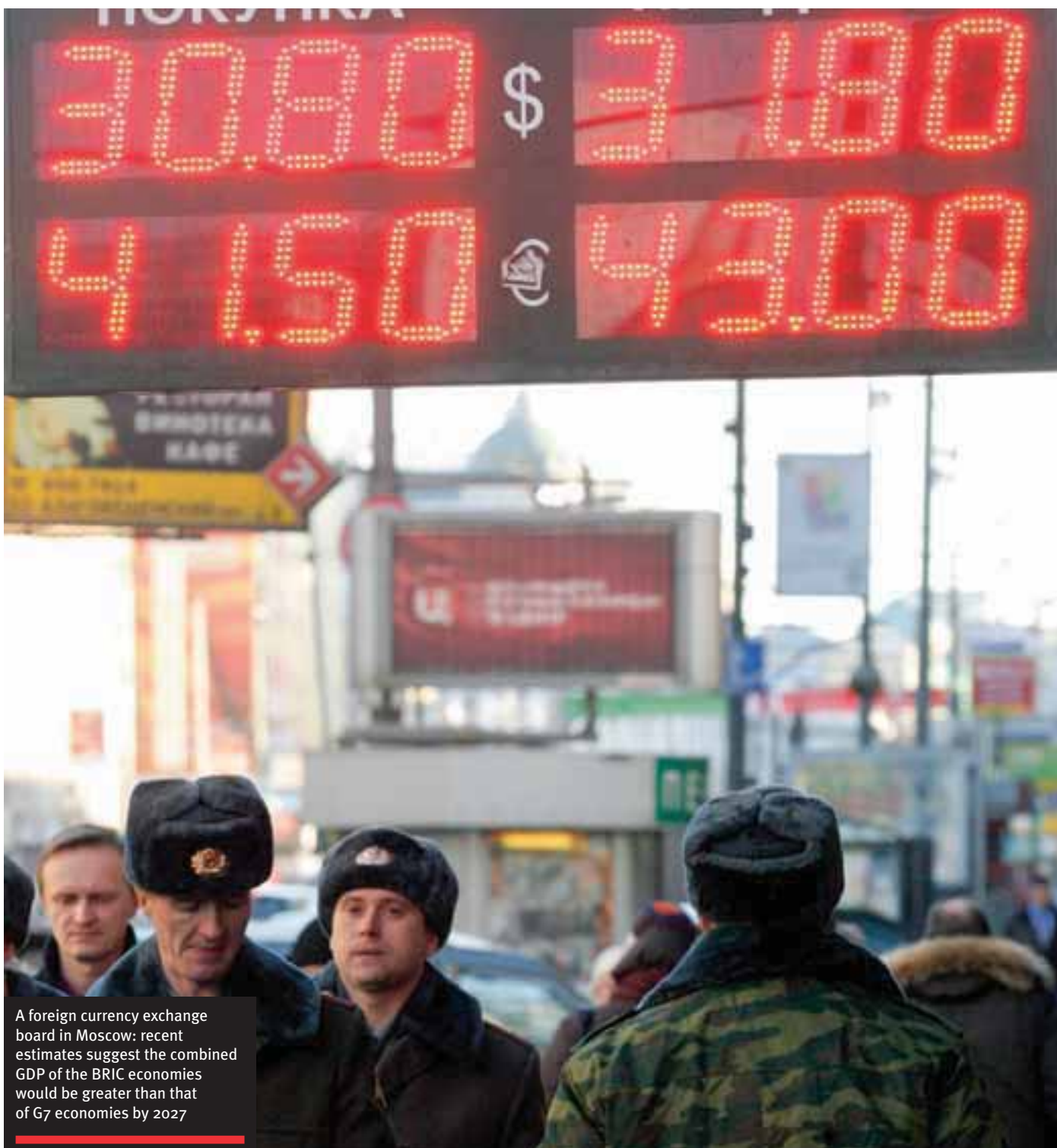
While the above analysis suggests that a grouping such as the G20 is much more appropriate for dealing with the world's challenges, there are a few issues that, in the near term, can give the G8 some purpose. One is financial regulation, where the forthcoming G8 L'Aquila Summit might face a real test of its continued usefulness. At the G20 London Summit in April, the leaders agreed to give increased importance to the Financial Stability Forum and, indeed, renamed it the Financial Stability Board (FSB). While membership was expanded to include many G20 countries, including the key BRICs, in terms of the financial crisis and the seemingly obvious need for improved regulatory governance, it is the larger developed countries, as well as the key players, that appear to have the greatest need for financial regulatory reform.

There are probably three areas of regulatory issues on which the G8's performance and usefulness might be judged. First, on the role of the FSB, how powerful and globally effective do the leaders want the new board to be? US treasury secretary Tim Geithner has lent his

“ It is the larger developed countries, as well as the key players, that appear to have the greatest need for financial regulatory reform ”

own support to an enhanced role for the FSB, as have all the key European participants in the G8. But it would be good to see specific steps as to how it can be truly more effective. Will the FSB be given a larger, permanent staff to help it become a more important organisation, as opposed to consisting of an informal grouping of key financial regulators? Will there be a formal head of the FSB? Will domestic regulatory bodies be treated as completely separate bodies, or will they be somehow indirectly answerable to the FSB? On this last question, especially, the answers seem tricky. As it relates just to the US, will there be key congressional oversight bodies that allow the judgement of their committees to be controlled by some international body? If the G8 is to show some usefulness, answers to aspects of these key issues would be good to see.

Second, with regard to procyclicality in the financial system, the G20 leaders and many of its members have supported a move to improve countercyclical use of capital by the world's financial system. In particular, there is broad agreement that banks should somehow be forced to raise more capital during the good times, partly to help avoid them creating future bubbles and partly to help avoid the need for banks to face a repeat of the current challenge of being forced to raise capital when it



A foreign currency exchange board in Moscow: recent estimates suggest the combined GDP of the BRIC economies would be greater than that of G7 economies by 2027

is least easy, during a recession. How exactly do the leaders plan to do this? Again, the need for such a strategy appears strongest in the most developed economies. Given that they dominate the G8 forum, here is a chance for the G8 to demonstrate that it has a purpose.

Historically, the G8 has focused on broad economic and social goals covering the economic cycle, the environment and energy prices all the way through to issues such as HIV/AIDS. These issues do not sit naturally at home with only the G8 any longer, now that the G20 has become so prominent. Some observers occasionally say that the G8 can serve its

own functionality in that it is primarily a club for the leading democracies. Not only does this always raise questions about why Russia is present – the only BRIC – but also, given the issues that face the world in the foreseeable and probably distant future, it raises the question of whether this is relevant. As mentioned above, Goldman Sachs has recently raised its forecasts for China's economic growth – and China is the first major economy that has had its forecast raised in the past 12 months. For the G8 to prove it is worthy of all of the world's attention, it needs to produce some achievements. Providing some more answers about regulatory plans on an internationally co-ordinated basis is a good way of doing so. ♦

International financial regulatory reform and small island economies



by Dr Marion Williams, Governor, Central Bank of Barbados

Amid the global economic turmoil, Barbados' banking system remains strong as evidenced by recent data on earnings, asset quality and capital. This is a testament to a relatively stable economy and to a regulatory framework

that is largely in compliance with international standards. Barbados received a generally favourable assessment from the International Monetary Fund and the World Bank in their most recent Financial Sector Assessment Program. Indeed, the assessors concluded that based on their stress tests, the banking system would be resilient to plausible economic shocks.

Barbados' long record of stability and the fact that it is a taxed jurisdiction with several tax information exchange arrangements and double taxation treaties enabled it to be classified by the OECD among the first tranche of jurisdictions that have substantially implemented internationally agreed tax standards. In addition, a recent survey by the World Economic Forum placed Barbados third in the Americas as it relates to the soundness of its banks and 21st overall in the world.

However, the Central Bank of Barbados continues to work with regional counterparts to further strengthen the legislative and regulatory framework and to enhance the information sharing processes for regional banks. The Government established a Deposit Insurance Scheme in 2007 to strengthen the banking safety net and is also in the process of establishing a Financial Services Commission that will bring together all non-banking activities under a single regulator.

Barbados' experience is not unlike that of many other Caribbean economies, which have watched as the global economy imploded in the face of a serious financial and economic crisis that has prompted policymakers to design far-reaching changes to the international regulatory framework. Unlike recent financial crises, such as that which beset the Asian economies in the late 1990s, this crisis was centred on the world's most advanced economies, impacting systemically important institutions and markets and creating a deep, widespread and prolonged financial meltdown.

The call for major reforms in the global financial system to take account of the risks posed by the financial innovations within and across sectors should provide for increased uniformity of regulatory frameworks in advanced economies. In addition, the integration of the global economy will likely see some of these changes filtering into smaller economies over time.

These reforms further consolidate the growing trend of the North Atlantic-dominated standard setting bodies to promote structures and processes for improved financial regulation and supervision. These are reflected in the myriad efforts of standard



setters with respect to, *inter alia*, the revisions to both the Core Principles for Effective Banking Supervision and the FAFT Forty Recommendations and Nine special recommendations, the ongoing work of the Financial Stability Forum (now succeeded by the Financial Stability Board) and Basel Committee's introduction of a new Basel II framework.

The effects of these enhanced standards on small island economies have led to increased regulatory costs for both the regulator and the regulated institutions. However, to the extent that many of these standards create a good foundation for best practice implementation, their adaptation has helped a small economy like Barbados to enhance its supervisory systems.

The current crisis has emphasised the importance of the application of the principles of consolidated supervision and brought to the fore, in a tangible way, the need for regulators to strengthen cross-border co-operation and crisis management. The latter is especially crucial for small economies as the dominance of large foreign banks that operate across many borders can place small jurisdictions at risk, in circumstances where large foreign banks may represent a significant share of a domestic financial system, even though they may account for only a negligible share of the overall financial institution.

While the new oversight mechanisms to be introduced under a new enhanced regulatory architecture will be centred on systemic institutions and markets, attention must be paid therefore to less systemically important jurisdictions in what remains a global and interdependent financial system. Without this, small economies reliant on international banks could be placed at the mercy of the 'too big to fail' paradigm.



Challenges for the global economy

Predicting the trends of long-term economic movement is a tricky game and the consequences can be serious if the gamble proves wrong

By Paolo Savona, professor emeritus, geopolitical economy, and chair, Unicredit Banca di Roma

In economic affairs, long waves – trends – are less predictable than short waves – cycles. If the effects of the waves are negative, they are more intractable. Economics has devoted much effort to understanding and taming cycles, but considerably less to understanding trends and setting them on the right track. Growth theory has brought out the importance of only two factors: good institutions and incessant innovation.

The events of the last two years confirm this interpretation. The return to the market and the downsizing of government launched by Margaret Thatcher and Ronald Reagan in the late 1970s generated a long wave that was neither understood nor managed. It engendered the libertarian dogma that the freer the market, the better it would perform as the supreme regulator of growth and society. The worst mistakes were made in that monetary and financial sectors of the United States, the country that created the money – the dollar – for international use. The US ignored a key lesson of economic history: that monetary and financial sectors are unable to regulate themselves and tend toward excess, unlike the real sector, which is driven to self-adjustment because excesses within the real economy are immediately perceived and paid for.

The thesis that there is a better understanding of the business cycle (and more tools for intervention) than there is for long waves is supported by the measures taken to cope with the current financial crisis and its transmission to the real economy. The system was flooded with liquidity; government budget deficits soared and were planned to reach exceptional heights. The result has been a smaller decrease in output than had been feared, given the distrust in the ability of the authorities and corporate managers to handle the crisis. In some parts of the system the first signs of recovery can already be glimpsed. But the measures taken appear to be a stop-gap, not the correct and logical response to the errors committed by policymakers and business leaders in interpreting and managing the libertarian



“ It engendered the libertarian dogma that the freer the market, the better it would perform as the supreme regulator of growth and society ”

trend. The entire known countercyclical arsenal has been unleashed, so the economy has returned to its previous path of more debt (now with a shift to the public sector) and more support for consumption, creating more money and increasing budget deficits. But this solution has immediately raised two problems: the danger of a new wave of inflation and the transfer of the burden to future generations through the expansion of public debt.



The G20 communiqué issued at the London Summit in April 2009 speaks of an exit strategy from the superabundance of liquidity, even before the exit strategy from the crisis has been finalised. It makes no specific reference to breaking the pact between generations, but expresses only an acute perception of the need for new rules to avoid the excesses of finance and improve protection for savers. The hit to the value of pension funds and retirement savings portfolios has still to be calculated. But the social problem has been sorely aggravated. Now the policy of zero interest rates is mainly producing the euthanasia of savers that Keynes considered necessary to overcome 'underemployment equilibria'. On this important subject the G8 leaders at L'Aquila cannot make practical progress, but can only lay down clear guidelines for implementation by the Financial Stability Board (FSB), the successor to the G8's Financial Stability Forum.

However, one mechanism that economists have clearly discerned is that when a rule is made, sooner or later the market finds a way to circumvent it. The reform of financial institutions must therefore be a permanent process. At the global level this task can be carried out only if the main countries chart a precise policy course for the World Trade Organization (WTO) for the

The hit to the value of pension funds and retirement savings portfolios has still to be calculated

“ The world can never have a global economy immune to new, grave crises unless market participants achieve greater ethical consciousness ”

real economy and the FSB for the financial economy. The success of this newborn international institution depends crucially on co-operation among central banks, preferably within the International Monetary Fund. In this regard, an exit strategy should be devised for the non-traumatic replacement of dollars by special drawing rights (SDRs). This is indispensable in order to free the US from the impossible task of pursuing both internal and external equilibrium, with the obvious sacrifice of the latter. However, the US increasingly depends on external equilibrium as a matter of choice and interest, having made huge direct investments abroad. Hopefully, the creation of an additional 250 billion SDRs is a significant first step in this direction, if it is not limited to developing countries, as was decided in London. This means paying more heed to the demand, expressed by China through its central bank governor, Zhou Xiaochuan, to expand the use of SDRs as a world monetary standard. But it will only be so if the United States adopts the necessary architecture of the world monetary system, inducing a revision of the WTO agreements in order to impose the same exchange rate regime on all WTO member states. The maintenance of fixed, dirty or floating exchange rates, the build-up of official reserves and the management of reserve assets in the form of financing foreign imbalances, conversions on the market and contributions to sovereign wealth funds all influence exchange rates and terms of trade beyond economic fundamentals. Such a revision lays the groundwork for a new materialistic geopolitical order.

The world can never hope to have a global economy immune to new, grave crises unless market participants achieve greater ethical consciousness. Ethics cannot be imposed upon economic agents by law or regulation, let alone guaranteed by voluntary codes of conduct. As Cesare Beccaria pointed out more than two centuries ago in his essay *On Crimes and Punishments*, the sanctions envisaged by the law have little impact on criminal or ethical behaviour. Ethics can prevail only if agents come to realise that their long-run interests, individual as well as collective, depend on the good management of the monetary, financial and real resources at their disposal. The reputation of institutions and market participants will increasingly be a benchmark for sustainable development and a reference for the requisite social stability. Failing this consciousness, the world will continue to witness the eternal game of cops and robbers, between oversight organisations and market free riders. ♦

ONTARIO

CANADA

POPULATION 440,000,000

THE BIGGEST MARKET IN NORTH AMERICA CAN BE AT YOUR DOORSTEP.

Within a day's drive of Ontario's economic centre, your business has access to the most densely populated market in the North American free trade region, with hundreds of millions of customers. NAFTA's an extremely affluent market too, with a GDP of more than \$16 trillion, where products move freely across borders. Our central location has attracted industries as diverse as automotive, pharmaceutical, IT and alternative energy. Ontario also offers generous R&D tax incentive programs, competitive operating costs, a network of public research institutions, and the best-educated workforce in the G7. Our diverse, multicultural society will make you feel at home as well. And our universal healthcare system reduces labour costs. Welcome to Ontario, in the centre of everywhere you need to be.

The world works here.



ONTARIO
CANADA

investinontario.com/access
00 800 4668 2746

Under pressure

Despite the long-awaited reform of the Bretton Woods institutions, the IMF faces the challenge of remaining relevant to all its members

By Domenico Lombardi, president, Oxford Institute for Economic Policy, and non-resident senior fellow, Brookings Institution

The novelty of the current process of reforming the International Monetary Fund (IMF) is that heads of state and of government, through the G20 summits, have taken on a task traditionally assigned to their finance ministers. If this effort proves sustainable, there is an opportunity to address the greatest challenge that the IMF has faced since the end of the Bretton Woods era in the 1970s, when its member countries withdrew political capital, making the institution ineffective as a forum for multilateral discussions. This shift in authority, away from the IMF back to member countries, was a defining feature of its role that emerged after the demise of the Bretton Woods system, whereby national policymakers claimed for themselves more discretion in setting their economic policies.

Beyond G20 leaders' reaffirmation of the political relevance of the IMF as overseer of the international monetary system, efforts to strengthen the institution have so far resulted in a significant enhancement of its lending capacity, on the order of half a trillion dollars, through bilateral direct financing as well as scaled-up new arrangements to borrow.

The IMF's enhanced lending capacity is on top of a number of internal reforms that have gone hand-in-hand with discussions at the highest political levels. These have resulted in the establishment of a new flexible credit line (FCL), with uncapped access and no conditionality for countries with a track record of sound policy implementation, and a simplification of the conditionality framework for the other lending facilities.

The number of countries seeking IMF support, including under the FCL, proves the increased responsiveness of the institution to its membership. At the same time, it also indicates some challenges that must be faced if the IMF is to remain relevant to its entire membership.

While a number of European and Latin American countries have rushed to apply for assistance, no Asian countries have yet turned to the IMF. They have instead strengthened their regional financing facility, which many Asian policy makers regard as a better alternative. Even if regional arrangements could co-exist and perhaps strengthen the functions already exerted by the IMF, the geographic discrepancy among the institution's new clients points to the need to move more aggressively on the reform of institutional governance. This is the area in which the current process has made the least progress, a



clear reflection of the European reluctance to address the issue of its own identity in a truly global IMF.

The European position, however, is bound to become unbearable in the context of the new round of IMF quota reform. It will not be politically acceptable to end the forthcoming quota review with merely a marginal redistribution of voting power and without addressing the crucial issue of the composition of the executive board, which is the IMF's policymaking body. Specifically, euro-area members will be expected to bring more consistency in the external representation of the euro by pooling their representation on the IMF board to leave space to strengthen the voice of other areas of the world.

Most recently, a blueprint from the Bretton Woods Committee, an authoritative Washington-based group, has outlined several important steps – beyond that of simply reviewing and streamlining the composition of the board itself. Among them is the introduction of a double majority for approval of major decisions at the IMF and at the World Bank. This change would give smaller countries most affected by the policies and programmes of such institutions a stronger voice in the decision making, but without jeopardising the interests of larger countries. If extended to the election of the IMF managing director and the World Bank president, it would automatically end

“

While a number of European and Latin American countries have rushed to apply for assistance, no Asian countries have yet turned to the IMF

”



the trans-Atlantic monopoly over those positions, which are currently decided by simple majority.

Indeed, the G20 reiterated its commitment to an open and merit-based selection process for the top jobs at both institutions. By itself, this reform would have the potential to generate wider ownership over the Bretton Woods institutions from their membership at large. It would, in turn, spur a number of other reforms, such as a review of the quota formula used to determine the distribution of members' voting power.

An aspect missing in the recent debate, however, is the impact of the crisis on the poorest countries. Having benefited only marginally from the previous expansion in global economic activity, they are now being hit the hardest by a crisis for which they bear no responsibility. Besides having no room for engineering a US-style stimulus package, or for bailing out their respective financial sectors, these countries rely on aid flows, which are procyclical and likely to be affected first when donor countries start making cuts. Remarkably, the IMF has managed to garner support for doubling its concessional resources for low-income countries. The World Bank, however, has been relatively marginalised in recent discussions, as indicated by its own limited additional funding from the G20.

The momentum generated by the focus of the G20

IMF managing director Dominique Strauss-Kahn speaks during his visit to the AMO Congo Health Centre in Kinshasa

leaders on the reform of the Bretton Woods institutions has led many to question the traditional steering role that the G8 has had vis-à-vis those institutions. The G8 may well continue to play a relevant role, but one that will have to be refined in light of the new emerging geopolitical reality.

Therefore, while discussions on the governance reform of the IMF may be more fruitfully held within the G20, the G8 could serve as a consensus-building forum for some of its most important shareholders to discuss issues of common concern, facilitated by the intimate and informal nature of G8 discussions. Among such issues is, for instance, a common interest among the G8 in a world economy based on open international financial markets, a feature not currently shared by the financial sectors of many emerging economies.

The G8 also provides an informal framework in which to discuss issues of common responsibility among its members. For instance, the likely shortfall in aid flows to poor countries would be an appropriate topic for discussion, especially given the G8 commitment at the 2005 Gleneagles Summit to double aid to Africa by 2010. Thus, while the scope for having more focused discussions among its members will be there, the G8 will need to be strategically selective on the economic issues with which it will engage. ♦

The common purse

Keynes's plan for a universal currency was ultimately flawed, but today, existing special drawing rights may be able to fulfil his vision

By Pietro Alessandrini, Università Politecnica delle Marche, and Michele Fratianni, Indiana University and Università Politecnica delle Marche

At their London Summit, the G20 leaders approved a fresh allocation of \$250 billion in special drawing rights (SDRs). This news was interpreted as a helicopter-type injection of international money aimed at relieving the financing of external imbalances of member countries. But how significant is this move as a step toward ultimately achieving a truly international form of currency?

SDRs are created by the International Monetary Fund (IMF) to supplement the stock of official reserves. The SDR is an artificial currency defined in terms of fixed quantities of four currencies, which are adjustable every five years: the dollar, the euro, the yen and pound sterling. Consequently, it is not a claim on a government, as the dollar is on the US government; it is also not a claim on the IMF, as a true international currency might be. It is simply an asset that may be exchanged for national currencies. Holders of SDRs effect such exchanges either through voluntary bilateral transactions or through the intermediation of the IMF, which can designate countries with external surpluses to accept SDRs in exchange for their currencies. The SDR seller pays an interest rate that is a weighted average of the money market rates of the four currencies in the SDR basket – currently approximately 0.5 per cent. To date, there have been two general SDR allocations: the first from 1970-72 and the second from 1979-81, for a total of SDR 21.4 billion. The G20 recommendation of a new allocation of \$250 billion is equivalent, at current exchange rates, to almost eight times the existing SDR stock.

The G20 recommendation harks back to the creation of the Bretton Woods system in 1944. The fundamental flaw of Bretton Woods was to link the value of a national currency to an international 'scarce' asset – gold – by a fixed price. The system broke down in 1971 because the central country, the United States, abused the privileges emanating from its national currency, which served as the key international currency. US monetary authorities, when faced with stark choices between domestic and international objectives, placed the former above the latter. Under Bretton Woods, gold became the scarce money.

While the Bretton Woods system is long gone, the United States has retained the benefits of a key currency. Foreign monetary authorities are willing to accumulate US liquid dollar liabilities, primarily in US government

securities and dollar deposits with US banks. The US can finance its federal debt at a lower cost than it could if its currency were not also an international currency. The interest rate subsidy, in turn, encourages the US government either to expand expenditures for given tax rates or to reduce tax rates for given expenditures.

An international monetary system based on a dominant national currency creates a precarious equilibrium. The authorities of the dominant currency must balance domestic objectives of unemployment and inflation with the international requirement of providing a currency that is neither too scarce nor too inflated. National objectives tend to prevail over international requirements.

John Maynard Keynes understood these conflicts well. He thus proposed an international currency, the *bancor*, to be the backbone of the new international monetary system in 1944. He argued that the ideal solution would be a supranational bank of national central banks, with assets in gold, securities and advances to central banks and liabilities in central bank deposits. The Keynes plan also called for the application of symmetrical adjustments in the financing of external imbalances, requiring minimal co-ordination. The burden of adjustment would fall primarily on deficit countries during booms and inflationary periods, and on surplus countries during periods of slack demand. An international clearing union would extend overdraft facilities to a deficit country that had depleted its initial stock of *bancors*, with a corresponding credit to a surplus country. The size of the overdraft would be constrained by quotas assigned to participating countries. *Bancor* balances exceeding the quotas, both positive and negative, would be subject to a penalty interest rate. The participation of creditor countries in the adjustment process was the most difficult and ambiguous part of the Keynes plan, given that these countries had to be convinced to accept *bancors* in the short run, but not to hoard them in the long run.

Keynes's supranational currency proposal lost to the dollar at Bretton Woods, because the US was the dominant power and the largest net creditor of the war-ravaged rest of the world. Power won over brains. Yet variations of his plan have resurfaced occasionally, even among US policymakers when the dollar is under strain, as it is these days.

How can the existing SDRs meet the ultimate



The flaw of Bretton Woods was to link the value of a national currency to an international 'scarce' asset – gold – by a fixed price





objective that the Keynes plan tried to satisfy? A short but useful blueprint of the required evolution has been provided by Zhou Xiaochuan, the governor of the People's Bank of China, in *Reform of the International Monetary System*.

Zhou's recommendations can be ranked in increasing order of importance. First, expand the valuation of the SDR to include a larger club of important countries. The omission of the yuan from the SDR is obvious, given the importance of the Chinese economy and the size of its external surplus. Second, transform the SDR from an artificial basket currency into one backed by assets, as envisioned by Keynes. Third, establish a settlement system between the SDR and currencies to make the SDR a fully fledged money and not merely a unit of account. This entails convincing private parties – through repeated exposure, actual performance and the inflation credibility of the SDR-issuing authority – that it is in their interest to denominate contracts in SDRs rather than in national currencies. Next, use SDRs to settle payments. A similar process would have to occur in finance, with securities denominated in SDRs competing with securities issued in national moneys. Finally, connect the SDR to an institution

US treasury secretary Henry Morgenthau Jr and British economist John Maynard Keynes, Bretton Woods, July 1944

“ Keynes’s supranational currency proposal lost to the dollar at Bretton Woods ”

that is responsible for its management and its value. So long as the SDR is no one's liability, its future will be weak. Before unification, the European currency unit (ECU) was as artificial as the SDR is today. The big change occurred when the ECU became the euro, issued by a supranational central bank with a clear mandate for price stability. Something similar must occur at the world level before the SDR can become a true international currency and replace the current ambiguous and unstable system of dominant national currencies. ♦

In memory of the beloved Francesca Alessandrini



The Centre for International Governance Innovation (CIGI) is an independent, non-partisan think tank that addresses international governance challenges. Led by a group of experienced practitioners and distinguished academics, CIGI's objectives are to anticipate and further understand emerging trends in international governance, particularly economic and financial governance, and to strengthen multilateral institutions.

Major research projects and initiatives are grouped under the following six international governance themes: Environment and Resources; Global and Human Security; Health and Social Governance; International Economic Governance; International Law, Institutions and Diplomacy; and Shifting Global Order.

Working behind the scenes since 2003, CIGI's Breaking Global Deadlocks project has led a "Track II" process to make the case for raising the G20 Finance Ministers' group to Leaders level. Some 30 "Track II" meetings have been held around the world over the last five years, to examine in detail the proposal for an expanded group of leaders as an international problem-solving mechanism.

CIGI is currently focusing its research capacities on the impact of the global financial crisis on the international institutions and regulatory regimes and authorities. Some recent projects include the Global Trade Alert (GTA) (www.globaltradealert.org), a new online resource that monitors policies affecting world trade, in partnership with the Centre for Economic Policy Research (CEPR), the International Development Research Centre (IDRC) and the World Bank.

An independent initiative, Global Trade Alert provides real-time information about measures taken by governments during the global economic downturn and their likely effects on foreign commerce. Member research institutes identify and assess how these new state measures will impact trading partners. GTA both complements and goes beyond the WTO's and World Bank's monitoring activities by identifying trading partners likely to be harmed by state measures.

EXAMPLES OF RECENT WORK

Emerging Powers in Global Governance: Lessons from the Heiligendamm Process

Edited by Andrew F. Cooper and Agata Antkiewicz,
CIGI/Wilfrid Laurier University Press

Measuring Progress towards the G20 Declaration on the World Economy

Eric Helleiner and Paola Subacchi, Co-publication with Chatham House

Issues, Obstacles and Outlook for the Copenhagen International Climate Change Negotiation

John Whalley and Sean Walsh, *CIGI Policy Brief #16*

Reform and Modernization of the OECD

Jocelyne Bourgon, *CIGI Working Paper #42*

The Diplomacies of Small States: Between Vulnerability and Resilience

Edited by Andrew F. Cooper and Timothy M. Shaw,
Palgrave Macmillan

The G20 and Green Protectionism: Will We Pay the Price at Copenhagen?

John Whalley and Simon J. Evenett, *CIGI Policy Brief #14*

The G20 Leaders' Summit and the Regulation of Global Finance: What was Accomplished?

Eric Helleiner and Stefano Pagliari, *CIGI Policy Brief #11*

International Payments Imbalances and Global Governance

Eric Helleiner, *CIGI Policy Brief #8*

Global Governance for a Global Age: The Role of Leaders in Breaking Global Deadlocks

Barry Carin and Ramesh Thakur, *CIGI Policy Brief #7*

The BRICSAM Countries and Changing World Economic Power: Scenarios to 2050

Manmohan Agarwal, *Working Paper #39*

Global Health Governance and Multi-Level Policy Coherence: Can the G8 Provide a Cure?

Heidi Ullrich, *Working Paper #35*

Global Governance and Diplomacy: World's Apart?

Edited by Andrew F. Cooper, Brian Hocking and William Maley,
Palgrave Macmillan



Facing up to responsibility

Is CSR just an appealing ideal, or can it actually be implemented across the board?

By Kimon Valaskakis, New School of Athens

Corporate social responsibility (CSR) is a very attractive idea. It invites private sector corporations to look beyond their narrow interests and become better citizens of global society. Why is this so important? Since the Second World War, the global balance of power has shifted from state to non-state actors. The 192 sovereign governments, members of the United Nations, have lost considerable influence, while multinational enterprises have become very powerful. Of the 100 greatest economies in the world at the beginning of this millennium, 51 were businesses and only 49 governments. The multinationals derive their power not only from

their vast spending potential but also from their high transnational mobility, which allows them to escape regulation and taxation. Because of this immense influence, their ethical behaviour is very desirable. CSR asks corporations to pursue the so-called triple bottom line, balancing three goals: maximising shareholders equity, respecting the environment and promoting social values.

The concept of CSR is at least 15 years old, but its record so far is very mixed. There are three notable successes. The first lies in the area of standards and norms. Private sector agreements have succeeded in harmonising norms and setting minimum standards of quality. The second partial success is in the field of the environment. Corporations are more environmentally friendly than they were 30 years ago, when concern about the environment was a public relations issue rather than a policy question. The third, and possibly the most impressive, success of CSR is the growth of private philanthropy. Some billionaires, such as Bill Gates, Warren Buffett, Ted Turner and George Soros, have given generously to promote the public good – a significant and welcome development.

At the other end of the spectrum is the bad news. The current global economic and financial crisis has revealed gross corporate irresponsibility, especially in the financial world. The worst offenders have been white-collar criminals, either indulging in elaborate Ponzi schemes or massive embezzlement through creative accounting practices. Beyond unlawful behaviour, the world of finance has created complex investment vehicles that have transformed the world economy into a casino. Hedge funds, derivatives, short



Enforceable global corporate law is needed to bring about global CSR: survivors of the Bhopal gas disaster

“
The world of finance has created complex investment vehicles that have transformed the world economy into a casino
”

selling, collateralisation of financial assets, subprime mortgages and hard-to-discover off-balance sheet operations have wreaked havoc and caused great economic pain. On balance, CSR cannot yet be called a success.

There are, at present, two major strategies to achieve global CSR: establishing voluntary guidelines and enacting enforceable corporate law. In the late 1990s, the dominant theme for CSR was voluntary guidelines. This implicitly assumed that corporate managers could become good Samaritans and automatically pursue policies to promote the public interest. Voluntary guidelines are also found in the recommendations made by intergovernmental clubs such as the G8 and the G20, the latter most recently at its summit in London in April 2009. When the recommendations involve government action, then it can be assumed that the signatories will honour their commitment – even though the actual record of compliance by individual signatories tends to vary greatly, as the G8 Research Group’s studies have shown. When the recommendations concern corporations, compliance is

even less certain. The mandate of intergovernmental clubs is to harmonise government and not corporate behaviour. Few, if any, intergovernmental organisations have direct jurisdiction over corporations, which is more the responsibility of sovereign governments. Given the erosion of power of the latter, effective control of global corporations leaves much to be desired.

The effectiveness of voluntarism as a strategy to bring about CSR, doubtful from the beginning, received the *coup de grâce* as a result of the current global financial crisis. Good Samaritans have proven few and far between. For every philanthropist there are dozens of selfish managers, seeking to maximise their own gain, with little regard for the public good. More importantly, the reward mechanisms of the modern corporation remain inimical to true CSR. Executives rarely receive an explicit mandate from their shareholders to promote the public good ahead of the corporate interest. If the promotion of CSR will increase shareholders’ profits, then it will be embraced. But when there is a trade-off, rare are the shareholders who will instruct managers to put CSR above shareholder equity.

The most promising strategy to bring about global CSR is the enactment of enforceable global corporate law. The most persuasive case for an international rule of law comes from Adam Smith, the greatest apologist of capitalism. Although a devout advocate of free markets, Smith noted that if humans were angels, no laws would be needed – but, since they are not, binding legislation is indispensable for the proper functioning of society. In most nation-states, the regulation of business and the protection of consumers are an integral part of the legal system. There are rules against usury, false advertising, price gouging, collusion and monopolies, and so on. If voluntary guidelines were enough, why would anyone bother with these corporate laws? Pamphlets on websites would simply recommend that corporate managers behave responsibly. Obviously, this is not how things proceed at the national level. Failure to comply results in fines, prosecution and possible jail sentences. The law is the law.

Unless a similar set of globally enforceable corporate rules is created, CSR will remain a pipe dream. But who will take on that task? At this stage, there is one organisation that could potentially move in this direction: the World Trade Organization. But this would require a revision of its charter and jurisdictional competence. Institutional restructuring of such magnitude is normally very slow. However, necessity is the mother of invention and the severity of the global financial crisis makes revolutionary change less implausible. Many strange things have happened in the recent months, including the quasi-nationalisation of banks in the United States – an unthinkable proposition only a year ago. The move to enact enforceable global corporate law to bring about true CSR may not be as impossible as one would think. It could even become one of the recommendations of the G8 at the L’Aquila Summit, as the G8 should remain at the vanguard of proactive policymaking, as it has in the past. ♦

A close-up photograph of a tiger lying in a forest. The tiger is looking directly at the camera with a calm expression. Its fur is a mix of orange, black, and white stripes. The background is filled with green leaves and branches, creating a natural, slightly blurred setting.

Incredible India

www.incredibleindia.org

*“I want all the cultures of all lands
to be blown about my house as freely as possible.
But I refuse to be blown off my feet by any.”*

~ Mahatma Gandhi ~

The Kuwait Fund for Arab Economic Development

A Partner in Development



Agricultural project funded by KFAED

The State of Kuwait established the Kuwait Fund for Arab Economic Development in 1961, the same year it gained its independence. Since then the Fund has been involved in assisting Arab and other developing countries in their efforts to achieve economic and social development. Over the years the Fund was able to extend assistance in the form of concessional loans to 101 countries to finance 748 development projects accorded high priority by the recipient countries.

Total commitments for these projects reached the equivalent of approximately US\$14.5 billion. The beneficiaries included 16 Arab countries, 40 African, 34 Asian and European, and 11 Latin American and Caribbean countries.

In addition to its primary activity of financing projects through loans, the Fund also supports other activities by means of extending technical assistance and grants to finance various consulting and expert services to promote capacity building and support the preparation, implementation and management of development operations in developing countries.

Other activities carried out by the Fund include contributions made, on behalf of the Government of the State of Kuwait, to the

resources of a number of regional and international development institutions involved in supporting and financing development operations in developing countries. Furthermore, the Fund also assumes the responsibility of management of grants provided by the State of Kuwait to Arab and other developing countries.

The Fund's co-operation with its partners in development has been based on mutual respect with full recognition of ownership and leadership of their development operations, as well as acceptance of priorities assigned to their development projects. Such priorities are acknowledged subject to evaluation and appraisal carried out by the Fund to ensure the technical soundness, as well as the economic and financial viability, and overall developmental impact of the supported projects on the recipient's economy.

Considering the complexity and the interrelated aspects of development, the Fund adopted operational principles, guided by flexible policies, simplified procedures, and transparent practices with the aim of sparing recipients the burden of unduly rigid guidelines and directives. The Fund's main concern in applying its policies and lending conditions is to ensure the timely and

Geographical and Sectoral Distribution of Cumulative Fund Loans (as at 31 December, 2008)

Division	Transportation	Agriculture	Industry	Energy	Water & Sewage	Telecom.	Social	Development Banks	Others	Total
Total no. of loans	318	113	61	126	73	14	12	17	14	748
Loan Amt. in USDL	5,071	1,763	1,150	3,371	1,351	344	358	448	129	13,988
Percentage in USDL	36.26%	12.61%	8.23%	24.10%	9.66%	2.46%	2.56%	3.20%	0.93%	100.00%



River blindness in West Africa

orderly implementation of projects and the realisation of their expected benefits.

Flexibility and adaptation in the Fund's core activities are reflected in its responsiveness to the needs and emerging situations affecting development outcomes. In this respect, Kuwait Fund welcomed and supported initiatives to enhance development efforts and promote the well-being of certain countries and regions, including, among others, the following:

Onchocerciasis (River Blindness) Programme in West Africa:

Millions of people in West Africa continued to succumb to a parasitical disease that impaired vision, and led often to blindness until the Onchocerciasis Programme was launched in 1974 to contain and try further to eliminate the devastating disease. Kuwait joined the Programme at its inception and Kuwait Fund, which acted on behalf of the Government, became a participating donor to the Programme in 1998. The latter has been an example of



www.kuwait-fund.org

effective development co-operation between the affected countries, donor governments, development institutions, non-governmental development organisations, and the private sector.

Today, the Programme stands out as a model of international partnerships, achieving substantial results. River blindness is no longer a public health threat as the 11-country programme area is virtually free of the disease, and arable land has been freed for resettlement and agricultural activities.

Disaster Aid: Countries in regions around the world face natural disasters of various types and magnitudes, such as earthquakes, floods, and drought, as well as other disasters such as environmental degradation, desertification, and pollution. In a number of cases, the Fund responded in a timely manner to assist countries facing the challenges imposed by such disasters, especially through grants provided by the Government of Kuwait to support such activities.

In this regard, the Fund delivered assistance to countries hit by earthquakes, such as Turkey, Egypt, and Yemen, among others. Assistance was also provided by Kuwait Fund, in the context of efforts supported by donors and international development institutions and organisations, to address major environmental and socio-economic challenges in the Aral Sea region, arising from environmental degradation with an increase in land and water salinisation, causing disastrous consequences to sustainable development. Furthermore, the Fund extended assistance to countries such as Sri Lanka and Maldives hit by the Tsunami to help them in alleviating the disastrous consequences.



Reconstruction and development of earthquake affected regions, Turkey

Geographical and Sectoral Distribution of Cumulative Fund Loans (as at 31 December, 2008)

Country	No. of Countries	No. of Loans	Percentage	Loan Amt. in USDMillion
Arab Countries	16	287	54.24%	7,587
Central Asian & European Countries	16	52	6.36%	889
Central, South & East African Countries	21	99	7.39%	1,033
East, South Asia & the Pacific Countries	18	144	19.45%	2,720
Latin American & the Caribbean Countries	11	37	2.56%	357
West African Countries	19	129	10.01%	1,400
Total	101	748	100.00%	13,988

Debt Relief: The debt crisis which erupted in early 1982 continued to impose a heavy burden on the capacity of many developing countries to service their debts, especially the heavily indebted poor countries. Two initiatives were launched: the Heavily Indebted Poor Countries (HIPC) initiative in 1996, and the Multilateral Debt Relief Initiative (MDRI), with the goals “to ensure deep, broad and fast debt relief and thereby contribute toward growth, poverty reduction, and debt sustainability in the poorest most heavily indebted countries” and “to provide additional support to HIPCs to reach the MDGs”, respectively.

Kuwait Fund welcomed those initiatives and participated in them. Its participation involved providing debt relief, so far to 18 countries, who reached either the decision or completion point. On the other hand, the Fund also supported the MDRI and contributed funds in accordance with the adopted principles.

The Millennium Development Goals (MDGs): The United Nations adopted the Millennium Declaration in September 2000, which contained a core group of eight goals to be achieved by 2015, with highest priority given to the eradication of extreme poverty. As a partner in development, Kuwait Fund started to intensify its efforts to assist developing country partners, especially through supporting their priority development operations with greater potential for achieving the MDGs. Examples of the Fund's efforts in this regard include the financing of education and health projects in countries such as Egypt, Lebanon, Tunisia, Uzbekistan, China, Sri Lanka, and Kenya.

Other examples of operations by the Fund with the aim of supporting the MDGs include assisting in the financing of programmes undertaken by national Social Funds and Development Banks. The latter with their focus on small and medium sized projects, such as in Egypt, Yemen, Djibouti, Bhutan and Bosnia Herzegovina, can be very effective in creating new jobs, increasing incomes, and reducing poverty.

Furthermore, the Fund has been very keen to support projects in the water and sanitation sectors, especially in low income countries due to their vital role in contributing to alleviating poverty and improving health, such as in Turkey, Moldova, Pakistan, Lebanon, Cuba, Commonwealth of Dominica, St Christopher and Nevis, as well as elsewhere.

The World Food Crisis: Some food prices have more than doubled during the last two years, with millions of people facing an increasing risk of poverty and hunger, especially in low-income countries. In situations like this, the development of agriculture, the source of food, is vital for human survival and the alleviation of hunger. In this regard, Kuwait Fund's support to the agricultural sector in developing countries over the last 47 years amounted to about 13 per cent of its total financing commitments. These commitments were made to support irrigation projects through the construction of dams, in such countries as Burkina Faso, Cameroon, Morocco, Lebanon, Syria, Honduras, Nepal, Sri Lanka, Sudan and others. Some of these dams are multipurpose, providing drinking water and generating electricity, in addition to irrigation.

Today, the Fund is encouraging recipient countries to accord higher priorities in their development strategies to the production of food crops, through the development of agriculture, which plays an essential role not only in promoting a country's overall growth and development, but also critically important for fighting poverty and hunger.

New Initiatives: The Arab Economic Summit held in Kuwait in January 2009, issued a declaration underlining the importance of raising the standard of living for Arab citizens, according priority to joint Arab investments, providing more opportunity for the participation of the private sector and civil societies in social and economic growth and development. The declaration recognised



School construction project, Egypt



General agricultural project



Bagre Dam, Burkina Faso



Beirut educational buildings, Lebanon



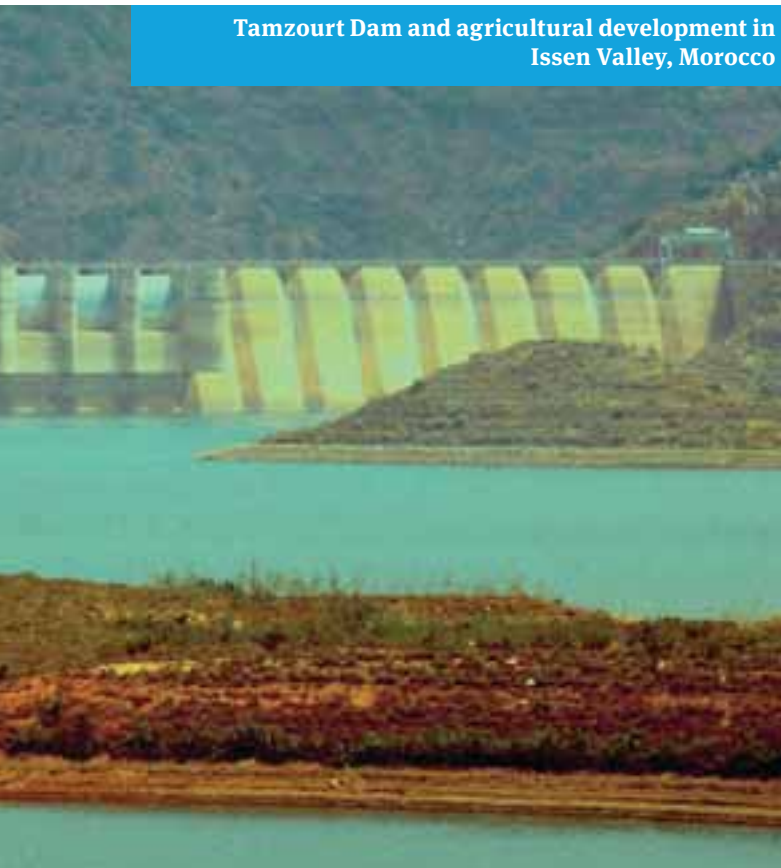
the need to promote Arab economic and social integration through co-operation in various economic and social sectors.

Among other things, the declaration called for boosting the role of joint Arab and national funds and financial institutions, and for developing mechanisms for financing inter-Arab projects with the aim of contributing to Arab economic integration, involving the private sector, providing credit

facilities for small and medium enterprises. In this respect, the Arab Economic Summit welcomed the initiative of His Highness the Amir of the State of Kuwait, Sheikh Sabah Al-Ahmad Al-Jaber Al-Sabah for establishing a US\$2 billion Fund for supporting private sector investment projects and small and medium enterprises (SME's), and Kuwait's contribution of US\$500 million to this initiative.

Kuwait Fund, which has been involved in assisting Arab economic development since 1962, will make best efforts, within its mandate, to support the activities underscored in the declaration.

Tamzourt Dam and agricultural development in Issen Valley, Morocco



Future Operations

Kuwait Fund is committed to continue to assist Arab and other developing countries in their development efforts, especially through the financing of projects accorded high priority by the beneficiary countries. Planned loan commitments over the next five years amount to about US\$700 million annually.

The Fund hopes that more of the prospective priorities will focus on sectors such as agriculture, education, health, water and sanitation, in addition to operations supporting small and medium size projects. It is evident today that global concerted efforts are needed by all partners in involved to address the development challenges facing the developing countries, including helping them to achieve the MDGs, and support their efforts toward sustainable growth and development.



Kuwait Fund For Arab Economic Development

Since 1961
Partners in Development

www.kuwait-fund.org



G8 leaders will have to face yet another sobering reality – concern about the health of the world's children as a result of chemical exposure

The environment-health axis

The damaging effects of chemicals on babies in the womb is a grim reality closely linked to changes in global temperatures

By Achim Steiner, under secretary general, United Nations, and executive director, United Nations Environment Programme

The links between climate change and health have been emerging rapidly in recent years. They range from concern over the spread of diseases such as malaria, to the impacts of rising temperatures on the elderly and vulnerable. But when the G8 leaders gather at their summit in Italy in July 2009, they will have to face yet another sobering reality – concern about the health of the world's children as a result of the chemical exposure of mothers and babies in the womb. This issue also links to global warming in more ways than one.

At the G8 environment ministers meeting in April 2009, Japan and the United States raised the tempo with quite disturbing findings.

The rates of congenital abnormalities, such as spina bifida and Down syndrome in Japan, have doubled over the past quarter century. The occurrence of children's immune system impairment has tripled over the last 20 years. Meanwhile, obesity rates, with a suspected link to disrupted metabolic and hormone systems in young people, have climbed 150 per cent in 30 years. And the birth rate of boys has fallen since the 1970s.

A wide-ranging study of women and newborns in Korea and the US is assessing the levels of substances such as lead, mercury and other heavy metals, along with dioxins and other persistent organic pollutants, set against social and genetic factors.

In the 1990s, studies began to raise the red flag about the effects on humans and wildlife of various human-made chemicals and their by-products that mimic oestrogen or block androgen. The detection of hermaphrodite polar bear cubs was linked to polychlorinated biphenyls, pollutants once used in nuclear submarines. Other studies suggested a link between DDT by-products and a declining sperm count in developed economies over the past half-century.

The international response to the chemicals challenge has so far focused on the establishment, under the auspices of the United Nations Environment Programme (UNEP), of the Basel, Rotterdam and Stockholm conventions and the Strategic Approach to International Chemicals Management. A dozen persistent chemicals, including dioxins and DDT, are scheduled for elimination, with nine more considered in May 2009. At UNEP's Governing Council/Global Ministerial Environment Forum in February 2009, governments also gave the green light to negotiations on an international treaty to reduce mercury. These are important and welcome developments.

But perhaps one of the most far-reaching recent changes has been the rapid recognition by many countries, economists, trade unions and members of civil society that a more holistic, joined-up, imaginative and cost-effective approach is needed now. It is an approach that can tackle persistent and emerging challenges together, and in more economically creative and transformative ways.

This approach has crystallised into the Global Green New Deal, a policy brief presented by UNEP and its partners in October 2008. It recommends that 1 per cent of global gross domestic product (GDP) or just under \$800 billion of the current \$3 trillion's worth should be funnelled into green investments to stimulate the global economy and set the stage for a truly sustainable 21st-century green economy – one that is low in carbon, is innovation led and uses resources efficiently, while also being able to overcome poverty and generate new employment prospects.

Some governments, such as China, Korea, Japan, the US and some European countries, are embracing aspects of the Global Green New Deal. But its full potential is not yet fully grasped.

In renewable energy, an estimated \$45 trillion will be needed before 2025 to meet increasing demands for energy while simultaneously moving to climate-friendly energy generation. An estimated \$630 billion invested in renewables by 2030 would translate into at least 20 million new jobs in the wind, solar and biomass industries.

Some developing economies already benefit from backing renewable energy. In China, the sector generates \$17 billion and already employs 1 million people. At least 20,000 jobs have been created in Bangladesh as a result of the installation of some 200,000 photovoltaic solar home systems, 6,000 biogas plants and 20,000 more energy-efficient cooking stoves.

Energy use in buildings can already be cut by 80 per cent using existing technologies. Additional

“ In renewable energy, an estimated \$45 trillion will be needed before 2025 to meet increasing demands ”



Multiple green economy benefits will extend to biodiversity as well as to the health of children



investments in this sector would not only stimulate the recovery of the construction and allied industries but also generate tens of millions of jobs. Up to 3.5 million green jobs could be created in Europe and the US alone, with even more potential in developing countries.

Similar arguments can be made regarding greening the global automobile fleet, introducing sustainable urban transport systems, moving to more reuse-and-recycling economies and promoting conservation agriculture.

Also important are investments in 'ecological infrastructure' and biodiversity – another key issue for the G8. Ecological services provided by India's forests account for more than 7 per cent of its overall GDP and for almost 60 per cent of the GDP of the poor.

A global network of protected marine areas, involving the closure of 20 per cent of total fishing grounds, could sustain fisheries worth up to \$100 billion annually while ensuring a future for 27 million fishing-related jobs and generating an additional million in fields such as conservation.

Governments need to 'seal the deal' at the UN climate meeting in Copenhagen to stabilise the

atmosphere, boost innovation and unleash multibillion-dollar carbon market flows from North to South.

Multiple green economy benefits will extend to biodiversity as well as to the health of children and adults worldwide. The melting of the Arctic and mountain glaciers threatens sea-level rise and increased water shortages in the coming decades. The same melting is triggering the re-release of many of the persistent organic pollutants and heavy metal compounds being urgently assessed in the new research on children's health in Japan and the US. If the world can move to a low-carbon economy, the rising mercury emissions from increased coal generation will diminish.

There are abundant and unassailable reasons why the world needs a low-carbon, resource-efficient green economy on a planet of 6 billion, rising above 9 billion by 2050. Combating climate change, achieving energy security, ensuring food supplies, maintaining the Earth's life-support systems and generating decent jobs for the 1.3 billion under-employed and unemployed are but a few. On the agenda of the G8, and at Copenhagen, there is now yet another – the health of the world's more than 2 billion children and those yet to be born. ♦

A global network of protected marine areas could sustain fisheries worth up to \$100 billion annually



TOWARDS THE GLOBAL DEPLOYMENT OF SUSTAINABLE BIOENERGY TECHNOLOGIES

GBEP IS BUILDING INTERNATIONAL CONSENSUS ON BIOENERGY FOR SUSTAINABLE DEVELOPMENT, CLIMATE CHANGE MITIGATION AND FOOD AND ENERGY SECURITY

As the "food-or-fuel" debate was reaching its peak amid surging commodity prices in July 2008, the G8 took a long-term view in affirming the importance of sustainable bioenergy. The Hokkaido Toyako Summit in Japan declared support for the work of the Global Bioenergy Partnership (GBEP) and invited it to co-operate with other relevant stakeholders to develop science-based benchmarks and indicators for biofuel production and use.

One year on, food and oil prices have dropped significantly. But the need to establish a broad consensus on the sustainable development of bioenergy remains an imperative at an international level. A common framework is essential so bioenergy can contribute to climate change mitigation and adaptation, energy security and poverty reduction in a manner that is compatible with food security, even in the context of an unstable investment environment and volatile agricultural and energy prices.

GBEP has been active on this front through two task forces that have allowed partners to find common ground on important questions. GBEP's Task Force on GHG Methodologies has designed a methodological framework for lifecycle analysis of emissions associated with bioenergy production and use. This is an area where practice varies immensely around the world, with hidden assumptions often resulting in significant differences in reported greenhouse gas emissions. A report has been published this year detailing the Task Force's work, which will help guide such analyses, increasing transparency and accountability.

Through its Task Force on Sustainability, GBEP is tackling the thorny question of sustainability by developing criteria and indicators, which are intended to guide analysis of bioenergy at the domestic level. By March 2009, agreement on the criteria – under the four headings of "environmental", "economic", "social" and "energy security" – was sufficient to allow more detailed and technical work on the indicators to begin.

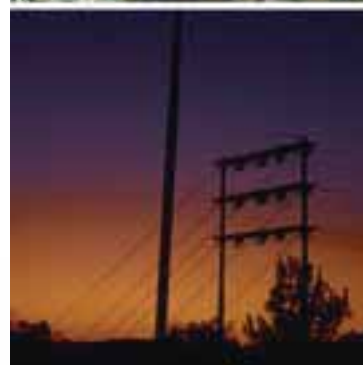
Once sustainability criteria and indicators are established at an international level, the priority for policy-makers will be to take co-ordinated action to ensure that available solutions for the sustainable and resource-efficient production and use of bioenergy are implemented around the world and that sustainable second-generation biofuels move swiftly towards commercial application.

This is the challenge that GBEP is now taking up as it seeks to complement its sustainability toolkit with instruments aimed at dismantling barriers to the widespread deployment of sustainable bioenergy technologies.

GBEP is an international initiative established in the context of the 2005 Gleneagles Plan of Action to "support wider, cost-effective biomass and biofuels deployment, particularly in developing countries where biomass use is prevalent." GBEP's partners now comprise 16 countries – including all G8 nations plus Brazil, China, Mexico, the Netherlands, Spain, Sudan, Sweden and Tanzania (with more expected to join before the G8 Summit in July) – as well as the international organizations and institutions FAO, IEA, UN DESA, UNCTAD, UNDP, UNEP, UNIDO, United Nations Foundation, World Council for Renewable Energy (WCRE) and European Biomass Industry Association (EUBIA).

As the number of partner countries grows, so too does the list of those participating as observers (17 at present) along with the European Commission, European Environment Agency (EEA), International Fund for Agricultural Development (IFAD), the World Bank and the World Business Council on Sustainable Development (WBCSD).

Read more about GBEP at www.globalbioenergy.org.



 **GBEP**
Global Bioenergy Partnership

WORKING TOGETHER FOR
SUSTAINABLE DEVELOPMENT

Human beings and nature – how on Earth can we live together?

Our world has got out of hand. The significant financial and economic crises are insignificant compared to global environmental destabilisation. Global economic contraction hurts hundreds of millions of people. An environment turning hostile to the human condition threatens billions.

Current initiatives by international groupings (such as the G8), organisations and national governments promise to get the economy back on track, 'back to normal'. However, that 'normality' produced the very conflicts and crises that must now be resolved. Our political and market systems are not in control of humanity's destiny.

We have an epic convergence of crisis-ridden interacting systems on our hands: economic/financial production, energy systems, urbanisation, poverty, education, health, governance and security. They feed upon each other. These systems of human design interact with and depend on the functionality of ecosystems.

The biosphere is, as James Lovelock first discerned, a living complex adaptive system. The purpose of nature is to produce and reproduce life. To produce life of higher orders demands a requisite diversity of species.

Humans are the one species of nature that has the intelligence to invent tools and arms to expand its dominion. Humans have designed a global system for value creation, the purpose of which is to grow welfare and wealth, but which the Tällberg Foundation believes puts us on a collision course with nature. In any contest between nature and humans, nature will win. The choice for humans is to become sufficiently disciplined in order to avoid widespread disaster.

Systems interact, adapt. That is their innate means of survival. The basic philosophy of the human world is one that encourages competition over adaptation, destruction over harmony. To believe that there would only be profitable solutions to the ecosystems crises would be a tragic self delusion. In the end we will be forced to do whatever it takes, as long as we consider our lives priceless.

The Tällberg Foundation believes that the current application of capitalism is encouraging destabilisation, not sustainability, as a means for innovation and economic growth. The focus of the present is primarily on the here and now. The future of our governance will only be found in a systems approach to how the world works. We have to abandon those models that lock our human activities into silos of stakeholder interests in isolation and in conflict with each other. We have to abandon hierarchy, linearity, reductionism and separatism as organising principles. We need to enter learning, feedback circularity, and participatory processes into economic, corporate and political governance. The context for working in one's own interest must include the interest of the whole. A new identity will inevitably emerge. Economists and ecologists must merge to recognise the moral and ecological boundary conditions that must not be transgressed.

Conflict among humans can be managed by conversations, negotiations, rule of law, agreements... or by war. Human societies have proven their serial inability to proactively design and harmonise technological, economic, social and political transitions. Millions have suffered from conquests, colonialism, slavery, empire building, genocides, religious and ideological



The Tällberg model of intellectual conversations tightly integrated with arts and nature have become recognised as a unique experience, providing leaders from many sectors, disciplines and parts of the world with a venue where they meet for open and honest exchanges.



The Tällberg Forum gathers yearly on the village commons of Tällberg, Sweden. Tällberg Conversations, Workshops and Learning Journeys take place throughout the year, including such venues as Cape Town, Brussels, London, Moscow, New York, Alexandria and Greenland.



Tällberg conversations have increasingly focused on the systems problems emerging from the growing imbalance between nature and human activity. Can we design, govern and manage the sustainable interaction between natural systems and the systems of human activity?

hegemony and persecution. More often than not such transitions have provoked wars and terror. Humanity is a huge reservoir of angst and this cannot be forgotten. Albert Schweitzer observed, perhaps prophetically, 'that humanity has lost its ability to foresee and to forestall'. Can we prove him wrong?

To reconcile humans' progress is the easy part. The difficult part is to restabilise the relationship between the exponential expansion of the human species, its economic activity with the functionality of ecosystems. Of this, modern humans have limited knowledge and scant know-how. Conscious environmental policies have only existed for a few decades. But despite new science, policies, technologies and business models, a dangerous situation has further deteriorated. The next generation of policy frameworks, technologies and business models must provide a satisfactory way to stop the economy from bleeding as we stop the ice-caps from melting. For this we must incentivize technological leaps to spur economic growth for the soon to be 9 billion people who must learn to live equitably on this planet. This is our assignment and our legacy.

Globalisation brings benefits. That is why we do it. But it also brought a new order of magnitude of risks. The present playing out of dangerous planetary crises is the wake up call to action for which the international community was irresponsibly

About the Tällberg Foundation

Founded 1981 by current chairman Bo Ekman, the Tällberg Foundation has been deepening our understanding of issues related to leadership and change in society and business. The Foundation's main focus of activity is to gather leaders from around the world and from a variety of backgrounds for discussions and reflection on HOW the world has changed and WHAT we can do. Main activities are Annual Forum at Tällberg, Sweden, other workshops and seminars, projects, studies and research programmes, leadership development initiatives and publishing. Tällberg now also embarks on large projects that help understand and define positive paths ahead. Rework The World (5th YES Global Summit) will gather 2000 delegates to Tällberg/Leksand in June 2010 to explore and seed the future of sustainable work for young people. The Tällberg Forum and other foundation activities are made possible through the generous support of its many private and public contributors. Lead contributor is Svenska PostkodLotteriet.

unprepared. There can be no other consequence of the globalisation dynamics than to design a governance system that serves the human interests of security in our ecological planetary system. The Tällberg Foundation believes this is priority number one.

This requires the reconfiguration of political processes, democratic mechanisms, international law, the concepts of sovereignty and the nation state and of the organisation of political power and force. Our focus must broaden to include our pasts and an infinite future within the ever present. The next systems of governance must provide us the answers to the question: 'Human beings and nature - how on Earth can we live together?'

Is the planet in our hands?

No. We are in the hands of the planet.

TÄLLBERG FOUNDATION

www.tallbergfoundation.org

A climate of change

The G8 will need to understand the climate goals of the new US administration and engage with it to effect real progress at Copenhagen and beyond

By Frank Loy, former US under secretary of state for global affairs and chief climate negotiator

When the G8 leaders turn to the subject of climate change, it will become immediately clear that the United States is “the indispensable nation”, as Madeleine Albright once said. This is because it is such a major contributor to global greenhouse gas emissions, and because many other emitters are unwilling to make serious commitments in reducing emissions as long as the US remains on the sidelines. That was evident in the eight-year period that just ended, when the US was essentially absent. The new administration, however, wants very much to engage. The challenge for the G8 is to make that engagement possible.

The G8 leaders thus need to get two things right. They need to understand the position of the new American administration – its goals, strategies and also its domestic limitations. And they need to determine just what they – the leaders themselves, in contrast to their climate negotiators – need to and can decide and announce, as they seek to advance success at the December climate conference in Copenhagen.

In pondering the US position, there are two apparently contrary concepts to keep in mind: first, the world will not soon see an American president as committed to tackling climate change as Barack Obama. Second, even a president with the popularity of Obama, with Democratic majorities in both houses, has an immensely difficult task to gain the necessary congressional support and approval for a domestic climate change law and an international agreement. This is more difficult than the summit leaders can easily comprehend.

Obama’s approach is based on four new propositions. There must be full acceptance of the science that warns just how serious the risk to the planet is unless it lowers greenhouse gas emissions dramatically. It must be understood that an effective global agreement

is necessary to combat this global problem and that the US needs be part of that solution. It must also be recognised that US participation in such an agreement is neither meaningful nor even possible without prior domestic legislation or regulation, or at least a clear understanding of what sort of legislation can be expected in the near future. Otherwise the US cannot make international commitments it can meet. It has learned from the Kyoto Protocol experience that agreeing to international commitments without some sort of congressional support for domestic measures to make compliance feasible is a dead-end street.

“The world will not soon see an American president as committed to tackling climate change as Barack Obama

”



Finally comes the belief that the American public will not support a tough enough programme if it judges the near-term economic penalty too great. Therefore a climate change response must be cast in terms of economic progress.

This was the president's position during and after the 2008 election campaign. Obama received advice to scale back his climate change programme or postpone its launch. During the campaign he was warned that the effort would be politically damaging in key states, both coal-producing ones and those with

President Obama announces the US intention to tackle climate change, EU-US Summit, April 2009

energy-intensive manufacturing. When he took office in the midst of an unparalleled economic collapse, he was counselled that this was no time to do anything that would raise the cost of energy.

The president has steadfastly refused to follow that counsel. However, he is out on a limb. If he cannot bring home the outlines of an agreement that makes US participation possible, early US participation will be set back badly. Moreover, public support of serious action on climate change is weaker in the US than in any other industrialised country. A 2008 Gallup poll showed the number of Americans who think climate change is



Thousands of solar panels generate electricity used at Nellis Air Force Base in Las Vegas

something to worry about (37 per cent) is no greater than it was 18 years ago. The issue ranks 20th (next to last) on the list of things Americans worry about.

By far the strongest correlation is between party affiliation and the belief that climate change is a serious problem. Republicans are much more reluctant than Democrats to consider climate change a serious threat. The political consequences of that can be seen in Obama's difficulty in May in getting a single

Republican in the relevant committee of the House of Representatives to vote to report out of committee on the principal climate bill before Congress.

The G8 leaders at the 2009 LAquila Summit should limit their efforts to four political decisions that could make Copenhagen a success. First, they must agree on a common position on what is expected from the major developing countries. Without a clear requirement that these countries will take significant action, the US and very likely other industrialised countries will be hard pressed to come up with anything meaningful. These developing countries will not accept the same commitments that the industrialised countries are expected to take. But there are many opportunities for progress within the Bali Action Plan mantra of 'measurable, reportable and verifiable'. The G8's sticking to a common position is more important than the exact character of that position.

The US currently requires these countries to adopt 2020 mitigation actions that involve quantified reductions from a business-as-usual curve. These

“ These developing countries will not accept the same commitments that the industrialised countries are expected to take ”

reductions are sufficiently ambitious to contribute to meeting the objective of the convention. This is a sound point of departure for an agreement.

Second, the G8 leaders must agree on an approach to provide the financial help the developing countries will need to carry out their mitigation obligations.

Third, they must call for a regime that rewards or compensates tropical forest countries for reducing the rate of deforestation. Unless this source, which contributes some 20 per cent of total global emissions, is included in an agreement, there is simply no way to achieve the level of emission reductions needed.

Finally, they must take off the table the numerical mid-term target reductions put forward by the European Union – 20 per cent or more below 1990 levels by 2020. Those are unrealistic in the extreme for the US, which has suggested 15 per cent below 2005 levels by 2020.

The 2009 G8 summit does not come at an easy moment for the United States, or for others. Germany, Japan and the United Kingdom are all contemplating early elections, and will not want to be seen as bowing to a weak US position, after they have swallowed hard and taken tougher ones. But Copenhagen cannot succeed unless some of the harder political decisions are taken in that devastated but beautiful city in Abruzzo. ♦

A vision for renewable energy

Accelerating the diffusion of renewable energy will lead to a shift from the fossil fuel era, serving new uses and new markets.

By Carlo Durante,
CEO Maestrale Green Energy

The Lehman Brothers effect still dominates our world and will be one of the key discussion elements during the G8 meetings this year. We have learnt that when the financial system is temporarily unavailable, our economies reveal their weaknesses. There is little doubt that infrastructures are the industry which the financial institutions will restart feeding first and in that, renewables, due to the intrinsic nature of their business, can capture a significant share of funding: in the short term, we strongly believe that renewables can contribute to the reignition of growth.

Now let's think ahead 20 years. The key target is to make renewables cost competitive and socially acceptable – a mature industry. We believe their key benefit is in the longer term, when their increasing use will lead a new generation of technological developments, creating new competences and industrial excellence, and new ways of using energy in traditionally under-served areas.

Renewables represent the possibility of a smooth but very significant shift from the fossil fuel era towards something different. Whether you believe in the need to combat climate change, or just fear the arrival of 'peak oil', we need to identify a different model today. Renewables can create a domino effect – an initial alternative to the fossil economy generating the curiosity to look outside and discover. It might be that water, wind, sun, geothermal, seas and biomasses are not the right resources or are not yet used in the most efficient way: these are however the start of something profoundly different. We need a 'champion' – ideally a leading economy – to create an initial impulse that others would follow. We currently lack that initial spark.

It would be a rebalancing of powers and the beginning of a different geopolitical chapter where reduced need to import

Following the recent financial turmoil, renewables can be an engine to restart economies. However, we must look into the future and target their cost competitiveness and social acceptance. Renewables can determine a rebalance of powers, create new ways to serve complex markets, and be integrated within conventional systems. Renewables can have the ambition to become a mature industry participating in the wider energy market.



energy or primary sources cross-border would trigger different international relationships and co-operation policies. Within each region, districts will emerge which will be using renewable resources, released from rigid centralised generation and long-term supply, progressing towards a more flexible 'smart' distributed network. The resulting vision of the renewable energy world is a self-sustainable but interconnected set of specialised provinces, each able to develop and exploit the most locally available natural resources, even in the countries which are least exposed to the need to import energy sources. Specialisation is likely to occur in different energy sources or fuels: renewables will specialise in geographical areas and particular segments of supply and demand.

Projections by economists show different views on the share renewables will have in the wider energy market. The issue is that the 'business as usual' model, which is usually projected into the future, does not contemplate discontinuities: we are just at the beginning of the renewables' revolution and are striving to identify their role. We call now for a firm commitment of the G8 towards creating the right environment for encouraging the culture of renewable energy across the key countries, so that rapid diffusion will lead to further cost and technology leaps and avoid the 'green divide' that fast-growing emerging economies could create. We must turn renewables from random assets added to the grid, which is today's model, to a system put in parallel to conventional energy. We must place the responsibility for promoting and exploring those new paths on the shoulders of a new generation of utility companies, which will be uniquely prepared to take on the challenge of generating and transporting renewable energy to almost all consumers of electricity.

Renewables have now grown sufficiently to be key actors in the wider energy sector, and are important enough to reshape the sector for human needs as they change.



Europe invests in space technology to tackle climate change



G8 leaders focus on climate change

Global climate change is, without doubt, the biggest environmental challenge the world faces today. Recognising the potential impact to humankind, the issue of climate change has been placed at the top of the agenda at recent G8 Summits. In Article 31 of the G8 Hokkaido Toyako Summit Leaders Declaration at the 2008 Summit in Japan, they stated: "To respond to the growing demand for Earth observation data, we will accelerate efforts within the Global Earth Observation System of Systems (GEOSS), which builds on the work of UN specialised agencies and programmes, in priority areas, *inter alia*, climate change and water resources management, by strengthening observation, prediction and data sharing."

Europe responds to these challenges

Observations of the Earth from space are proving an ever-more important way of enhancing our understanding of how the Earth system works and ultimately help improve predictions of how the environment is likely to respond to a changing climate. In order to help address the challenges of climate change, Europe has launched a number of initiatives such as the Global Monitoring for Environment and Security (GMES), the Climate Change Initiative and the European Space Agency's (ESA) series of Earth Explorer satellites.

The GMES initiative is largely based upon observations from space that are coupled with *in situ* measurements and forecast models to derive timely, policy-relevant geospatial information services. While GMES is led by the European Union, ESA has been charged to co-ordinate the space component, which forms the backbone of the observation system. Under GMES, a number of new Earth observation satellites are being developed that will carry a range of instruments such as radar and optical imagers to focus on observations of the land, ocean and atmosphere.

Satellites like ESA's ERS and Envisat have been delivering data that are proving extremely valuable in our quest to help understand how natural Earth processes work as a system.

Having access to near-continuous data over long periods of time is important for scientists to identify and analyse long-term climate trends. ESA's Envisat mission provides continuity of data initiated in the early 1990s with the earlier ESA satellites ERS-1 and ERS-2. The GMES satellites and Earth Explorer missions are set to continue these data streams.

In the same context, at the latest ESA Ministerial Council, ESA presented the Climate Change Initiative, a new programme proposal that aims to systematically generate, preserve and give access to long-term global records of 'Essential Climate Variables'. These data are required by the Global Climate Observing System to support the International Panel on Climate Change (IPCC) and the United Nations Framework Convention on Climate Change (UNFCCC).

The Climate Change Initiative will implement actions that have been agreed between space agencies and the climate community in a formal process over the last three years. It contains a range of activities including long-term data preservation, recalibration and reprocessing of data records, algorithm development, product generation and validation. The initiative will focus on climate variables such as greenhouse gas concentrations, ocean salinity and temperature, sea and lake levels, sea ice and snow extent where ESA satellite data will make a major contribution to complement data from other international space agencies. This new initiative will also pave the way for future operational support to climate policies within the GMES programme.

Earth Explorer missions, which are driven by science and research priorities, focus on the atmosphere, biosphere, hydrosphere, cryosphere and the Earth's interior with the overall emphasis on learning more about the interactions between these components and the impact that human activity is having on natural Earth processes. As well as answering critical Earth-science questions raised by the scientific community, their combined data archives will also contribute to producing Essential Climate Variables for climate monitoring, modelling and prediction.

The GMES space infrastructure

Some of the Earth observation satellites that are to be used for GMES services are already in orbit, such as ESA's ERS and Envisat as well as a range of national and commercial missions. Europe is currently investing 2.3 billion euros to develop ten dedicated GMES satellites or payloads to meet GMES user requirements. They constitute five series of satellite missions, called Sentinels, which will be launched from 2012 onwards. ESA is in charge of the development of these missions.

The Sentinels are complemented by existing or future ESA and European Union Member States and Earth observation missions. Today, about 30 satellites are available for GMES, examples of which are the French Spot, the German TerraSAR, the Italian Cosmo-Skymed and the UK and Spanish DMC satellites. Data from international partners will come from mission such as the US Ikonos, the Japanese ALOS, the Canadian Radarsat, and the Indian IRS satellites.

The ground infrastructure is developed by ESA to provide harmonised access to the various satellite data for GMES services. Current funding ensures ESA-developed space observations until about 2020, but plans are currently being made to extend them for several decades, hence ensuring the long-term availability of critical observations.

GMES services

Based on global observations, GMES services will provide essential information in five main domains, atmosphere, ocean and land monitoring, as well as emergency response and security. Climate change cross-cuts all these domains.

Specific services include sea ice and Arctic region monitoring, surveillance of the marine environment, monitoring of land-surface motion risks, land/forest-cover maps, sea and land colour, ocean and land surface temperature measurements, surface topography, as well as atmospheric trace gas measurements. In addition, following disasters such as earthquakes, landslides, floods and maritime accidents, emergency and civil protection services are able to depend on timely and accurate maps for situation assessment, support and response. Atmospheric monitoring includes stratospheric ozone profiles to monitor the evolution of the protective ozone layer, surface ultraviolet radiation levels, air pollution maps, greenhouse gas and aerosol distribution maps.

In the domain of deforestation, last year's G8 summit noted a determination to strengthen international efforts to tackle the problem of illegal logging. Deforestation in the tropics is currently the second largest contributor to global greenhouse gas emissions. Reducing deforestation could make an important contribution to keeping concentrations of heat-trapping gases in the atmosphere at relatively safe levels.

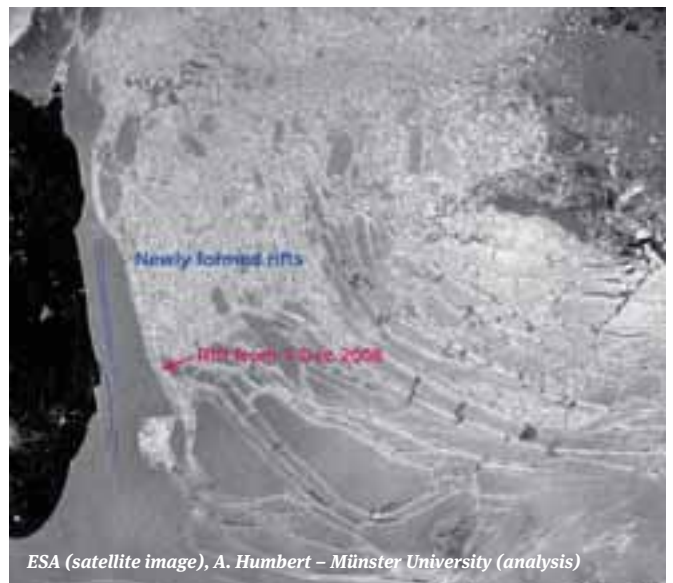
Due to the growing international interest in establishing a mechanism to reduce emissions from deforestation, particularly in developing countries, the United Nations has launched the Reducing Emissions from Deforestation and Forest Degradation programme. This initiative will establish a mechanism for compensating reduced deforestation with economic incentives. It will be based on a reliable, accurate, and objective monitoring capacity from space that will work in concert with other tools like forestry surveys in specific countries. In this respect, GMES will help verify the emissions released into the atmosphere due to tropical forest clearing by providing accurate information on location, distribution, changes and statistics of forest and non-forest areas derived from optical and radar imaging technologies.

The ESA-funded GMES Forest Monitoring project is already providing a number of products to users that include maps of old



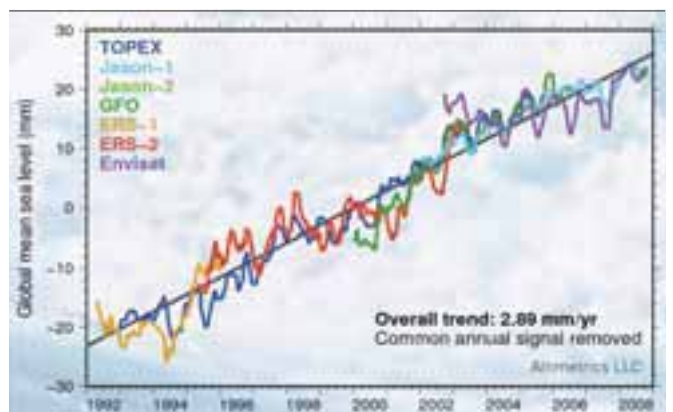
CNES (satellite image), SERTIT (image analysis)

Several days of persistent heavy rain during the summer of 2008 caused the Prut and Dniestr rivers in western and southern Ukraine to burst their banks. The flood caused extensive damage to homes and infrastructure, which resulted in tens of thousands of people having to be evacuated. This image from the French Satellite Pour l'Observation de la Terre (SPOT) mission shows the flooded Dniestr river in July – August 2008.



ESA (satellite image), A. Humbert – Münster University (analysis)

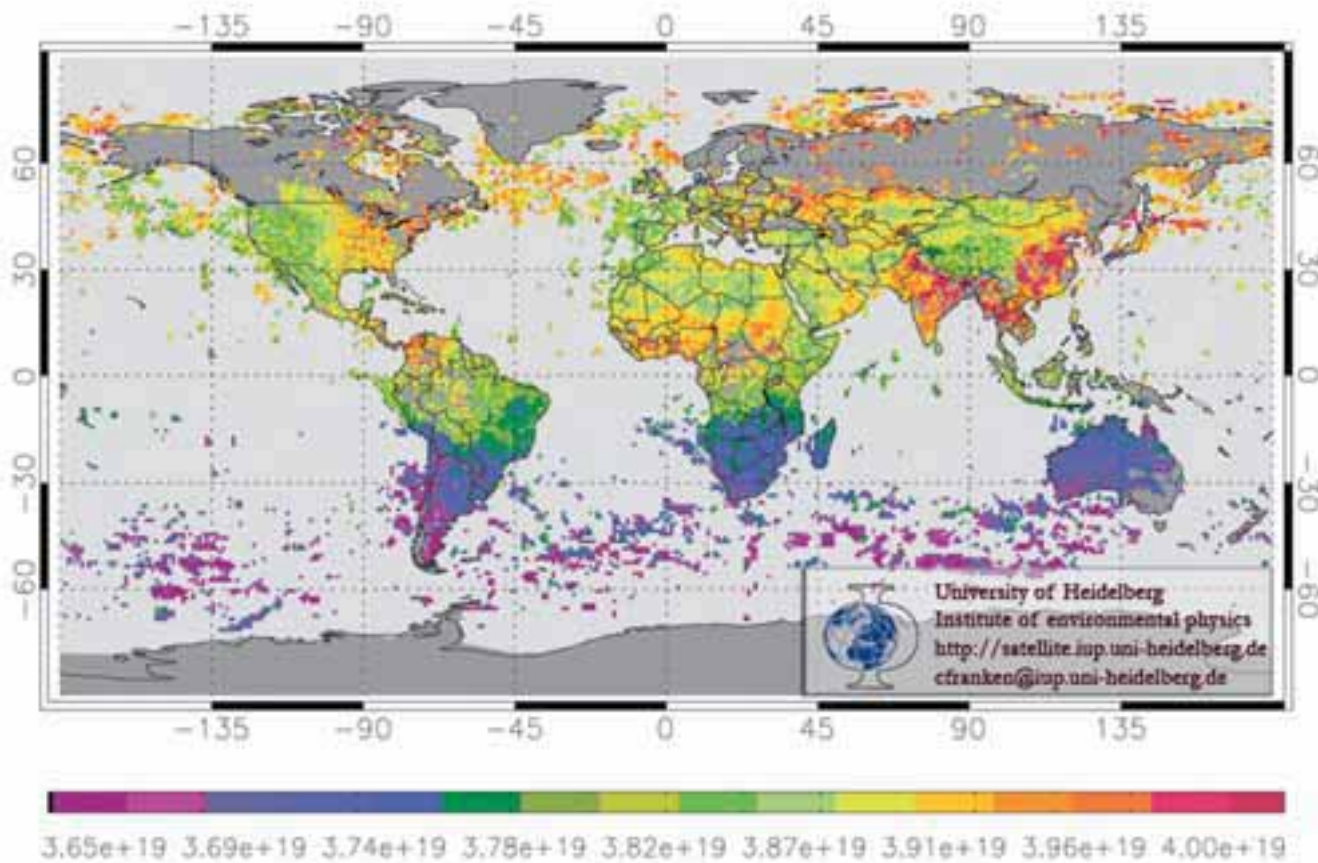
ESA Envisat's Advanced Synthetic Aperture Radar (ASAR) captured the early stage of the disruption of the ice bridge that connects the Wilkins Ice Shelf to Charcot and Latady Islands on 2 April 2009. The new rifts that developed along the length axis of the ice bridge are visible.



R. Scharroo, Altimetrics LLC

Global sea-level rise derived from radar altimeters carried on various satellite missions. The overall trend shows an increase of 2.89 mm over the period 1992–2008.

ESA (satellite data), University of Heidelberg (analysis)



Map of global atmospheric methane distribution based on data acquired between August and September 2003 by ESA's Envisat satellite. The map depicts vertical column density of methane (CH₄) measured in molecules per square centimetre. The concentration of methane over the Indian subcontinent is due to rice cultivation in the Ganges valley.



ESA

This image of the Xingu River in Brazil was acquired by ESA's Envisat satellite on 30 May 2006. It clearly highlights the contrast between the rainforest (dark green) and deforested areas and urbanisation (light green).

and new forest cuttings, monitoring of forest regeneration activities, land and forest area cover maps and biomass and carbon statistics.

In conclusion

As a result of industrialisation and human activity over the last century, the Earth environment has changed. The degree to which these changes are impacting the climate and what this means for the Earth system is still unclear. However, the European GMES initiative as well as the Earth Explorer satellites and the Climate Change Initiative mark a significant step in helping, not only to understand the consequences of climate change, but also to help develop important strategies to cope with our changing environment.

Europe, through its Earth Observation programmes, contributing to GEOSS and responding to UNFCCC/GCOS, is taking concerted, co-ordinated and accelerated action to implement and maintain consistent, long-term space-based observations of the global climate system, and to make these data freely and easily available to climate research communities worldwide.



www.esa.int



Securing the future

“This is a matter of urgency and of national security and it has to be dealt with in a serious way.”

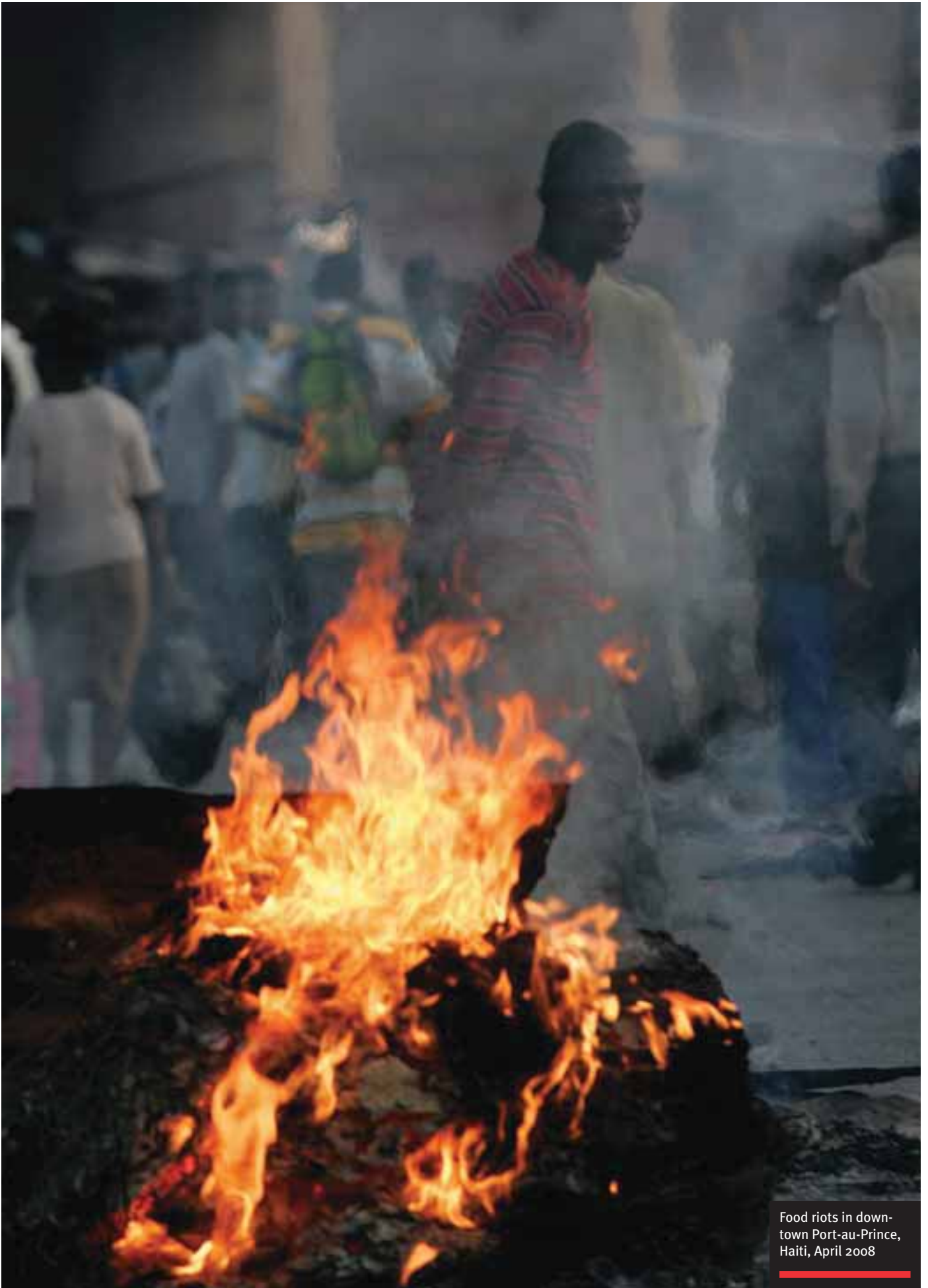
By Tobias Feakin, director, National Security and Resilience, Royal United Services Institute

With these words in December 2008, Barack Obama outlined what he perceived to be one of the key security issues that his administration would have to face, namely the threat posed to US national security by unabated climate change. Earlier, in 2007, a group of retired US generals and admirals stated that “projected climate change poses a serious threat to America’s national security”. In 2003, the Pentagon’s Office of Net Assessment identified climate change as a threat that vastly eclipses that of terrorism. However, a US president has now, for the first time, linked climate change to the potential security implications it can pose. Globally, other governments are also acknowledging that climate change will pose security challenges over the next

50 years. The security dimension of climate change sharpens the focus of the mitigation and adaptation debate in a way like no other.

When linking climate change to conceivable security situations, one must consider that climate

“ Climate change can add stress to already fragile regions of the world. This could lead to conflict ”



Food riots in downtown Port-au-Prince, Haiti, April 2008

change can add stress to already fragile regions of the world. This could lead to conflict. Climate change will disproportionately affect those least able to cope with its effects, namely the poorest. Rich countries will not be left unaffected by climate change: Hurricane Katrina demonstrated how a natural disaster can overwhelm even the most developed countries. Extreme weather events are predicted to increase both in severity and frequency. Indeed, if unwilling to move toward a low-carbon economy, industrialised countries not only must assist poorer countries in responding to climate-driven emergencies, but also could see increasingly severe impacts on their own shores.

The 2007 findings of the Intergovernmental Panel on Climate Change (IPCC) provided a scientific consensus on the potential impacts of climate change. Broadly defined these come in four key areas: a global mean temperature rise between 2 degrees and 6 degrees Celsius, rising sea levels, an increase in extreme weather events and precipitation change. These findings were a wake-up call. But what is becoming even more alarming is that many in the scientific community suggest that those estimates are conservative.

The impact that these changes will have upon food production and water scarcity is key to understanding the national security implications of climate change. The pressure placed upon scarce basic resources by climate change can increase public protest, cross-border conflicts and mass migration as people look to move from areas ravaged by climate change. The tempo at which climate-driven impacts occur can erode a government's ability to govern by overloading already stressed emergency response capabilities, health services and security mechanisms.

During the past two years, spikes in food prices have contributed directly to civil disturbances in Peru, Yemen, Burkina Faso, Bolivia, Mexico, Bangladesh and Uzbekistan. In Egypt, riots turned deadly, with seven fatalities. In Cameroon, 40 people died during food-related riots. Such unrest can lead to leadership change, as in Haiti, one of the world's poorest populations, where 80 per cent of the population exists on less than £1 a day. Within a short time frame in 2008, the price of basic foods rose by more than 50 per cent. Demonstrators attempted to storm the presidential palace, leaving four dead. By 12 April 2008 the prime minister of Haiti had been sacked over his handling of the riot.

These food price increases are attributable more to the diversion from traditional crop provision to producing biofuels, rising energy costs and growing demand from the swelling 'middle classes' of Brazil, India and China than to the impacts of climate change. Yet pressure on food production will only increase with predicted climate change impacts. This rise could lead the trend of civil disturbances to continue and strain global disaster response capabilities.

Access to freshwater could also lead to conflict. The 2009 United Nations World Water Development Report suggests that even according to the lowest projection, almost 2 billion people in 48 countries will struggle with water scarcity in 2050. Already, water scarcity has reached alarming dimensions in several arid and semi-arid regions of the South, including parts of the

Middle East, Central Asia, the Indian sub-continent and Africa. Nature does not respect human-made political borders: more than 260 rivers in the world transcend international boundaries and are used jointly by two or more states, and 40 per cent of the world's population live in those shared river basins. International sub-state conflict could occur as climate change places additional stress on access to freshwater supplies.

By 2050, out of a global population of approximately 9 billion, almost 3 billion will live in coastal regions, exposing them to rising sea levels, increased extreme weather events and other natural hazards. The economic infrastructure concentrated on coasts will also come under direct threat. This causes governments difficulties in emergency preparedness, building and infrastructure programmes, and contingency planning.

When these climate impacts occur in sequence or concurrently and exacerbate existing problems within a state, they can overwhelm a government's ability to maintain order, as well as make communities potentially violent as they struggle to cope. Sometimes the sheer scale of just one natural disaster produces that outcome, as was shown during Hurricane Katrina, when criminal activity filled the power vacuum left by broken-down law and order. What would be the implications if the frequency of such large-scale events increased in line with climate impact predictions?

“ No longer should the issue be considered solely as scientific and environmental policy – it crosses policy and academic boundaries ”

By discussing climate change as a security issue, global leaders recognise the importance and urgency of the climate change agenda. No longer should the issue be considered solely as scientific and environmental policy, for it crosses all policy and academic boundaries. Without a comprehensive approach, innovative responses will not be discovered. The strongest policies should address climate security challenges and also help reduce emissions, provide energy security and produce economic benefits. Global leaders must comprehend that there is a consequence to inactivity both in making the necessary decisions on global carbon emission cuts and in choosing policy decisions to mitigate the impacts. Using creative adaptation policies – those that they would not regret having pursued even if the consequences of climate change prove less severe than feared – will enhance the resilience of their countries and safeguard against the most severe and unwanted outcomes that climate change impact could bring. ♦

Trading our way out of climate change

Emissions trading is an artificial commodity for which there is no real economic need – but it may be the best way to reduce the harmful emissions that threaten our future

By Henry Derwent, president and CEO, International Emissions Trading Association

The International Emissions Trading Association is ten years old in 2009. This is not quite the same thing as saying that greenhouse gas emissions trading has been with the world for a decade, but that the public and private sector pioneers started work that long ago. For half that time, these pioneers seemed interesting but lonely. Only with the opening of the European Union Emissions Trading Scheme (EU ETS) in 2005 did trading become serious. The rest of the world started watching.

What they saw was an extraordinary thing: an artificial commodity, for which no one had any basic economic need, that behaved just like a real commodity, willed into existence by governments.

But there were setbacks, as all pioneers experience. Europe learned the hard way that companies will overestimate the number of allowances they actually need and that governments will go along with them. Europe also learned that all markets depend on information arriving and circulating in an orderly way.

It was easy to improve the rules on the release of information. It was less easy to be tough about allocations. The obvious way forward was to auction allowances. But politics and rigidities in the regulation of the industry sectors did not allow that, so the European Commission had to impose its own views of needs on the companies and member states. The trading market waited to see whether they had the strength and the will to do so. They did – although even today there are some legal challenges that are not completed.

Even now, one of the toughest demands to answer about the EU ETS is 'show me the low-carbon investments that would not have been made but for the carbon price'. There are a number of legitimate responses. First, the price has probably not yet been high enough. Second, the duration of the periods of obligation has not yet been long enough. And third, the point of a market is to discover the most cost-effective way of achieving a given result. There is no reason to make different investment choices if the amount of carbon reduction required can be achieved by less costly means, such as fuel switching.

The EU ETS has proven that carbon pricing does what it says on the packet: it is the best way to achieve a given reduction in emissions. If governments want to

increase that amount, or extend the period over which the market has to produce the emissions so that longer-term reductions start to make sense, the remedy is in their own hands.

Another main area of criticism concerns getting the allocations to the market in the first place. There is no denying that auctioning is the most effective system. But suddenly introducing a substantial price for something essential, and previously free, is politically



and practically very hard indeed. The EU discovered that, and the United States is discovering it now, too. In the greater scheme of things, just getting the allocations into the hands of the market is probably more important than arguing over the best way to do it.

Another area of heavy criticism of the EU ETS is its use of international offsets. At one level this criticism is bewildering: the whole point of introducing a market is to prompt people to scour the world for the most cost-effective way of reducing those emissions. But then critics start saying that, in fact, cost-effectiveness today should have been traded off for equity and other supposed benefits of making all the reductions at home. The offset project methodologies are criticised as well.

Worries on the other side are the economic cost of reducing emissions and the competitiveness implications of a non-level playing field. These are hardly problems that can be laid at the door of emissions trading. Doing something about climate change is a political choice. Giving developing countries a free, or freer, ride despite the global nature of the problem was a principle that all the developed countries, including the US, signed up to in Rio in 1992.

There are many minor improvements that can be made to trading schemes on the basis of the EU ETS experience. The ground covered in the recent Phase 3 Directive is a good list of them. But the big criticisms

“

Emissions trading is a tool and has been shown to be very effective

”

China is opening up a cap-and-trade emissions trading floor in addition to its Beijing Environmental Exchange

of emissions trading either miss the whole point or go to the level of ambition behind it. Emissions trading is a tool, and has been shown to be a very effective one. It cannot really be blamed for the project on which the tool is used.

Because the shaping of that project is politically difficult, and politics is largely national, national emissions trading schemes are going to display some differences rooted in national political compromises. There is only limited force, in the US today, in the argument that it cannot be done one way because the Europeans have done something different. It is probably better to be less ambitious. The economic advantages of whittling those differences away will become clear over time, especially with continued pressure from global market players.

The G8 can do a lot to help. For those countries that have not yet adopted trading as a tool, high-level endorsement and support of this most globalised of approaches to a global problem will be helpful. And it is evident to all that a global solution can only be achieved by bringing more countries into the circle of those that have taken caps on emissions. Trading is a means of keeping costs low and sharing the burdens around the whole world. The G8 and other bodies where the big decisions may be taken would do well to remember that, and use emissions trading to the full. ♦



Emerging stronger from crisis

By Dr Klaus Engel, Chairman of the Board, Evonik Industries AG



Some 80 years ago, the German author Erich Kästner wrote: “There is nothing good unless it is of our own making,” and these words are equally true today. Around the world, the past months have been dominated by a stream of bad news and there is currently no sign that it is ending. Yet, despite all the problems and anxiety, there are still good prospects of success for those who can demonstrate endurance, dependability, courage and creativity. Pessimism, despondency and predictions of gloom and doom will not improve matters, but solid hard work and a clear commitment to economic, ecological and social responsibility can.

Achieving a successful performance in periods of economic prosperity is nothing remarkable. However, Evonik does not regard itself as a fair weather sailor. Our goal is to remain on course even when the seas get rougher and to emerge stronger from the present financial and economic crisis. Good ideas and practical solutions should help us achieve that goal.

Megatrends: energy efficiency and climate protection

Rising global energy requirements, limited resources and climate protection are overriding issues of our age and require innovative solutions. According to most climate researchers and politicians, global emissions of greenhouse gases need to be cut significantly in the coming years. To achieve that without hampering economic growth and reducing living standards, energy efficiency needs to be raised substantially in all areas of business and daily life. The guiding principle of sustainable development – achieving a viable balance between economic, ecological and social development – is of central importance here. Evonik is well-equipped to follow that guiding principle. Its **three business areas** already offer customers modern materials and extensive system solutions that enhance energy efficiency.

The **Chemicals Business Area** operates in attractive areas of speciality chemicals, a field in which it ranks among the leading global players. Its innovations facilitate a reduction in the use of valuable resources and cut emissions.

Here are some highlights:

• Solar power

Evonik is the global market leader in the production of ultra-pure chlorosilanes, a starting product for solar cells. However, clean solar power starts well before the socket: Evonik is involved in the manufacture of polycrystalline silicon (PCS) through its joint venture Joint Solar Silicon (JSSi). JSSi uses an energy-efficient process at the cutting edge of technology to produce silicon from silane. This uses far less energy than the conventional production method.



• **SEPARION®**, a ceramic separator for lithium-ion batteries

Lithium-ion batteries are state-of-the-art mobile power packs. They have considerable advantages in hybrid and electric vehicles and can greatly reduce fuel consumption. The main advantages of lithium-ion batteries compared with lead and nickel-cadmium alternatives are their power density and longer lifecycle. SEPARION® increases the operational reliability of modern lithium-ion batteries, opening up new applications.

Our **Energy Business Area** also improves energy efficiency by using renewable resources and advanced coal-fired generators. In this way it saves raw materials and supports climate protection endeavours.

Evonik operates several major hard-coal power plants in Germany and abroad and is a pioneer of modern coal-fired generating technology. Its vision of “Clean Competitive Electricity from Coal” focuses on saving raw materials and increasing efficiency by using state-of-the-art technology to cut emissions from hard coal-fired power plants. Evonik is currently building a hard coal-fired power plant with over 45 per cent net efficiency in Duisburg-Walsum (Germany). This will be the most modern plant of its type in Europe and will reduce carbon dioxide emissions and coal requirements by 30 per cent compared with older power plants. Given the rising global demand for energy, which will be met predominantly through coal, Evonik sees enormous opportunities to export its energy-efficient technology.

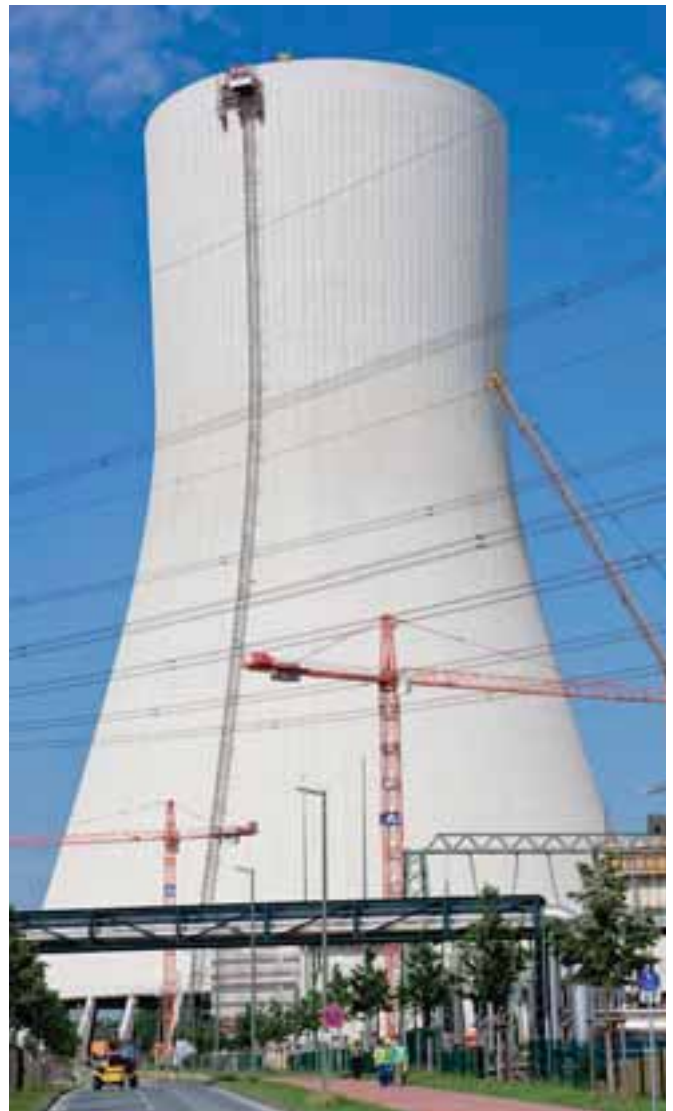
For decades, Evonik has made extensive use of combined-cycle generating technology which reduces CO₂ emissions. These plants supply district heating to customers in the Rhine/Ruhr and Saar regions of Germany.

Evonik is also well-positioned in the fast-growing market for renewable energies and is one of the German market leaders in mine gas, biomass and geothermal energy. In 2008, its ten biomass plants generated electricity and heat from around 450,000 tons of lumber. In addition, Evonik currently has geothermal energy projects in Germany.

Mine gas from operational and disused pits contains methane, which is 21 times more harmful to the climate than carbon dioxide. Utilising this gas to generate heat and power reduces emissions of greenhouse gases and makes more efficient use of resources.

The **Real Estate Business Area** is working on a wide range of pioneering solutions to optimise the energy efficiency of its housing stock and equip new buildings with modern, energy-efficient facilities. The ‘three-litre house’ is a good example. State-of-the-art installations, including smart ventilation systems, heat recovery and solar power bring energy savings of nearly 90 per cent for tenants. The environment benefits too: solar power and a mini co-generation plant reduce consumption of fossil fuels and thus cut CO₂ emissions.

Issues such as environmental protection, energy costs and the shortage of raw materials will become even more important around the world in the future. In an international context, it is therefore particularly important to develop innovative solutions based on balanced and consistent international policies where all nations make a substantial contribution. By this we mean a commitment to reducing greenhouse gases that goes beyond Europe. Financial incentives that encourage end-users to invest in green technology could speed up the breakthrough of technological innovations, and show that economic and ecological considerations are complementary.



All three business areas at Evonik Industries therefore see many new market opportunities for their products and custom-tailored solutions. Evonik wants to make even better use of the opportunities offered by megatrends like energy efficiency and climate protection, for example by encouraging the development of networks between its various areas of activity. One step toward this was the establishment of the Eco² Science-to-Business Center under the auspices of group's strategic research and development entity Creavis Technologies and Innovation at the end of 2008. The Science-to-Business Center concept is based on interdisciplinary, cross-sector collaboration with university researchers, suppliers and customers along the entire value chain. The Nanotronics and Biotechnology Science-to-Business Centers are established examples of how Evonik rapidly translates scientific findings into innovative solutions for practical application.

As a commercial undertaking, appropriate remuneration and adequate protection of our know-how are prerequisites for the utilisation of our highly efficient technologies. The political framework should support that. To quote Kästner again: “There is nothing good unless it is of our own making.”

Toward Copenhagen

Reviving the world economy needs to happen in parallel with a new global climate regime

By Björn Stigson, president, World Business Council for Sustainable Development

The world is constantly changing, but at the moment it is hard to escape the feeling that the changes are bigger and more challenging than usual. What the world decides to do about climate change, in particular at the negotiations in Copenhagen this December, and how governments implement those decisions, will affect the lives of people today and of generations to come.

Around the world, change is apparent. There is new political leadership in the United States, the European Union and Japan, and elections in India and soon in Germany. Many countries are in recession. The global



financial system is being restructured with a rebalancing of the roles of governments and the markets, a push for low-carbon economies to combat climate change and the surge in green jobs those changes will create. It has been estimated that up to 20 million jobs worldwide can be created in renewable energy alone by 2030, far more than would be achieved with fossil fuel-based energy.

Although the issues are complex, it is clear that the global community must revive growth in the world economy and imperative to do this in a low-carbon way.

No matter where one lives, or what one does for a living, it seems unlikely that anyone will be left untouched by the changes that will be brought by the decisions the world simply has to make on climate change.

But whatever happens in Copenhagen, the pressure for change will be vast. Poverty alleviation for today's poor and providing for the expected 3 billion new

Both animals and people share the limited resources of the polluted and shrinking Lake Chad

people by 2050, are major challenges. These people will quite naturally aspire to better their lives. But those aspirations will somehow have to be achieved within the context of a new, global climate regime in a world likely to be constrained by resources and carbon.

These people expect their governments to help them. The governments of today and those of the future need to find ways to achieve development, growth and low-carbon economies together. About 1.6 billion people currently have no access to electricity. It will be difficult to improve their lives significantly without it. But more people with more access to electricity cannot mean more greenhouse gas emissions.

The world after 2050 will be different – there is no doubt about that. The changes that shift the world to low-carbon economies will be transformational. They will require tremendous leadership from governments and co-operative, innovative, across-the-board thinking.

“About 1.6 billion people have no access to electricity. It will be difficult to improve their lives significantly without it”

Governments have a difficult task ahead of them. But they will not be alone. They need to work with business in wide-ranging partnerships to cut greenhouse gas emissions by half by 2050. Business wants to – and can – contribute to the solutions to climate change. But governments need to help by providing business with the right policy frameworks to work within.

The world is at an historic turning point. What is unfolding today is nothing short of a new industrial revolution, one that has the potential dramatically to reshape the world.

But just what kind of world will this revolution leave? And how can the world make sure that it builds a more sustainable society with lower energy and use of resources? How does it create the green jobs needed to deliver these solutions? And how can it establish a societal infrastructure that is more resilient to the challenges of climate change and its impacts on food and water supplies?

These are the questions on which the G8 could lead and foster solutions. There needs to be huge investment in energy, urban infrastructure, water, transport and food supply. The world must make sure that these investments do not lock it into an unsustainable future. Governments need to look forward to the low-carbon economy of the future and focus on investments in clean energy systems, transport solutions, energy-efficient buildings and water and urban infrastructure. Making the right decisions now will spur new industries, create green jobs, change lives and secure the future.



With vision, foresight and leadership, leaders can transform the world. But there must be co-operation on a global scale like never before. The G8 is well placed to facilitate this.

This co-operation needs to encompass all levels of society, including business. Companies know they will be called upon to provide the lion's share of the investment needed to propel the world toward a low-carbon economy. They stand ready to act. But today's financially uncertain times mean that, more than ever, business needs as much certainty as possible, in order to understand the risks, before investment.

Business needs the following: a transparent, predictable, long-term policy framework; precise intermediate targets (2020-30); commitments from all parties to take action built on fair burden-sharing; separate and distinct considerations of rapidly emerging economies; national policies suited to national circumstances; and skills development and resources to support actions in developing countries.

Business has expertise that governments could tap. It can help answer key questions such as these: how can market mechanisms best be developed to create a price for carbon that takes its true cost into account? How can energy-efficiency measures be scaled up globally? What does an energy-lean economy look like? What technologies and policies are needed to get there? And how can investment flow into technologies that will help deliver jobs in clean energy?

“ The G8 can help by putting sustainability at the forefront as it tackles the challenges of climate change and global recession ”

There is a lot to do before the world meets again in Copenhagen in December 2009. Business understands that all are in this together. It wants to get on with working, planning and investing for the future.

The G8 can help by putting sustainability at the forefront of its thinking as it tackles the twin challenges of climate change and global recession. The leaders of the G8 and other governments must know that what is needed now is leadership for the decades ahead, not the short-term leadership that simply equates the planet's interests with those of people today. What is needed now is leadership that understands that if it leaves the world without a global climate deal after Copenhagen, then history will relate that this was the leadership that failed to act to secure the future. ♦

Workers installing the wind power dynamotor in Weifang, Shandong Province, China



Zero NO_x – making it possible

For years, the solution to one of our greatest environmental problems has been within reach. If all supply ships built recently were powered by gas instead of diesel, Norwegian NO_x emissions would have been reduced by 14,000 tons and CO₂ emissions by 90,000 tons per year. Such NO_x reductions represent about 50 per cent of Norway's obligations under the Gothenburg protocol



Eidesvik Offshore's gas-powered offshore vessel, *Viking Queen*

The 'Gothenburg protocol' states that Norway is committed to reduce NO_x emissions by 30 per cent within 2010. The coastal fleet is responsible for 40 per cent of Norway's NO_x emissions. Emissions of NO_x from Norwegian shipping have increased from 65,000 tons in 1990 to 73,000 tons in 2007. A significant part of these emissions come from more than 150 offshore vessels.

Even if 70 new supply ships have been added to the fleet in recent years, only four of the 150 supply ships operating on the Norwegian continental shelf are gas-powered. If all new vessels were powered by gas, the reduction in NO_x emissions would have corresponded to the emissions from 2.8 million cars, more than all the cars in Norway.

The technology is well known and easy to implement when building new vessels. Such ships are somewhat more expensive to build, but these costs are small, if you consider the environmental benefits.

What Norwegian authorities can do

Norwegian politicians are now aware of these new possibilities, and should not permit 'yesterday's' vessel technology to be used. Instead, they should:

1. Use their large ownership interests in the North Sea to demand that transportation to and from oil fields is carried out with low NO_x and CO₂ emission vessels.
2. Use their role as legislators to require the use of low emission

vessels on the Norwegian shelf and in local coastal traffic. Today's emissions would be greatly reduced if we motivate greater political willpower than we have seen in recent decades.

Eidesvik Offshore – heading for zero emission with the fuel cell

It has been seven years since Eidesvik Offshore demonstrated that gas-powered ships are possible, and built the first one in the face of opposition and doubt from the authorities. The world's first gas powered offshore vessel, *Viking Energy*, was launched in 2003. Eidesvik's second ship, *Viking Queen*, was launched in 2008, and the third ship, *Viking Lady*, was delivered in March 2009. *Viking Lady*, which will operate for Total E&P Norge, has the additional benefit of using fuel cell technology for internal power supply.

Eidesvik's dream is to build a ship powered only by fuel cells, where the NO_x emissions will be zero and the CO₂ emissions will be reduced by half, compared to today's vessel emissions. For more information on the Eidesvik story and its plans for the future, visit www.eidesvik.no

www.eidesvik.no





On thin ice

Serious predictions of global warming due to human action – and the dire results not limited to the poles – need urgent government measures to halt catastrophe

By Christopher Wright, Grantham Institute on Climate Change, London School of Economics, and Centre for Development and Environment, University of Oslo

On the issue of climate change, the future is now. Given the time lag between greenhouse gas emissions and their actual warming effect, today's current climate is a result of emissions from decades past, while the future climate is defined today. By all accounts, the current trajectory of emissions is not sustainable. The Intergovernmental Panel on Climate Change (IPCC), the United Nations-affiliated body that periodically disseminates the consensus view of thousands of climate scientists, concluded in 2007 that the warming of the climate system is unequivocal and that most of the observed increase in global average temperatures in the last 60 years is very likely due to human contributions to atmospheric greenhouse gases, primarily the burning of fossil fuels. This accumulation will continue unless drastic governmental actions to curb emissions are

implemented. Polar ice caps now melt at a rate that exceeds predictions made by the IPCC only a few years ago. Stark evidence of warming is also provided by dramatic images of giant ice shelves breaking off and dissolving in waters off the coasts of Greenland and in Antarctica. These developments, combined with the thermal expansion of oceans, will cause a rise in sea levels that could be devastating to the 13 per cent of the world's population living in low-lying areas.

Warming-induced ice melt is not confined to the poles. According to the United Nations Environment Programme (UNEP), the average rate of melting and thinning of the world's mountain glaciers more than doubled between 2004 and 2006. In many regions, the disappearance of glaciers threatens the sustainability of water supply in river systems that are critical for generating hydropower, feeding irrigation systems, providing drinking water and operating industrial



facilities. Compounding this trend is the reduced precipitation projected in the arid and semi-arid tropics, which poses a threat to long-term food security. Using IPCC climate models, the Center for Global Development recently estimated that agricultural productivity may on average drop by 10 per cent to 25 per cent in developing countries, and 6 per cent to 8 per cent in developed countries. Many African countries that depend on rain-fed agriculture for generating export revenues and maintaining food security are already water stressed. Moreover, the drought-induced agricultural downturn in Australia has vividly illustrated how lower wheat yields from one large exporter can contribute to spikes in global food prices, to the detriment of food-importing countries.

These sobering predictions may actually understate the gravity of the problem. The rates of change in many indicators have become so rapid that the thorough but cumbersome process of synthesis that precedes each IPCC report renders many of the findings out of date before they are even released. The IPCC's Fourth Assessment Report in 2007 projected with higher confidence than the preceding Third Assessment Report, released in 2001, an increasing risk of species extinction, coral reef damage, droughts, heat waves and floods. On the basis of new evidence, Sir Nicholas Stern has admitted that projections about the risks and costs of climate impacts were underestimated in the landmark Stern Review in 2006. And earlier this year the International Scientific Congress on Climate Change concluded that, given

the high rates of current emissions, the worst-case IPCC scenarios about the future are being realised.

These dire predicaments provide a strong case for G8 countries to cut their emissions aggressively, given their disproportionately large historical share of accumulated carbon stock in the atmosphere. While some mitigation efforts do require adjustment costs, other measures produce an almost immediate payback. Research by McKinsey observes that annual global investments of \$170 billion in energy productivity between now and 2020 could halve greenhouse gas emissions, while producing an internal rate of return on investment of about 17 per cent. Resulting increases in global energy productivity could meet half of the growth in global energy demand by 2020. At negative cost, these

“ Projections about the risks and costs of climate impacts were underestimated in the landmark Stern Review in 2006 ”

“ The European Environment Agency projects that existing water shortages will be exacerbated by more droughts ”

measures would help curtail demand for new energy sources and cut emissions, while also reducing the future economic costs of dangerous climate change. In the United States alone, the Natural Resources Defense Council projects that by 2100, hurricane damage, real estate losses, energy costs and water shortages associated with climate change could account for as much as \$1.9 trillion, or 1.8 per cent of gross domestic product. In the UK, a government report assessed the annual costs of flooding and coastal defences to rise 20-fold by 2080 under a business-as-usual scenario. In the Mediterranean region, the European Environment Agency projects that existing water shortages will be exacerbated by more droughts, further undermining agricultural productivity and hydropower generation and adversely affecting the tourism industry. In Japan, a government study projected that costs associated with sea-level rise and flooding could amount to \$87 billion annually by 2100.

Since the signing of the landmark Kyoto Protocol in 1997, anthropogenic carbon dioxide emissions have grown four times faster than during the previous decade. Therefore, a much more effective deal that gains the commitment of all major emitters needs to be reached in Copenhagen later this year. At Japan's 2008 Toyako Hokkaido Summit, the G8 committed to reducing emissions by 50 per cent by 2050, relative to 1990 levels, and to working toward the stated goals of the United Nations Framework Convention on Climate Change. By most scientific accounts, this target is insufficiently ambitious. It does not reflect what the science identifies as necessary in order to prevent the worst impacts from materialising. According to the IPCC, preventing warming of two degrees relative to pre-industrial levels may require concentrations to stabilise below 350 to 400 parts per million. This suggests that a commitment to reduce emissions by 2 per cent annually is needed immediately, amounting to an 80 per cent cut by 2050 relative to 1990 levels. To achieve this, the scale and pace of action need to match recent governmental responses to the economic crisis. If the G8 countries lay the foundation for an ambitious, effective and equitable agreement in Copenhagen later this year, they can do much to reassert the relevance of this intergovernmental forum in global governance. ♦



Innovative climate protection

Go carbon neutral with myclimate – The Climate Protection Partnership

myclimate – The Climate Protection Partnership

The non-profit foundation myclimate is an international initiative with Swiss roots. Founded in 2002, today the organisation is one of the world's leading suppliers for carbon offsetting in the voluntary market. The international reseller network represents myclimate around the globe and offers myclimate services in Canada, USA, Scandinavia, south Europe, India and New Zealand.

According to the principle of 'Avoid – Reduce – Offset', myclimate also serves clients with custom-made and professional training on climate change and climate protection and promotes public dialogue on climate protection, for example with exhibitions, interactive teaching in schools or competitions for young people.

myclimate supports the renovation of a hydropower plant in the west of the Indonesian island of Sumatra, so that the rural region can be supplied with electricity from renewable energy



In order to counter the deforestation on Madagascar, myclimate supports the manufacture and distribution of climate-friendly solar cookers and efficient cookers



The third core competence of myclimate is systematic analysis and calculation of clients' emission profiles (on a product, process or company level). With the results of the life cycle assessment, myclimate enables fact-based decision-making at corporate management level. Along with these services the Swiss foundation serves its clients with the implementation of custom-made emission calculators.

High quality carbon offset projects

myclimate offsets emissions in well-chosen projects in developing and emerging countries as well as in Europe. The organisation currently has 30 projects under contract. The funding makes it possible to use renewable energies and energy efficient technologies instead of inefficient fossil fuel technology. By this, emissions are reduced in a sustainable and measurable way and the projects contribute to global climate protection.

myclimate's carbon offset projects meet the highest international standards (CDM/Gold Standard) and – aside from reducing greenhouse gas emissions – contribute to sustainable development in the project region.

myclimate in international comparison

Independent studies acknowledge the stringent project standards and regularly rate myclimate among the top offset providers of the world. The ENDS Carbon Offsets Guide 2008 counts myclimate among the top three of 170 providers surveyed. A study by the Tufts Climate Initiative (Tufts University, USA) on international providers of voluntary offsetting measures in air travel ranks myclimate among the top four offset providers in the world.

Clients and partners

Besides the guarantee that their supported projects observe the highest standards, companies want to be sure that the bigger proportion of their offsetting money reaches the projects. As a non-profit organisation, myclimate guarantees that at least 80 per cent is invested directly into the projects. Among myclimate's customers are companies from different sectors and of different size, for example HSBC, PricewaterhouseCoopers, Fleurop, Migros, Volvo Switzerland, Seat, UNEP, the UN Global Compact, Unilever, the Football World Cup 2006, the World Economic Forum, WWF UK, Greenpeace International, Red Bull, Coca Cola Company, Q-Cells, SGS and some Swiss governmental agencies. Several companies from the tourism and travel industry also co-operate with myclimate in order to enable their clients to offset their emissions. Some of these include Lufthansa, Virgin Atlantic, Swiss International Airlines, Tui and Kuoni.

For further information on myclimate, please email us at info@myclimate.org or visit our website: www.myclimate.org

www.myclimate.org

myclimate
Protect our planet



MOVING
ENERGY
FORWARD

We will continue to develop wind power



The world's largest offshore wind farm to date in the North Sea

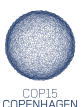
For many years the wind worked hard to produce flour from the mills; now it helps us to produce electricity from our wind turbines.

We are working hard too; we are busy building Horns Rev 2. When completed by the end of 2009 it will become the largest offshore wind farm in the world to date. Horns Rev 2 is being built in the North Sea, 30 km off the Danish west coast and is expected to produce elec-

tricity equivalent to the consumption of about 200.000 households a year.

We are working intently on tripling our renewable capacity by 2020. We currently have major onshore and offshore wind farms under construction and more under development in the UK, Poland and Sweden.

DONG Energy is one of the leading energy groups in Northern Europe. We are headquartered in Denmark. Our business is based on procuring, producing, distributing and trading in energy and related products in Northern Europe. We have approximately 5,500 employees and generated more than DKK 60 billion (approx. EUR 8.2 billion) in revenue in 2008. For further information, see www.dongenergy.com.



UNITED
NATIONS
CLIMATE
CHANGE
CONFERENCE
2009

OFFICIAL
PARTNER

DONG
energy

The energy challenge

Concerted, co-ordinated action is required to bring about a policy revolution toward an environmentally sustainable energy system

By Nobuo Tanaka,
executive director,
International
Energy Agency

Last November, the International Energy Agency (IEA) released the 2008 edition of its *World Energy Outlook (WEO)*. The report concludes that the future of human prosperity depends on how successfully the world tackles the twin energy challenges facing it today: securing the supply of reliable and affordable energy and effecting a rapid transformation to a low-carbon, efficient and environmentally benign system of energy supply. Current trends in energy supply and consumption point to rising imports of oil and gas into the regions of the Organisation for Economic Co-operation and Development (OECD) and developing Asia, while the growing concentration of production in an ever smaller number of countries threatens to increase vulnerability to supply disruptions and sharp price hikes. In the absence of stronger policy action, rising consumption of fossil energy will inexorably drive up emissions and atmospheric concentrations of greenhouse gases, putting the world on track for an

eventual increase in global temperature as high as 6°C. What is needed is nothing short of an energy revolution.

A necessary first step to change course is to take strong, co-ordinated action to curb the growth in greenhouse gas emissions and the resulting rise in global temperatures. The post-2012 climate change policy regime that will likely be established at the United Nations climate talks in Copenhagen, in late 2009, must provide the international framework for that action. With energy-related carbon dioxide accounting for 61 per cent of global greenhouse gas emissions, the energy sector will have a pivotal role to play. The target that is set for the long-term stabilisation of greenhouse gas concentration will determine the pace of the required transformation of the global energy system, as well as the level of stringency required by the policy response. The energy sector has a relatively slow rate of capital replacement in general, due to the long lifetime of much of its infrastructure for producing, transporting and even consuming energy. As a result, more efficient

What is needed is
nothing short of an
energy revolution



RPS



What if...

you were thinking about **Carbon Capture and Storage**, but weren't certain of the best partner to work with?

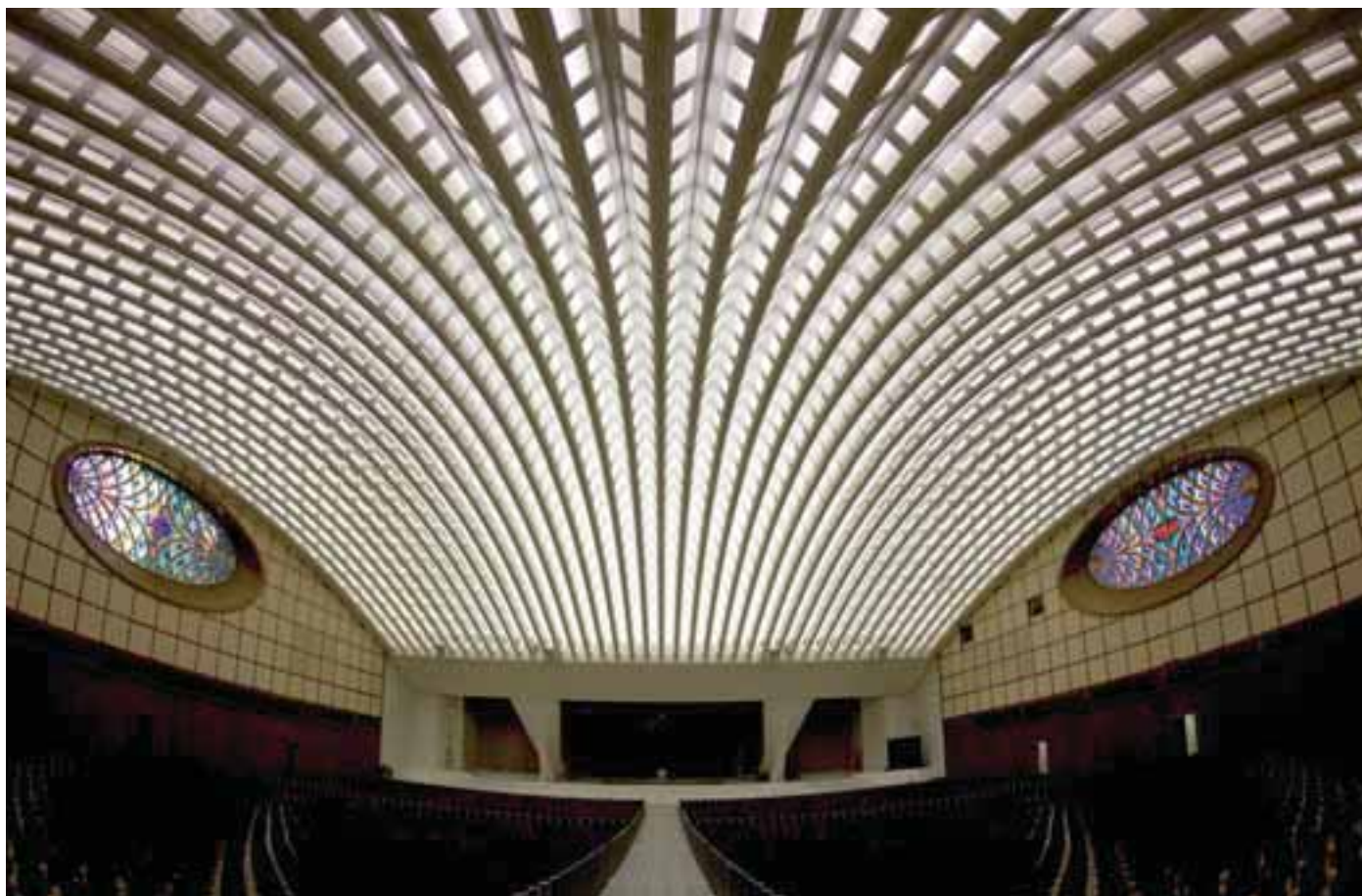
Our energy and environmental experience is unique in being able to offer clients the immense breadth of support required to develop their CCS projects at each stage of the lifecycle.



Just some of our areas of expertise:

- Integrated Carbon Management Services
- Technical and commercial counsel from source to sink
- Guidance in legislative and market developments
- Planning and consenting advice
- Environmental and monitoring assistance

RPS are global specialists in managing major, complex, multi-disciplinary projects.



Paul VI hall, Rome. The Vatican has committed to a new solar energy system to power key buildings and to using renewable energy for 20 per cent of its needs by 2020

technologies normally take many years to spread through the energy sector. It will be necessary to face up to the reality of the cost of early capital retirement if radical measures are to be taken to speed up this process and deliver swift, deep cuts in emissions.

To demonstrate the extent of this challenge, the *WEO 2008* considers two climate policy scenarios corresponding to long-term stabilisation of greenhouse-gas concentration at 550 and 450 parts per million (ppm) of carbon dioxide equivalent. The 550 Policy Scenario amounts to an increase in global temperature of approximately 3°C, the 450 Policy Scenario to a rise of around 2°C. The scale of the challenge is immense. The 2030 emissions level for the world as a whole needs to be lower than the level of projected emissions for non-OECD countries alone in the *WEO 2008* Reference Scenario. In other words, the OECD countries alone cannot put the world onto the path to a 450ppm trajectory, even if they were all to reduce their emissions to zero. The technology shift that would be required, if achievable, would certainly be unprecedented in scale and speed of deployment.

Fortunately, many of the policies and technologies that can deliver very substantial savings in both energy consumption and carbon dioxide emissions are already known. The current financial crisis must be used as an opportunity – not an impediment – to launch this transformation. Countries must shift away from traditional, carbon-intensive technologies and embrace new ones. It is for governments to effect the transformation. Clear price signals, including carbon pricing, will be important. Lessons learned from

the European Union Emissions Trading Scheme can inform the efforts of other countries. In many non-OECD countries, the removal of subsidised fuel prices is an important first step. However, prices alone are not enough. Delivering a low-carbon future requires major breakthroughs in technology development and deployment. Governments have the means to put in place incentives to innovate, to encourage promising research activities and to break down international barriers. Much of the additional spending will have to be made by households. Therefore a huge step-level change in the attitudes toward energy efficiency (which is the cheapest and fastest way to reduce greenhouse gas emissions while creating jobs) and consumer purchases by hundreds of millions of consumers worldwide are needed. Governments, through information provision, sound regulation and targeted fiscal incentives, play a key role in ensuring that, worldwide, the right decisions are taken to safeguard the future of the energy sector – and of the planet.

It is also imperative that international collaboration on energy policy is enhanced, not only for climate change reasons but also for improved security of supply. Collaboration between IEA member and non-member countries is vital because all countries trade oil in an interconnected global market. Even if the IEA countries were to succeed in lowering their oil imports in the coming years, increasing import dependency in other major consuming regions – notably China and India – would still mean that any oil-supply disruption anywhere in the world would result in severe knock-on effects for all countries.

Micro seaweeds for green fuel production: countries must shift away from traditional, carbon-intensive technologies and embrace new ones

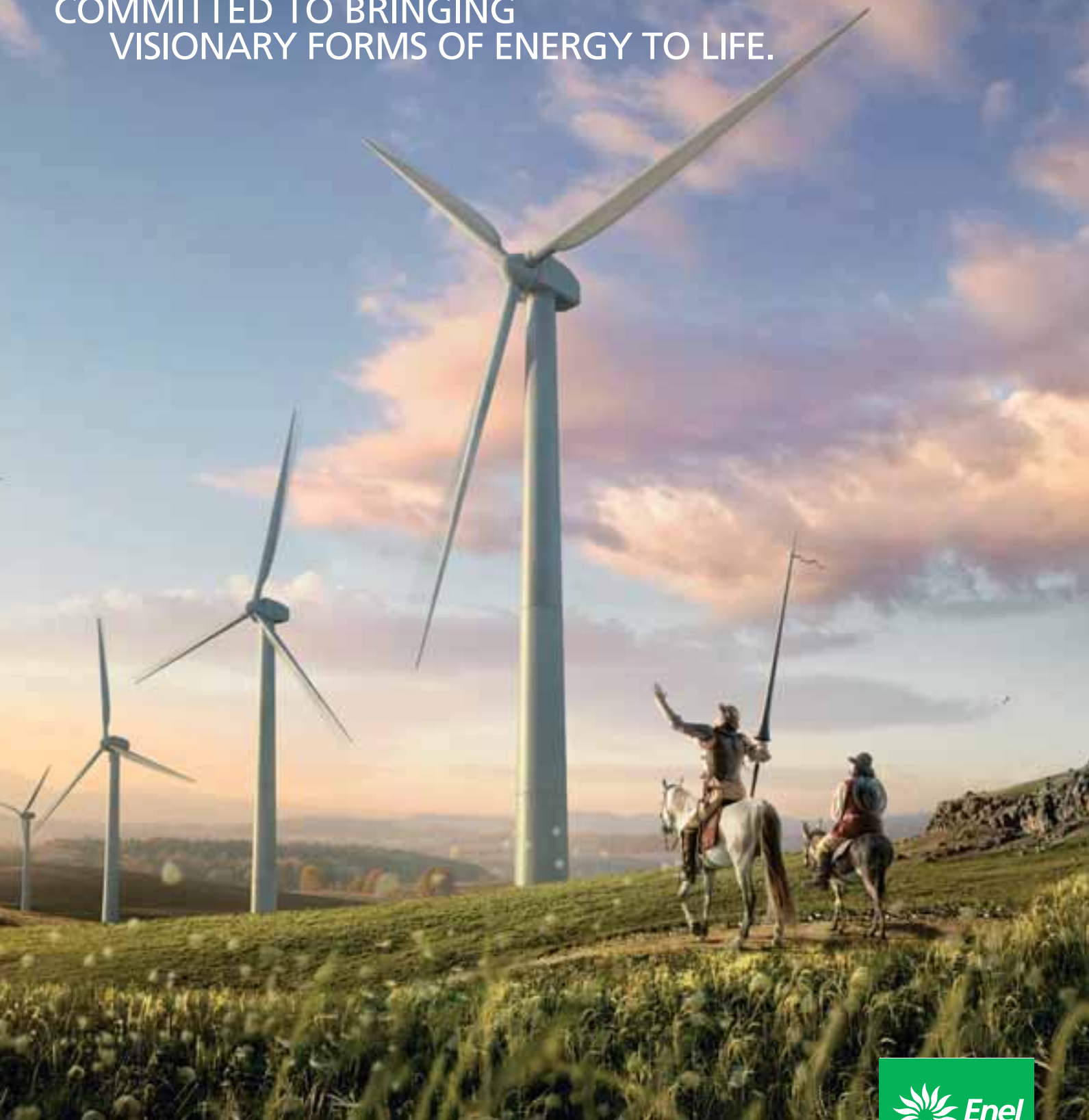


The IEA is strengthening its collaboration with non-member countries. Delegates from China, India and Russia attended the meeting of the IEA's governing board in March 2009. The IEA recently released the Energy Policy Review of Indonesia, which will be followed by a review of Chile. The forthcoming World Energy Outlook 2009 will contain a special analysis of Southeast Asia's energy prospects. These types of outreach efforts are essential when considering the size of the energy challenges the world faces. The IEA is also working closely with the G8 countries by submitting various reports over the coming months, on topics ranging from low-carbon technologies, the impact of the financial and economic crisis on energy investment, energy efficiency recommendations and strategies for accelerating the development and commercialisation of carbon capture and storage.

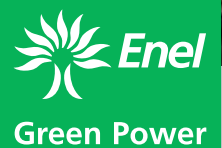
“ The IEA is working closely with the G8 by submitting various reports on the impact of the financial and economic crisis on energy investment ”

The world has the technologies and policies to address these challenges. While the costs are not insignificant, the most crucial resource is also the one the world is quickly running out of – time. The time to act is now. ♦

INTRODUCING ENEL GREEN POWER. COMMITTED TO BRINGING VISIONARY FORMS OF ENERGY TO LIFE.



WIND. RENEWABLE ENERGY FOR EVERY GENERATION. Enel Green Power may be new but we're already an important player in our field: tomorrow's energy. All the energy we produce comes exclusively from renewable sources. The sun, the Earth, wind, water and biomass. Enel Green Power is already generating more than 4,300 MW of power in Europe and the Americas. And over the coming years, we are planning to become a world leader by doubling the generation capacity of our green energy. Above all, Enel Green Power is here to help make a reality of one of humanity's most cherished dreams: an energy as pure and unlimited as our imagination. www.enelgreenpower.com



ALANOD-SOLAR

the first choice to reduce CO₂ emissions



alanod

S O L A R

Alanod-Solar GmbH & Co. KG

EFFICIENCY. SOLAR. SURFACES.

Solar energy is more important than ever in our daily lives. Highly efficient solar systems can supply electricity to the grid, heat our water, and even cool our homes in the summer. Alanod-Solar produces the world's most advanced surfaces for solar solutions, helping make them more efficient and more reliable so they can better harness the power of the sun.

Our MIRO® technology optimizes absorber surfaces for solar thermal collectors, and can increase solar reflection rates as high as 95% for solar mirror systems. Alanod-Solar is the solar industry's first choice for reducing CO₂ emissions.

We are the world's first company to have reached the milestone of having sold more than 10 million square metres of absorber surface area. Therefore we contribute to a CO₂ saving of more than 1 Mio. tons per year.



Alanod-Solar, MIRO-SUN, mirotherm, mirocol and sunselect are registered trademarks.



Renewing efforts

At earlier G8 summits it was agreed that climate change negotiations should stay within the UNFCCC. How can L'Aquila take this further?

By Sergey Koblov, executive director, and Victoria Panova, chief of strategic planning and partnerships, International Sustainable Energy Development Centre

The problem of sustainable, adequate and environmentally friendly energy supply has become a top priority on today's global economic development agenda. Interest in renewable and alternative energy resources has grown, thanks to extremely volatile hydrocarbon prices, the understanding of the limits and adverse impacts of those hydrocarbon resources, and the increasing role of political, environmental and social factors in energy development. And many in the global community still resist nuclear energy.

There are three key requirements for renewables to be regarded as a promising energy source: sufficiency, economic accessibility, and ecological and technical feasibility. The biggest challenge is that only a small

share of such resources is technologically accessible and commercially viable. Consequently, investment in renewables has increased substantially on a global scale, with the annual figure growing fivefold over the past five years. Moreover, the availability of renewable resources does not correspond to the distribution of population, economic activities and energy consumption.

The further development of renewables has positive economic effects: it contributes to creating new jobs, reducing greenhouse gas emissions and achieving the Millennium Development Goals (MDGs). The medium-term attractiveness of investments in non-conventional energy will decline and hydrocarbons will retain their place in the fuel and energy balance. Nonetheless, non-traditional sources of energy and innovative energy-



saving methods will be found. Developed countries have more opportunities and incentives to contribute to a higher share of renewable and alternative sources of energy.

The European Union's 20/20/20 Plan strives for a 20 per cent cut in carbon dioxide emissions and a 20 per cent increase in renewables by 2020. European countries have the means to introduce renewables, which are subsidised and have a high level of technical and economic development and low demand for traditional resources. In contrast, the increased demand for hydrocarbons in developing countries will likely meet basic energy needs and maintain economic growth.

The United States is also adopting specific measures related to energy to overcome the current crisis, including tax incentives aimed at developing renewable energy and conserving energy (regarding energy-efficient buildings, industries and transport).

In the future, developing countries will take the largest share of world energy demand. The BRICs – Brazil, Russia, India and China – occupy a special place, since traditional energy supply hardly meets rapidly growing demand. This demand requires even higher investment for quantitative growth and innovative ways to deal with environmental constraints and improve efficiency. The poorest countries suffer from a high rate of energy poverty, which cannot be resolved on a national level. Thus with the global North shifting to alternative and

““ The poorest countries suffer from a high rate of energy poverty ””

renewable energy sources and the global South largely relying on hydrocarbon resources, the core and periphery of the global economy will become even more polarised.

The energy crisis of the mid-1970s helped create the G7 in 1975 and made energy its continuing concern, even as environmental values became increasingly important in the club. By the 21st century, energy security, environmental issues and clean energy remained priorities on the G7/8 agenda. With its Renewable Energy Task Force, created at the 2000 Okinawa Summit, the G8 supported the 1992 Convention on Civil Liability for Oil Pollution Damage and the International Oil Pollution Compensation Convention.

The 2001 Genoa Summit was set back by the US decision to drop the Kyoto Protocol. At Gleneagles in 2005, climate change became a central, if divisive, issue, with the somewhat ambiguous document on

climate change agreed upon only at the last moment. The 2006 St. Petersburg Summit reflected Russia's idea of establishing a new energy security architecture to accommodate all parties – an approach that Russia still pursues.

The most important achievement of the G8 summits at Heiligendamm in 2007 and Hokkaido-Toyako in 2008 is the unanimous agreement that climate change negotiations should stay within the United Nations Framework Convention on Climate Change (UNFCCC) and aim to reduce greenhouse gas emissions by 50 per cent by 2050. The G8 leaders agreed to support innovative low-carbon technologies and energy efficiency, including 25 recommendations by the International Energy Agency (IEA). They also supported market mechanisms, such as emission trading systems and tax incentives, as well as the

The G8 has also committed more than \$100 billion over the next three years to a green economic recovery, R&D and efforts to attract investment by comprehensive policy frameworks that address non-economic barriers such as grid integration, electricity market design, access to technology, information and training, and cultural and social acceptance.

The G8's 2007 summit also established the Heiligendamm Process of dialogue among the G8 members and Brazil, China, India, Mexico and South Africa. The key objective of their working group on climate change and clean energy was to achieve inclusive, green and sustainable development – which requires a predictable climate for investors. The Heiligendamm Process has allowed the sharing of experience and good practices and the identification of specific steps and suitable stimulus packages. One recommendation in the working group's report was to

Sustainable buildings: solar panels on the roof of the Paul VI hall near Saint Peter's Basilica, Rome



“The G8 should lead R&D in innovative technologies to help developing countries achieve sustainable energy development”

creation of the International Partnership for Energy Efficiency Cooperation. They endorsed the promotion of clean energy through “setting national goals and formulating action plans followed by appropriate monitoring” and the promotion of renewable energy, including biofuels through the Global Bioenergy Partnership and other initiatives.

They also agreed to assist the least developed countries through the UNFCCC's Adaptation Fund, Climate Investment Funds, the World Bank's Clean Technology Fund and Strategic Climate Fund (with the allocation of approximately \$6 billion in official development assistance), and IEA roadmaps for innovative technologies. G8 members have also pledged more than \$10 billion annually in direct government-funded research and development (R&D) over the next several years.

create a sustainable buildings network, with the final decision to be made at the 2009 LAquila Summit.

Notwithstanding considerable progress, the G8 – and the G20 – can still do much more. For example, the G8 should lead R&D in innovative technologies to help developing countries achieve sustainable energy development. Energy security can come through increased efficiency in coal-fired power generation by retrofitting existing plants, because, although controversial, today's coal reserves may be sufficient for 200 years, even with today's technology.

Since 1975, the G8 has done much for sustainable energy development. But it has failed to establish a fair system of global energy governance. The G8 must agree among its members, as well as with its outreach partners, to create a comprehensive mechanism to solve today's urgent, sustainable energy challenges. ♦

Building sustainable bio-energy solutions

“There is no value in the economic success of any industrial initiative if it is not also accompanied by commitment to social progress.”
(Aristide Merloni, 1967)

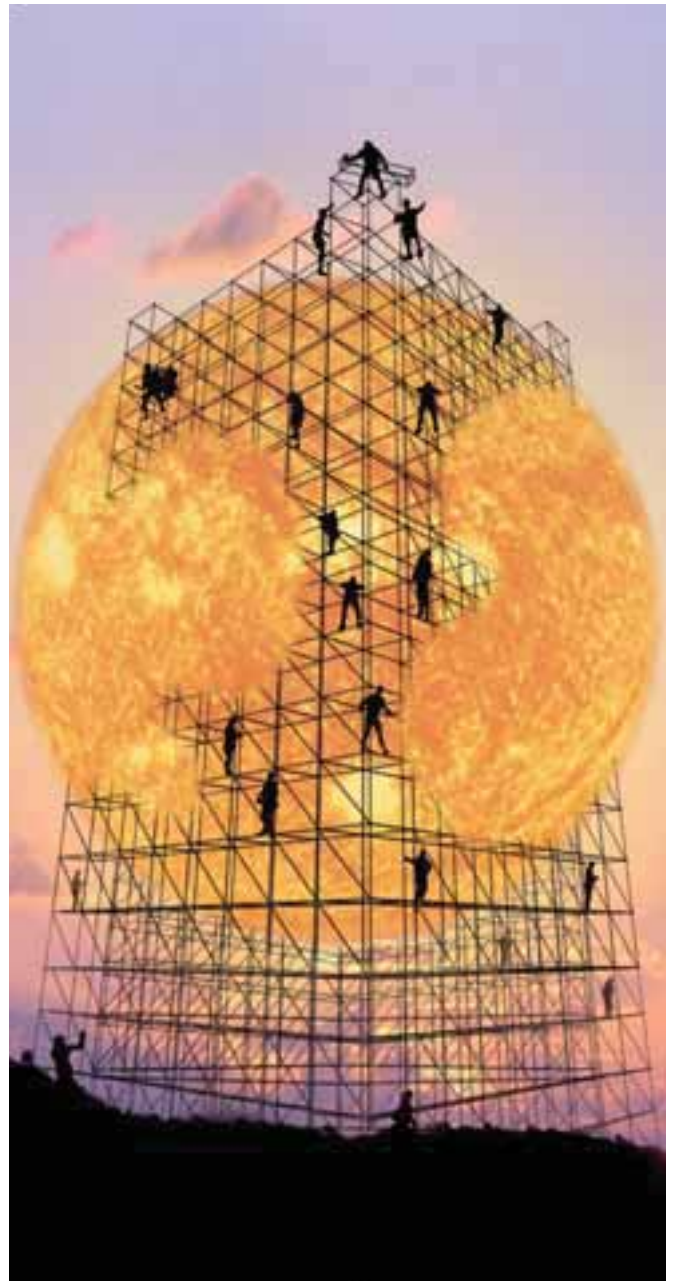
With the growing concern about environment protection and energy security, the focus on renewable energy promotion has become a priority at worldwide level. Governments keep strengthening their environmental policies, setting new and tougher targets in terms of greenhouse gas emissions and renewable energy share. The US green deal towards a greater environmental sustainability, and EU recent plan for a cleaner, more diverse and more efficient energy, go exactly in this direction.

We, at Merloni Progetti, play an active role within the renewable energy sector, and believe that companies should not only focus on profit generation, but also on social progress. As a main contractor, with 35 years' of experience and more than 100 engineering projects ongoing in 26 countries worldwide, we design and realise innovative industrial solutions for the bio-energy sector. These include: multi-feedstock turnkey industrial plants for the production of biofuels; power plants for the production of green electricity and thermal energy from liquid and solid biomass; and customised solutions for solar parks.

Our approach to the bio-energy industry reflects our commitment as innovators, suppliers of value-added solutions, and industrial partners. Heavy investments in research & development, internationalisation and proprietary patents are the key drivers to develop our business and build up a sustainable competitive advantage.

Our activity starts from market analysis up to plant and equipment maintenance. We have a leading edge research & development team, continuously working on innovation, able to combine our ethical approach and our business objectives.

The most important result of this work is the creation of a proprietary technology, able to produce clean energy in full respect of the environment and always choosing the most efficient solution. During the last two years we have invested more than three million euros in research & development, carried on a continuous assessment of new technologies, fine-tuned the existing plant solutions and realised, from



green field, three pilot plants to test and promote innovative technologies within the bio-energy sector.

International openings are key to making the most of all market opportunities: Europe and the Far East are our main geographic focus today, together with Russia and China, which represent our historical markets. As far as Italy is concerned, we are currently working on an integrated bio-refinery solution using 350,000 tons of liquid biomass as yearly input to generate biodiesel, refined oil and green electricity – representing one of the biggest and most advanced projects at national level within the bio-energy industry.

MerloniProgetti

the main contractor

www.merloniprogetti.it

Accordia Global Health Foundation urges the G8: Support healthcare leadership development in Africa

As the G8 leaders meet in Italy this year, there are many competing and compelling issues vying for their attention. Certainly, the meeting priorities articulated by its organisers – worldwide economic and financial crisis, climate change, terrorism and nuclear proliferation, African development, and global security – are critical issues that must be addressed. But it is equally crucial that another subject be included in the discussion – the infectious diseases epidemic in Africa and how the G8 can best continue its efforts to ameliorate the crisis.

Twenty-two years ago, at the 1987 Summit in Venice, AIDS was first placed on the G8 agenda. Since then, the G8 has demonstrated continued and admirable commitment to fighting AIDS and other infectious diseases in Africa. The member countries have committed significant resources to the 2005 G8 Gleneagles communiqué's pledge to "develop a package for HIV prevention, treatment, and care, with the aim of coming as close as possible to universal access to treatment for all who need it by 2010."

Still, more than 22 million people in sub-Saharan Africa are living with HIV/AIDS. Malaria kills an African child every 30 seconds. Tuberculosis is the leading cause of death for individuals with HIV/AIDS. And Africa suffers from a shortage of more than one million healthcare workers.

This crisis, which has been on the agenda for over two decades, is predicted to continue for years to come. It is time for new approaches and bold strategies that strengthen the long-term capacity of individuals and institutions in Africa to lead the response to this and future threats. Africa's health leaders are faced with dynamic economic, policy, and political contexts as well as evolving forces of globalisation that create a tremendously



challenging environment. Investment in these individuals, their institutions, and the next generation of African leaders, is critical. Ultimately, African healthcare leaders will be the consistent force that will drive the fundamental change that is necessary to meet the Millennium Development Goals.

Recognising the need for a shift in strategy, the global community has responded with a greater emphasis on health systems strengthening. While this important shift is to be commended, the implementation has tended to be incremental, with emphasis placed on projects that demonstrate

The Infectious Diseases Institute: A Centre of Excellence for Africa

Accordia Global Health Foundation's flagship programme, the Infectious Diseases Institute (IDI) in Kampala, Uganda, demonstrates the success of aligning the right partnerships to accomplish an ambitious goal. Housed in Makerere University's Faculty of Medicine, IDI provides a vibrant learning environment for students, nurses, doctors and researchers.

IDI is a world-class institute that is African owned and led. It provides Africa's current and future healthcare leaders with the training, opportunity and environment necessary to make a difference in their home countries throughout sub-Saharan Africa. Since 2004, over 3,500 healthcare workers from 29 countries have trained at the IDI, and then returned to their homes to pass their new knowledge on to others.

IDI has state-of-the-art clinical facilities, modern training rooms, and one of the few College of American Pathologists-accredited laboratories in sub-Saharan Africa. IDI training, clinical treatment, and research help to establish leading practices and standards of care throughout Africa. IDI designs and tests new approaches that improve clinical care, performs cutting-edge research that is immediately relevant in resource-limited settings, and develops new training approaches that translate into positive health outcomes for patients. And in the process, it is helping to develop a growing cadre of individuals who can and will assume leadership roles in Africa's healthcare system – for today and well into the future.



Photo Credits: Nancy Farese Photography

measurable, short-term outcomes. The long-term horizon of this crisis and the inherent complexity of health systems call for approaches that meet the persistent needs of society and incorporate commensurate funding streams and outcome expectations.

Institution building and leadership development are critical components of a long-term strategy for strengthening health systems. This includes essential investment in leading African medical schools and regional centres of excellence that will build lasting institutional knowledge, as well as teach and nurture the next generation of health leaders. With the proper support and working in collaboration with ministries of health, these institutions can lead the development of international research agendas on infectious diseases that are immediately relevant in resource-limited settings.

Leadership at all levels within the health system is required to scale up effective interventions, to discontinue those that are not working, to align global funding streams for sustainable impact, and to motivate a health workforce that daily is faced with basic challenges and resource shortages. Success depends on adoption of a bold, sustained approach that includes an explicit emphasis on the development of leading individuals and institutions that will drive fundamental change.

The leaders of the G8 have a long history of commitment to reducing the incidence of infectious diseases in Africa, and the efforts and investments by the member countries are beginning to show results. But there is still much to do. The G8 must continue to lead the world in supporting Africa to build a strong and



effective healthcare system that includes visionary and competent individual and institutional leadership at all levels, if those investments are to pay off for the long term.

Accordia Global Health Foundation wishes to thank the Fondation Bertarelli for its generous support of this article.



www.accordiafoundation.org

The global health challenge

Gaps in healthcare and inequalities in life expectancy globally must be addressed by the G8. The international community is tasked with making the right policy decisions now

By Margaret Chan,
director general,
World Health
Organization

Where do we stand on the global health challenge today? The answer can be stated simply: we stand firm.

The world faces the most severe financial crisis and economic downturn since the Great Depression. It is also in the midst of the most ambitious drive in history to reduce poverty and reduce the great gaps in health outcomes. Health enjoys a high place on the development agenda, a place that was earned by a wealth of evidence. A financial crisis does not change the weight of that evidence.

The Millennium Development Goals (MDGs) are driven by the values of social justice and fairness. A financial crisis should not make the world's moral compass point in another direction. All must hold governments, political leaders and the international community accountable, not just for their promises and commitments but also for the evidence.

The world needs to learn from the experience of past recessions. Health is an investment. In the past, mistakes were made and health spending was cut. The result was that access to care was distorted, with the best going to the wealthy and the poor left to fend for themselves. The values and approaches of primary healthcare – of equity, prevention, multisectoral action and self-help as the best help – were pushed aside.

Today, the gaps in health outcomes, both within and between countries, are greater than ever before in recent history. Differences in life expectancy between the richest and poorest countries exceed 40 years. A child in Lesotho can expect to live 42 years fewer than a child in Japan. Annual government expenditures on health range from \$20 per person to more than \$6,000. Each year, healthcare costs push around 100 million people into poverty. This is a bitter irony at a time when the world is committed to poverty reduction. It is all the more so at a time of financial crisis.

“

All must hold governments, political leaders and the international community accountable

”

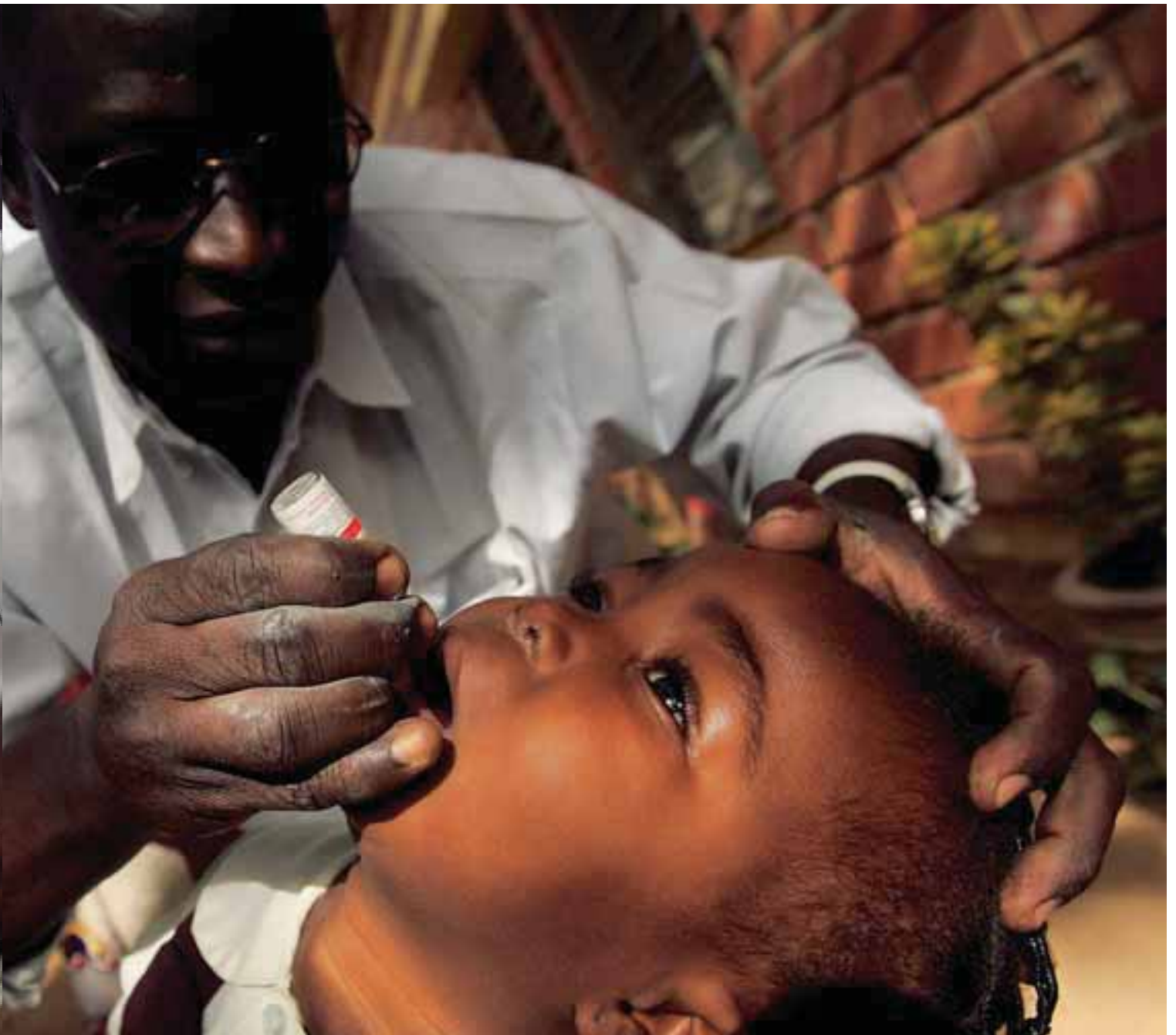


In the 1990s, health struggled for a place on the development agenda. The expanded programme on immunisation, a legacy of smallpox eradication, was a success story, but coverage had reached a stubborn plateau.

HIV/AIDS was cancelling out health gains, setting back life expectancy and ripping societies apart, especially in sub-Saharan Africa. The resurgence of tuberculosis, including its drug-resistant forms, was declared a global health emergency by the World Health Organization (WHO). The malaria situation was described as stable, because it could not get any worse.

Scepticism about the effectiveness of aid placed the blame firmly on recipient countries: lack of commitment, weak absorptive capacity and corruption.

Things changed in 2000 when the power of health to drive socioeconomic progress was reflected in the Millennium Declaration and the MDGs. Cash followed. Commitments of official development assistance for health rose from \$6.5 billion in



2000 to more than \$14 billion in 2006. There was a string of innovations: the Global Fund to Fight AIDS, Tuberculosis and Malaria; the GAVI Alliance; initiatives launched by presidents and prime ministers; money from philanthropists; money from a levy on airline travel; the selling of bonds to finance immunisation; and advance market commitments to stimulate the development of new vaccines.

For the first time, childhood deaths from vaccine-preventable diseases dropped below 10 million, to an estimated 9.2 million deaths in 2008. Access to antiretroviral therapy for HIV/AIDS was extended to more than 3 million people in low- and middle-income countries. TB control made steady and impressive progress. Traditionally cash-starved malaria reached its billion-dollar moment.

But commitments and cash are not enough. They do not buy better health outcomes in the absence of equitable systems for delivery. Additionally, as the

For the first time, childhood deaths from vaccine-preventable diseases dropped below 10 million

““ Commitments and cash are not enough. They do not buy better health outcomes in the absence of equitable systems for delivery ””

number of health initiatives grew, recipient countries were overwhelmed by inefficient aid: duplication, fragmentation, multiple reporting requirements, high transaction costs and fierce competition for scarce health staff. Previous uncertainty about aid

A TB patient in Myanmar, Burma



effectiveness shifted to an admission that donor policies and practices must also change.

Fortunately, the need to strengthen health systems is now recognised. It is receiving long-overdue attention from the Global Fund, the GAVI Alliance, the World Bank, the International Health Partnership and the G8. Under Japan's presidency in 2008, the G8 profiled the strengthening of health systems and clarified the need for personnel, money and data. This momentum must continue.

Of all the MDGs, the goal set for reducing maternal mortality is the least likely to be met. This should come as no surprise. Reductions in maternal mortality depend on a well-functioning health system.

There is no quick fix for broken health systems. But there are quick wins when drugs prevent the transmission of HIV from a mother to her infant, DOTS (Directly Observed Treatment, Short course) cures TB and a bednet protects a child from malaria. The world needs to do both: strengthen health systems while also combating high-mortality diseases. The two approaches are not in conflict, but they do need to be better balanced and better integrated with national priorities.

More efficient and equitable health services require better public-private partnerships, the right incentives for health research, more abundant and predictable financing, and more effective use of aid. Greater equity in access and health outcomes should be the key measure of progress.

The world faces problems beyond those targeted by the MDGs. Health in rich and poor countries alike is now threatened by three trends: population aging, unplanned urbanisation and the globalisation of unhealthy lifestyles.

Chronic diseases were long considered the companions of affluence. But 80 per cent of the burden of heart disease, hypertension, cancer and diabetes

is now concentrated in low- and middle-income countries. This creates additional stress on weak health systems and contributes to two more problems: the high cost of long-term care and a severe global shortage of healthcare workers.

Clearly, it is not just countries, economies and markets that are interconnected. Different sectors, such as agriculture, energy, transportation and the environment, are also interrelated. Many health problems demand joint action across sectors. Likewise, policy action in other sectors has important health consequences. Climate change, with its multiple dangers for health, is a clear case.

The world does not need to change directions. But it does need visionary, innovative thinking and moral leadership.

This world will not become a fairer place for health all by itself. Economic decisions within a country will not automatically protect the poor or guarantee universal access to basic health care. Globalisation will not self-regulate in ways that favour fair distribution of benefits. Corporations will not automatically look after social concerns as well as profits. International trade agreements will not, by themselves, guarantee food security, or job security, or health security, or access to affordable medicines. Each of these outcomes requires deliberate policy decisions.

The G8 has the leverage and the clout to shape these decisions. The price of failing to take action, especially at a time of crisis, is high. A world that is greatly out of balance in matters of health is neither stable nor secure.

Most recently, the world has received yet another major shock: the threat of a pandemic resulting from a new A(H1N1) virus. To the growing list of challenges that face global health – food, fuel and finance – now influenza is added. WHO is leading the global response. It is dealing with a situation that is unpredictable, and one in which its member states must make critical decisions on the basis of limited information. The principles that guide its action, however, do not change.

First, we have to get the best information we can and make it available to those who have to act on it as rapidly as possible. Second, we have to remember the value of co-ordination – between agencies, between countries, among the public, private and voluntary sectors. No one organisation can go it alone. Third, co-ordination is a step on the road toward the most important principle: solidarity and social justice. Solidarity in the face of the pandemic mirrors the solidarity we need in the face of the financial crisis. The countries most affected by the problem must have access to the means to do something about it, whether that is access to drugs and vaccines or financing for social safety nets. Making the world more resilient to the health shocks it will continue to face requires that the moral compass remains pointed in exactly the same direction. ♦

This article is adapted from a keynote speech delivered at the Global Health Forum held at the Aspen Institute Italia in Rome on 13 February 2009.

“
The world needs to strengthen health systems while also combating high-mortality diseases
”

Health workers for all and all for health workers



© 2004 Tom Furtwangler, Photostore

The health worker shortfall is a global crisis that requires urgent action. The impact of the current financial downturn on health is exasperating the persistent global health workforce shortage. A robust, functioning and accessible health workforce and system is more critical than ever to weather these difficult times. The time to act is now !



The Global Health Workforce Alliance (the Alliance) is the global partnership to address the health workforce crisis. Its members include governments, UN agencies, professional associations, NGOs, foundations, research and training institutions and the private sector. The Alliance is hosted and administered by the World Health Organization. For more information, <http://www.who.int/workforcealliance>

Global pandemic preparedness: a shared responsibility



By William M Burns, CEO Roche Pharmaceuticals

Until recently, global preparedness focused on the H5N1 avian influenza virus in Asia, which was widely believed to be the trigger for the next pandemic. The work undertaken by governments in the shadow of this threat means that the world is better prepared than ever before for an influenza pandemic. However, in view of the uncertain impact of the novel influenza A(H1N1) virus on the current southern hemisphere influenza season and the subsequent northern hemisphere winter season, it is important for all stakeholders to closely monitor events and continue their pandemic preparedness with increased urgency.

In this context, a fully integrated and co-ordinated approach to pandemic planning, with agencies, governments and the business community working together across continents, is the best way forward. The emergence of the new influenza A(H1N1) virus therefore represents an important opportunity for the international community to ramp up global pandemic preparedness and response.

Roche responding to global needs

Vaccines are currently the most important medical intervention for preventing influenza. Although work is underway to produce a vaccine to match the new influenza A(H1N1) virus, WHO estimates the first doses will only be available five to six months after identification of the novel pandemic strainⁱ. In the meantime, antiviral therapies remain the only available therapeutic option to prevent and treat infection with the new influenza A(H1N1) virus.

Roche is the manufacturer of Tamiflu (oseltamivir), an oral influenza antiviral (not a vaccine) approved for the prevention and treatment of influenza infection in adults and children one year of age and older. WHO, the US Centers for Disease Control and Prevention (CDC) and European Centre for Disease Prevention and Control (ECDC) confirm that Tamiflu is active against this new influenza A(H1N1) virus^{ii,iii,iv}. The European and US regulatory authorities have also stated that children under the age of one year may benefit from Tamiflu in a pandemic^v.

Roche's top priority now is to support WHO, governments and businesses in ramping up their pandemic preparedness. Before the emergence of the new influenza A(H1N1) outbreak, Roche donated over 5 million treatment courses of Tamiflu for distribution at the discretion of the WHO to countries in need, including:

- 3 million courses for a rapid-response stockpile, intended for use as a 'fire-blanket' to contain or slow a pandemic at its site of outbreak
- 2 million treatments for regional stockpiles in developing countries that are unable to purchase the drug for economic reasons.

WHO has arranged the first deployment of antiviral drugs from the rapid-response stockpile to 72 countries. Roche has since pledged to donate a further 5.65 million treatment courses of Tamiflu to replenish the WHO rapid-response and regional stockpiles, as well as an additional 650,000 treatment courses of Tamiflu small capsules (30 and 45mg) for children.

Roche has immediately begun to increase production output for Tamiflu to produce 110 million treatment courses up to October 2009. Production will then increase if required towards a maximum output of 36 million treatment courses per month by the end of 2009 - equating to an annualised maximum production capacity of 400 million treatment courses (4 billion capsules). In order to further increase the global availability of Tamiflu for pandemic use, Roche has provided manufacturing sub-licences to generic manufacturers in China and India. Roche also signed an agreement with a South African manufacturer to produce a generic version for the African continent in January 2006.

To help governments optimise their stockpiles, Roche is using its extensive experience to develop new strategies, including:

- Extending Tamiflu shelf life from five to seven years
- Reprocessing expired capsules to extract the active pharmaceutical ingredient
- Developing smaller capsules to provide paediatric options that can be more readily stockpiled than suspension.

Strengthening pandemic stockpiling strategies

To date, 85 countries have stockpiled a total of 220 million doses of Tamiflu for pandemic use, however, the global stockpile will treat fewer than 5 per cent of the world's population and is clearly inadequate to meet likely demand in a pandemic. Furthermore, while some governments have sufficient stockpiles to treat around half of their population, others will be able to cover a much smaller proportion^{vi}.

Many governments are now re-evaluating their plans. For example, the UK has announced an increase in the national



pandemic stockpile to cover up to 80 per cent of the population^{viii}. This means that the UK will now have stocks available to treat everyone infected, based upon on a 'severe' pandemic scenario. The French Government has also recognised the need to increase antiviral reserves in order to treat individuals who could be affected by the illness or be directly exposed^{ix}.

As part of their pandemic planning, governments and other agencies are recognising the special role of children as an important channel for amplifying the spread of influenza. Children have also been significantly impacted by the last three pandemics and more recently by the H5N1 avian influenza outbreak in Asia^x. Stockpiling age-appropriate formulations of antiviral drugs can therefore further strengthen pandemic plans.

WHO's call to action: a united response

Given the uncertainty about the pandemic's progress over the coming months, WHO has provided a clear signal to all governments, the pharmaceutical industry and the business community that mitigation strategies must be undertaken with greater urgency, and at an accelerated pace. The G8 countries now have the opportunity to show united leadership by bringing together international agencies, other governments, businesses and society to ensure a robust response to the current clear and present threat.

References

ⁱ World Health Organization. Vaccines for the new influenza A (H1N1). 27 May 2009. http://www.who.int/csr/disease/swineflu/frequently_asking_questions/vaccine_preparedness/en/index.html (Last accessed 28 May 2009)

ⁱⁱ World Health Organization. Weekly epidemiological record. 15 May 2009

ⁱⁱⁱ Centers for Disease Control and Prevention. Interim antiviral recommendations for patients novel influenza A(H1N1) virus infection and their close contacts. 6 May 2009. www.cdc.gov/h1n1flu/recommendations.htm (Last accessed 15 May 2009)

^{iv} ECDC Health Information. Frequently asked questions on human swine influenza A(H1N1). Updated 27 April 2009

^v European Medicines Agency. Questions and answers on the use of antiviral medicines in case of a novel influenza A/H1N1 pandemic. 8 May 2009

^{vi} US Food and Drug Administration. FDA Authorizes Emergency Use of Influenza Medicines, Diagnostic Test in Response to Swine Flu Outbreak in Humans. 27 April 2009. www.fda.gov/bbs/topics/NEWS/2009/NEW02002.html (accessed 15 May 2009)

^{vii} Coker R. Swine Flu. Editorial. *BMJ*, 2009; 338: 1087

^{viii} NHS Choices. Swine flu latest from NHS. www1.nhs.uk/news/2009/04April/Pages/Swineflulatest.aspx (Last accessed 16 May 2009)

^{ix} République Française. Le plan de lutte contre une pandémie. http://www.grippeaviaire.gouv.fr/article.php3?id_article=154

^x Nicoll A. Children, avian influenza H5N1 and preparing for the next pandemic. *Archives of Disease in Childhood*. 2008; 93: 433-438





IMPROVED CARE FOR SOME OF THE WORLD'S MORE VULNERABLE PEOPLE

The Lilly MDR-TB Partnership, a public-private undertaking, mobilizes 18 partners on five continents in the battle to stop the spread of MDR-TB. Lilly and its partners are working hard to save lives from TB and MDR-TB, a disease which affects the most productive populations.

The public-private partnership provides access to medicines, transfers manufacturing technology to resource-constraint countries, conducts research, trains health care workers, raises awareness and promotes prevention, while providing support for communities and advocating on behalf of people living with TB and MDR-TB.

The partners work together closely, sharing knowledge and expertise in the quest to contain and conquer one of the world's oldest diseases. The Lilly MDR-TB Partnership is about more than the transfer of technology and know-how — it's the **Transfer of Hope**.



For more information visit www.lillymdr-tb.com



Finding the cure

Increases in funding have led to unprecedented gains in health outcomes for some of the world's poorest. But still more can be done

By Michel Kazatchkine, executive director, Global Fund to Fight AIDS, Tuberculosis and Malaria

As we look ahead to this year's G8 meeting, it is inevitable to think back to the last G8 held in Italy, in Genoa in 2001. There, the concept for a new way of delivering international financing for health was realised and the first pledges were made, enabling the Global Fund to Fight AIDS, Tuberculosis and Malaria to be created the following year.

Genoa saw the G8 use its collective voice and commitment to the fullest. It was an extraordinary example of what the world can do when it comes together with a common vision and goal. It showed that health is an issue that gives substance to the sometimes vague notion of the international community, by providing a clear platform for collective action.

Many believe that the G8 has achieved its most impressive and tangible accomplishments in the area of health. The Global Fund and the GAVI Alliance are both performance-based funding institutions financed largely by the G8. These innovative instruments use the collective will of the international community to fight treatable and preventable diseases – diseases

that provide striking examples of inequity between the richest and poorest countries. The Global Fund channels two thirds of the financing to programmes fighting tuberculosis (TB) and malaria and a quarter of the resources to fight AIDS. GAVI pays for vaccines that prevent millions of future deaths in nearly 100 countries. Together, they are the world's largest investors in health systems.

“ Many believe that the G8 has achieved its most impressive and tangible accomplishments in the area of health ”



Global Competitor

The NRF is the intermediary agency between the policies and strategies of the South African government and those institutions that perform research. The mandate includes managing the national research facilities in the fields of Astro/Space and Geosciences, Biodiversity/Conservation and Nuclear Sciences. The NRF works with leading agencies around the world constantly striving to enhance South Africa's global competitiveness and is open to new partnerships.

www.nrf.ac.za

Celebrating 10 years of science and technology.



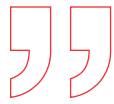
The dramatic increase in funding over the past six years has translated into unprecedented gains in health outcomes. In sub-Saharan Africa, mortality from AIDS has fallen dramatically, as nearly 4 million people have gained access to HIV treatment. Countries with comprehensive malaria-control programmes have seen mortality – mostly in small children – decline between 50 per cent and 90 per cent. Several countries burdened by TB show a moderate to significant reduction in prevalence and mortality. There is an associated strengthening of health systems, too.

What has the Global Fund achieved from Genoa to L'Aquila? As of December 2008: 2 million people have received anti-retroviral therapy for HIV, 4.6 million people have received effective TB treatment and 70 million insecticide-treated bed nets have been distributed to protect families against malaria. These results represent between 30 per cent and 50 per cent of international targets in 2008. The Global Fund is the world's leading funder of programmes to fight those three diseases, with grants worth \$15.6 billion and support to programmes in 140 countries.

The Global Fund has thus been faithful to the G8's request in 2001. It promotes an integrated approach to



The Global Fund promotes an integrated approach to prevention, treatment and care



prevention, treatment and care – and has contributed significant resources to strengthening health systems. Around \$4 billion, or 23 per cent, go to human resources, such as salary support and training, as well as the refurbishing and equipping of thousands of health clinics and laboratories.

These efforts nourish the hope that the health-related Millennium Development Goals (MDGs) can be met for TB and exceeded for malaria, and that substantial progress will be seen for HIV/AIDS. However, many challenges for the G8 remain in these times of financial crisis.

These resources have encouraged countries to be ambitious in their national programmes. They have helped build relationships between governments and civil society, often where none existed. They have fostered an unprecedented climate of trust and hope. The G8 must honour its commitment to provide \$60 billion for health. A failure to continue to augment investments in health will betray the trust of millions who can now hope to survive deadly diseases through those promises.

Equally important, resource commitments must be predictable and invested in sustainable strategies and plans. The fight against diseases must be effective, based

Continued p117



Insecticide-treated mosquito nets, Gutu, Zimbabwe

Finding the right partner in the fight to enhance public health

Leaders across the world stress the need for creative partnerships that can accelerate development. Partnerships are born in a moment when different parties discover that they have common goals, or more importantly, a common vision. BASF – ‘The Chemical Company’ – has responded to the concerns for the health and welfare of developing countries and is widely engaged in finding the right partners to fortify human health worldwide. Together with its partners in the private and public sectors and civil society, the company is working hard to find new, innovative solutions that can improve public health.

In March 2009, the latest of BASF’s partnerships for public health were set in place. BASF and Grameen Healthcare Trust established a joint social business venture called BASF Grameen Ltd. The purpose of the company is to improve health while simultaneously creating business opportunities for people in Bangladesh. This will be done with two products from BASF’s portfolio: dietary supplement sachets containing vitamins and micronutrients, as well as impregnated mosquito nets that offer protection against insect-borne diseases such as malaria.

Social commitment with an entrepreneurial twist

“Our social business joint venture is intended to empower people to take part successfully in business life,” says Jürgen Hambrecht, Chairman of the Board of Executive Directors of BASF SE. “The more people who do so – be they business partners, customers or employees – the better the economic and social development of a country and its population. Investing in people’s entrepreneurial skills is therefore part of corporate responsibility.” A social business encourages the entrepreneurial commercial spirit with

a beneficial social outcome. The idea is for a business venture to serve a social purpose, cover its own costs and recoup the partners’ initial investment. Any additional profits are reinvested fully in the company.

“BASF Grameen Ltd. is not a charity. It combines business sense with social needs,” stresses Professor Muhammad Yunus, Nobel Peace Prize Laureate and Managing Director of Grameen Bank. According to the WHO World Malaria Report 2008, Bangladesh had an estimated 2.9 million cases of malaria in 2006 and 72 per cent of the population is at risk of the disease. Bangladesh also has some of the highest child and maternal malnutrition rates according to the UNICEF State of the World’s Children Report 2008. Approximately 8 million children under the age of five years are malnourished. “In the long term, we can better help these people through a business model that offers them beneficial products and services at affordable prices rather than through charitable donations,” says Yunus.

Microcredits to combat malaria and malnutrition

Given the substantial need for dietary supplements and mosquito nets, BASF and Grameen have decided to locate their joint venture with these two products in Bangladesh. In the initial stages, the dietary supplement business will focus on large consumers such as schools, and established distribution channels such as pharmacies. This will familiarise people with the benefit of the sachets as part of everyday, healthy nutrition. In the medium term, the products will also be sold directly to end users via established Grameen networks. In towns, the impregnated mosquito nets will be sold in food stores, clothing





stores and pharmacies. In rural areas, agricultural wholesalers will sell the malaria protection nets in association with the Grameen network and will also instruct purchasers in their use. Grameen Bank plans to provide microcredits to support people in setting up their own distribution outlets and in funding the purchase of mosquito nets.

“Social business is an excellent way of creating value from values, and BASF is seizing that opportunity,” says Hambrecht. “Our market-oriented joint venture will provide long-term help in addressing social challenges in Bangladesh. In addition, it will allow BASF to explore new markets and customer groups.” BASF is the first DAX30 company and the first chemical company in the world to set up a social business with Grameen.

BASF has clearly identified global health as one of the key global challenges. It works with the international community to provide the products necessary to reduce the incidence of diseases like malaria, dengue fever and guinea worm. Together with partners like the UN Global compact, The Global Fund, The World Bank and Unicef, among others, BASF is engaged in fighting against malaria and other diseases around the world.

Get to know an arsenal of BASF products against malaria and insect-borne diseases:

- INTERCEPTOR®, the impregnated, fast-acting bed net that knocks out malarial mosquitoes before they can bite people as they sleep. The safe and odourless textile netting retains its effect, even after 20 washes for more than three years.
- FENDOZIN®, the unique textile-finishing polymer used to coat the polyester fibre of the Interceptor net. It slowly releases the fast-active anti-mosquito agent to the textile surface to ensure long-lasting protection.
- FENDONA®, a fast-acting BASF insecticide approved for vector control by WHO. Low toxicity and high effect make it especially suited to indoor use, such as treating conventional mosquito nets or wall spraying to combat against disease-carrying insects.
- ABATE®, the larvicide used in standing water to stop disease-carrying insects from breeding. It has become the world standard for water treatment against pestilential insect larvae.

For more information, visit www.publichealth.basf.com



www.basf.com

European Malaria Vaccine Initiative

EMVI MANDATE

The mandate given to EMVI by the European Commission (EC) at its inception was to provide:

- A mechanism to facilitate integration of a EC core activity and Union Member States' investments
- A mechanism to facilitate the process of bringing promising research results, i.e. experimental malaria vaccines, via limited industrial production, to clinical evaluation in European volunteers, and subsequent clinical evaluation in Africa

EMVI MISSION

To contribute to the global efforts to control malaria by:

- Providing a mechanism for accelerated development of malaria vaccines in Europe and Developing Countries
- Promoting affordability and accessibility of malaria vaccines in Developing Countries

ADMINISTRATIVE STRUCTURE

- EMVI acts as Sponsor and is responsible for Clinical Trials Insurance
- EMVI has set-up a Quality assurance system to ensure:
 - Good Clinical Practice (GCP Directive 2001/20/CE)
 - Good Manufacturing Practice (appendix 13 Eudralex vol 4)
 - Good Laboratory Practice (WHO guidelines)
 - Good Statistical Practice (PSI guidelines)

EMVI is a partnership of four European Member States (MS) and receives public funds only, mostly from Development Aid agencies

- Sweden (SIDA)
- Ireland (Irish Aid)
- Denmark (DANIDA) and
- The Netherlands (DGIS)

EC is supporting EMVI through the following coordination activities:

EMVI is the coordinator of the EU Integrated Project (EMVDA), a 5-year project involving 14 scientific institutions based in Europe and Africa

- EMVI is the coordinator of two EC-funded Coordination and Support Actions, OPTIMALVAC on Optimising Malaria Vaccine Laboratory assays evaluation and INYVAX on optimisation of the development of poverty related disease vaccines by a transversal approach, addressing common gaps and challenges.
- Additionally the EC-funded "The European Network of Vaccine Research and Development (TRANSVAC)" a research Infrastructure is a combination of a collaborative project and coordination and support action for integrating activities allowing the establishment of an entity to support vaccine development in Europe on an unprecedented scale.

EMVI CLINICAL TRIALS

Phase Ia of MSP3 (LSP) Vaccine – Lausanne, Switzerland: Infect Immun. 2005;73:8017-26

Phase Ia of GLURP (LSP) –Nijmegen, Netherlands: Vaccine 2007;25:2930-40

Phase Ib of MSP3 (LSP) – Burkina Faso: Vaccine 2007; 25:2723-32

Phase Ia/IIa of Oxford Polypeptide vaccine – Oxford, UK: 2006 – 2007

Phase Ia of AMA1 vaccine – Nijmegen, Netherlands: 2006-2007

Phase Ia of GMZ2 – Tübingen, Germany: 2006-2007

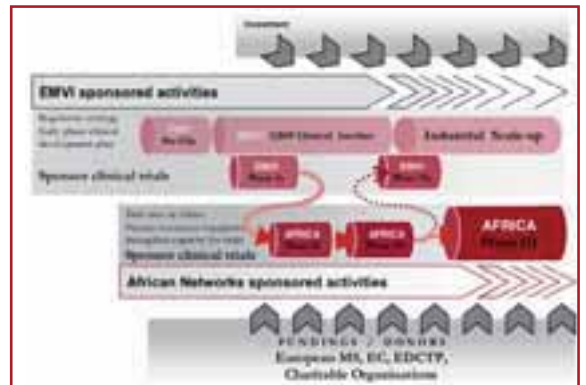
Phase Ib of AMA1 vaccine (sponsored by AMANET) – Bandiagara, Mali: 2007-2008

Phase Ib of GMZ2 vaccine (sponsored by AMANET) – Lambaréné, Gabon: 2007-2008

Phase Ib of GMZ2 vaccine in children 1-5 yrs (funded by EDCTP and Sponsored by AMANET)

- Lambaréné, Gabon: 2008-2009

EMVI PARTNERSHIPS DIAGRAM



Contacts:
COPENHAGEN

Odile Leroy
Statens Serum Institut
Artillerivej 5, DK-2300
Copenhagen S, Denmark
Tel: +45 3268 3798
Fax: +45 3268 3144
E-mail: oly@ssi.dk

Contacts:
LONDON

Egeruan B Imoukhuede
12 Bell House
Ewen Crescent, Tulse Hill
London SW2 2PW, UK
Tel. +44 208 674 8318
Fax: +44 203 256 0070
E-mail: ebi@ssi.dk

Today's
Catalyst For
Tomorrow's
Vaccines

EMVI PORTFOLIO:

- AMA1 adjuvanted in Aluminium Hydroxide and GSK's ASO2
- AMA1 DiCo currently undergoing process development/adjuvant selection
- GMZ2 (MSP3/GLURP Hybrid) adjuvanted in Aluminium Hydroxide
- JAIVAC-1 – Combination of EBA175 and MSP-1₁₉ adjuvanted in Montanide ISA 720
- AdCh63 CSP and MVA CSP – viral-vectored recombinant proteins encoding CSP



TB ANYWHERE IS EVERYWHERE

The image

The dandelion is a plant which propagates itself by airborne means. In the same way, social action can spread and take root, carried on the winds of our efforts and the global determination to overcome this disease.

The image also represents the vulnerability of people where the disease, located anywhere, can spread everywhere.

preventable and curable.
GLOBAL PLAN TO STOP TB.

WORLD TB DAY

on science and epidemiology, and targeted at those in need. It must protect human rights, support social protection and move toward a world where basic health services for all are guaranteed.

The core values of the Global Fund – country ownership, results-based financing, inclusiveness and partnership – are fully consistent with these ideals. A new process to apply for grants will integrate disease programmes supported by the Global Fund further into national budget cycles and long-term planning.

Recent dramatic progress has shown that several of the health-related MDGs can be met by 2015. But the necessary action must happen over the next six years, and the financing must be determined now.

Countries are ready to expand the fight. Demand for Global Fund grants has steadily increased over the past seven years. Grant approvals have increased from \$613 million in 2002 to \$5.2 billion in 2008. They could reach \$8 billion in 2009 and between \$4.5 billion and \$7.5 billion in 2010. The Global Fund has received pledges and contributions of approximately \$20 billion, leading to a shortfall by the end of 2010 of between \$4 billion and \$10 billion.

The funding gap exists because countries have improved their capacity to implement programmes that address real and urgent health needs. Countries have acted on international calls for action by the G8 and the United Nations. While the response must now compete with the need to stabilise the global economy, stagnating or reducing health investments now will have disastrous consequences. The economic crisis hits the poorest hardest and threatens to undo years of progress, sending

A man with TB waits for his free treatment in Siliguri, West Bengal

hundreds of millions of people back into extreme poverty. Cutting their access to health would exacerbate this terrible trend.

The Global Fund thus has several initiatives to generate efficiency gains in funding. For its 2008 round, the Global Fund implemented an average 10 per cent saving in programme costs for new grants, saving \$250 million in new grant funding. It is also working with its partners to negotiate lower prices or increase price competition on drugs, bed nets and other commodities.

The G8 endorsed the Global Fund's focus on channelling money to where it is most effective and quickly reducing or ending funding to programmes that do not work. The Global Fund built such performance-based funding into its core architecture. Much work remains to ensure that money fully maximises results, and the Global Fund is taking several measures in response.

At Genoa the G8 spoke of "breaking the vicious cycle of poverty and disease" once and for all. Now is the time to ensure that the gains made in global health are not lost. The 2009 G8 has the opportunity to renew the vision born in 2001. The International Development Association and the Global Fund will be replenished in 2010. The poor of the world will be watching to see whether the G8 keeps its promises to global health.

It is exactly Genoa's spirit of determination and commitment to equity in global health that should guide all to L'Aquila and ahead into the 21st century. ♦



Honouring commitments in the fight against HIV/AIDS

Universal action against HIV/AIDS is still needed for universal access to comprehensive HIV prevention, care, treatment and support

Celebrate success

As the G8 leaders convene in Italy to confront key global challenges, action against HIV must remain a priority. It was, after all, the G8 countries that helped bring about the creation of the Global Fund to Fight AIDS, Tuberculosis and Malaria in 2002. The Global Fund is now the largest funder of HIV/AIDS programs for the world's most affected populations. It is tangible proof that the collective action of G8 leaders can bring about significant change in the way the world confronts HIV/AIDS.

'Universal Access by 2010' was the call made by G8 leaders in 2005 at their summit meeting in Gleneagles, Scotland, to ensure that all people worldwide had access to comprehensive HIV prevention, care, treatment and support. Thanks to this commitment, and ones made at each G8 summit since then, more and more economic resources have been devoted to stopping the spread of HIV.

But it's not over yet

Further action is needed by G8 leaders. Despite increased HIV/AIDS funding and improved HIV treatment and control, the crisis continues to escalate. Creating affordable treatments and developing new prevention technologies are only part of the solution. Equally important is breaking down the social, political and economic barriers that expose the most vulnerable to the risk of infection and that frequently prevent people with HIV from living full and productive lives.

Far too often, governments fail to protect the rights of people living with HIV to live a life of dignity, travel, earn a livelihood, gain access to health care, and be free of stigma and sexual or physical violence and abuse. The United Nations estimates that



one-third of countries lack laws to protect people living with HIV from discrimination. And while 74 per cent have policies to ensure that vulnerable groups have equal access to HIV-related services, 57 per cent of those countries have laws or policies that actually impede access to those services. Without such basic protections for vulnerable groups, AIDS will continue to ravage our communities, even in the face of life-saving drugs and treatment.

What more is needed?

The question before us during these troubled economic times is not whether we can afford to maintain vigilance against a global challenge that preys upon economic need and social injustice, but, rather, whether we can afford not to. Beyond maintaining the financial commitments made in past summits, we urge you to expand your commitment to action by:

- Committing to remove barriers that impede the basic human rights and justices of people living with HIV.
- Ensuring that all people can, without impunity, access the HIV services and support they need to live full and free lives.

Together, we can promote social justice as we work to achieve 'Universal Access'.



FORD FOUNDATION

www.fordfound.org

Delivering on promises

The G8's and G20's credibility rests on their ability to deliver, now

By James Orbinski, St Michael's Hospital, and Jenilee M Guebert, Program on Global Health Governance, University of Toronto

With pledges of \$1.1 trillion at the G20's London Summit in April 2009, and with strong but non-specific commitments on poverty, world hunger and global health, the catastrophe for the world's poor that United Nations secretary general Ban Ki-moon feared has been averted – for now. What the G8 and the G20 actually deliver matters, a lot. The standing of both the G8 and G20 depends not simply on what they can achieve for themselves, but also on what they are willing to do for others. In this sense, both are indeed powers. But neither – especially the G8 – is yet a leader. The G8 has been very good at setting priorities that intersect with vital humanitarian and development needs, but not so good on delivering.

Most G8 members are not on track to meet their commitment to double aid to Africa by 2010. Given the international financial crisis, they are unlikely to do so. Days after the London Summit, official development assistance (ODA) from Germany was categorised by the European Union as 'off track' for 2009. Italy actually cut aid. France reduced its aid targets and cut its budget.

In February 2009, Sylvie Lucas, president of the UN Economic and Social Council, announced that "at the current pace, the Millennium Development Goals [MDGs] will not be achieved until 2050". Today, six of the eight MDGs are on track to fail. The World Bank reports that developed countries have not yet met the commitment to devote 0.7 per cent of gross national income to ODA. The effects of climate change, the increasing price and decreasing availability of food, and the roller-coaster – but ultimately escalating – cost of energy mean that the bottom billion already suffer more than their fair share. More are being added to their numbers. There is a legitimate fear that even minimal development goals will be reversed as more and more people are pushed back into poverty, hunger and disease. These are critical realities, and not just in Africa. According to the World Bank, among South Asia's 1.2 billion people, three quarters now live on less than \$2 a day and more than 400 million go to bed hungry every night. Globally, the number is



967 million: one out of every seven people on the planet. Hunger in the South Asia region has reached its highest level in 40 years because of rising food and fuel prices and the global economic crisis. Women and children are particularly vulnerable, and 100 million more people are going hungry in the region compared to two years ago.

These setbacks harm human health enormously. To be sure, gains in donor spending since 2000 have meant that more than 3 million have started treatment for HIV/AIDS. Reductions of up to 50 per cent in malaria deaths have been achieved in some African and Asian countries because of bed nets. Donor spending

“

The bottom billion already suffer more than their fair share

”



A girl sits with her parents who have leprosy, Mogiri, south Sudan

can achieve real results. But while pledges rose from \$15 billion in 2000 to \$45 billion in 2006, and ODA increased from \$55 billion in 2001 to \$120 billion by 2006, overall ODA actually dropped 4.7 per cent in 2006 and 8.4 per cent in 2007. By 2008, G8 countries had delivered only \$4 billion of the \$25 billion promised. When the international financial crisis hit in the fall of 2008, donors were already in arrears to the tune of \$21 billion. Few of the G8 commitments on development and global health over the last five years have been realised.

The impact of this failure is palpable. More than 100 million people suffer catastrophic healthcare

costs and are pushed into poverty each year because of out-of-pocket healthcare payments. In 30 low- and middle-income countries, upward of 80 per cent of all people who die every year cannot afford existing medical treatments. Beyond HIV, tuberculosis and malaria, more than 1 billion suffer from neglected tropical diseases – for which there are inaccessible, inadequate or non-existent treatments and a paucity of research and development because of insufficient return on investment for the private sector.

Climate change is happening with greater speed and intensity than predicted. People in the least developed countries and island states are already affected and



Crippling Global Health Work Shortage

To: G8 Member Countries
From: AMREF and Health Workforce Advocacy Initiative
Subject: Crippling Global Health Worker Shortage

Dear G8 Leader:

The global health worker shortage is a central obstacle to achieving the AIDS, maternal health, and the other health MDGs to which the G8 is committed. Overcoming the shortage requires bold G8 action. In 2006, WHO alerted the world of the global shortfall of 4.3 million health workers. In Africa, a mere 3% of the world's health workers struggle to combat 24% of the world's disease burden. Immediate commitments commensurate with the crisis are needed to fulfill the G8's health commitments.

The G8 should:

- Urgently support developing countries to develop and fully implement robust health workforce plans, including sufficient and sustained funding.
- Promote IMF policies to expand fiscal space for health spending and enable civil society and government ownership of these policies.
- Expand their own domestically-trained health workforce, reducing brain drain "pull" factors.
- Include health workforce in the G8 follow-up mechanism.

Without these measures, G8 countries will severely undermine their emphasis on their own accountability.

Community health workers

Many developing countries rely on community health workers as part of their health workforce strategies. These community members receive basic medical training and are able to improve disease prevention, diagnose and treatment and refer more complicated cases to formal health facilities.

Involving community health workers in the health systems can quickly strengthen and expand the health workforce, improving access, shifting provision of health care to the community level, and enabling more highly skilled health professionals to address complex health needs.

In this context, we urge the G8 to provide needed financial and technical support to enable all countries that adopt human resources for health strategies involving community health workers to develop and sustain successful approaches. This means:

1. Community health workers are not cheap substitutes for doctors, nurses, and midwives, but rather complementary to health professionals. Community health worker programs should be implemented as part of an overall expansion of human resources and investments in health systems.
2. Community health workers require supportive systems that need to be developed and strengthened, including for initial and on-going training, supervision, supplies, and referrals.
3. Community health workers provide critical health functions and should be fairly compensated for their work. Compensation and important incentives will reduce attrition and enable programs to be sustained.

We look forward to your addressing these issues at the forthcoming G8 Summit in L'Aquila

Sincerely,

African Medical and Research Foundation
Health Workforce Advocacy Initiative



**HEALTH WORKFORCE
ADVOCACY INITIATIVE**



Flood-affected children crowd around a relief worker distributing free milk at a flood relief camp in Purniya, India

will be affected worst. The consequences for political stability, the global economy, poverty reduction and health could be devastating. Already by 2010, as many as 50 million will have been forced to migrate because of climate change. Flooding, droughts, cyclones, hurricanes and heatwaves make some lands inhabitable. A decade from now, crop yields in some parts of Africa will likely drop by 50 per cent, and water stress could affect as many as 250 million Africans. Researchers warn that the world should brace itself for the largest migration in history, with up to 700 million climate migrants by 2050.

In early 2008, before the international financial crisis hit, the World Health Organization's Commission on Social Determinants of Health argued that "social injustice is killing people on a grand scale". It called for changes in the operation of the global economy if the health gap between rich and poor is to be closed. Now that gap is an open and growing abyss. It is time for the G8 and G20 to deliver fully on what has already been promised. People who are poor can no longer wait.

Beyond domestic stimulus spending, G8 and G20 governments have marshalled at least \$7 trillion in public funds in the last year to rescue a collapsing global financial system and restore confidence in the global economy. The same kind of bold leadership is

“

It is time for the G8 and G20 to deliver fully on what has already been promised. People who are poor can no longer wait

”

required for a sustainable human and humane future. Health and development should not be a matter of charity or subject to the whims of market forces. Sustained efforts to address global health, climate change, food security, and economic and financial stability are all critical to a sustainable future. With crisis comes opportunity, and opportunity – if it is to be seized – requires political courage. The single greatest crisis-opportunity is sustainable funding for the MDGs. Sustainable development requires sustainable funding, and this requires courageous thinking and leadership. For example, a currency transaction tax (CTT) for development would, in the words of former French president Jacques Chirac, be a “tax on the benefits of globalisation”. If properly implemented, the CTT could generate at least \$33 billion annually for the MDGs without affecting foreign exchange markets. In 2006, France and many other governments implemented an air travel tax, with proceeds going toward an international drug purchase facility to assist the campaign against pandemics. In 2004, more than 100 countries endorsed a proposal urging CTT-type financing. This small levy on foreign exchange transactions is an idea whose time has come. For the G8 and G20, it is time to deliver. It is time for bold leadership. ♦

Diabetes and NCDs need greater attention

Every ten seconds someone dies of diabetes, and in the same ten seconds another two people develop diabetes. Diabetes was responsible for 3.8 million deaths worldwide in 2007, roughly 6 per cent of total world mortality. There are currently an estimated 246 million people with diabetes worldwide and within 17 years this number is expected to rise to a stunning 380 million.

Diabetes is a major health challenge, particularly in the developing world; yet too little is being done to tackle it. Increasingly, younger people all over the world are developing diabetes, with serious complications that can derail lives and overwhelm health care budgets.

Access to care is important – but so is awareness about prevention of diabetes and its devastating complications. People with diabetes are at great risk of complications such as hypertension, heart attacks, blindness, limb amputations, and kidney failure. These complications of diabetes are costing people their future, but it need not be that way. It costs just US\$3 to educate a person with diabetes to take care of his feet to prevent foot ulcers – but an estimated US\$650 to amputate a limb and another US\$524 for limb prosthesis. Costs like these put people living on less than a dollar a day into lifelong indebtedness and poverty, sentencing them to a life of dependence through their inability to work and support a family.

Recent systematic reviews show that diabetes mellitus (DM) increases the risk and odds of developing tuberculosis (TB), especially in developing countries with a high background incidence of TB. Millennium Development Goal (MDG) number six specifies that the incidence of infectious diseases such as TB will be halted and reversed by 2015. To succeed in achieving this target, it is important to focus not only on HIV/AIDS, but also on the burgeoning epidemic of DM as a significant epidemiological risk factor.

Diabetes during pregnancy now contributes substantially to 'high-risk' pregnancies and, in some countries, may already be the leading cause of maternal morbidity and mortality due to worsening of vascular complications (pregnancy induced hypertension, pre eclampsia), as well as poor pregnancy outcomes such as spontaneous abortions, still births, congenital anomalies, large baby and obstructed labour, need for caesarean and instrumental deliveries. Also, a substantial number of women developing diabetes during pregnancy go on to develop type 2 diabetes over time.

Raised blood sugar during pregnancy as well as other factors such as maternal malnutrition, can contribute to foetal programming (a permanent change in structure or physiological function occurring in utero during the period of organ development and growth). While the former leads to large babies, the latter is associated with small babies. Both type of babies have been shown to have several fold higher risk of future diabetes, obesity, hypertension, cardiovascular disease and stroke.

This highlights that pregnancy offers a window of opportunity to provide maternal care services, not only to reduce the traditionally known maternal and peri-natal morbidity and mortality indicators, but the potential for intergenerational

prevention of several chronic diseases. Thus, with one high-quality intervention it is possible to achieve several objectives with far-reaching health and economic benefits.

This issue also links to the implementation of the United Nations MDGs 3, 4, 5, and 6, and needs to be brought to the attention of all UN, governmental, and intergovernmental agencies involved in the work related to achieving the MDGs.

It is high time that global development initiatives take into account the prevention and control of non-communicable diseases and diabetes in particular. Instruments such as the MDGs and the recently adopted United Nations Resolution on



According to WHO, in 2002 infectious diseases caused 40% of deaths worldwide, while non-communicable diseases accounted for 60%. In the same year, USD 2.9 billion were allocated by international donors to infectious diseases, while only USD 0.1 billion were allocated to non-communicable diseases.

diabetes provide opportunities for synergy, as do mechanisms that harmonise development aid and strategies for poverty alleviation.

World Diabetes Foundation

The World Diabetes Foundation (WDF) is dedicated to supporting prevention and treatment of diabetes in the developing world through funding sustainable projects. The Foundation creates partnerships and acts as a catalyst to help others do more.

Mandate and objectives

The aim of WDF is to alleviate human suffering related to diabetes and its complications among those least able to withstand the burden of disease. The Foundation operates with a strong poverty focus; in effect this means that only countries listed on the OECD/DAC list of aid recipient countries are eligible for WDF support – and within each country assistance should be



Diabetes during pregnancy now contributes substantially to 'high-risk' pregnancies and, in some countries, may already be the leading cause of maternal morbidity

directed towards the poorest segments of the population. In its effort to improve care, the Foundation pays special attention to prevention of blindness and limb amputations due to diabetes, as they have disastrous psychosocial and economic consequences; as well as on primary prevention through community awareness, school and workplace initiatives and focus on maternal health.

WDF strives to educate and advocate globally in an effort to create awareness, care and relief to those impacted by diabetes. WDF has funded 182 projects to date with a total portfolio of USD 191.4 million of which USD 62.2 million are donated by the Foundation. The projects funded by WDF will in the coming 3-4 years potentially influence the diabetes treatment, prevention and awareness efforts of 65 million people directly in the developing countries.

The World Diabetes Foundation was established as an independent trust in 2002 by Novo Nordisk A/S through a commitment of over 1.2 billion DKK (USD 255 million) to

be allocated over the period 2001 - 2017. The Foundation is governed by a board of six experts in the field of diabetes, access to health, and development assistance.

For further information about our projects, partnerships and funding possibilities, please visit our website at: www.worlddiabetesfoundation.org



WORLD DIABETES FOUNDATION

www.worlddiabetesfoundation.org

Out of our depth

Water is no longer a resource that we can take for granted. A more responsible and sustainable attitude must be adopted

By Loïc Fauchon,
president, World
Water Council

In a fast and sometimes brutally changing world, we must strive to give voice to those who want to take up the challenge of creating a world where people can live in harmony with nature – in harmony with the air they breathe, the energy they generate, the water they drink.

The road leading to access to water is long and there remains far to go to reach the Millennium Development Goals. It is nevertheless everyone's duty to stimulate dialogue, listen and endeavour to reach these legitimate goals.

Water is undergoing changes on a planetary scale. Yet never has the demand been as strong as it is today. Every day the world needs more to produce food to meet the requirements of an additional 1 billion people every decade. Every day, more water is needed to generate the energy necessary for development. Every day, better-quality water is required to defuse the health threats from inadequate or outright absent sanitation of many mega cities. Every day, water must be protected to respect the biodiversity of ecosystems. And water use is not confined to humans alone.

At this moment in the history of water, the world faces a major challenge: how to use more water resources but – at the same time – protect, enhance the value of, and even reuse, these resources. A harmonious, albeit rigorous, way to share water must be reached and maintained.

To share water is difficult and is an immense responsibility. That responsibility is mainly political, because the future of water rests not only on technological progress, but also on political commitments.

The fact that many heads of state and government, along with hundreds of ministers, parliamentarians and mayors, attended the March 2009 World Water Forum speaks loudly of this change in emphasis from the hydro-technical to the hydro-political.

And water needs the respect and ongoing support of political leaders. These will be called upon for some time to come to increase the quantities of water available to meet the requirements of global growth.

In the future, rivers, lakes and groundwater will be increasingly used to quench the ever-escalating thirst of the planet. The world will have to store water, pump it, transfer it, desalinate it and recycle it, thanks to technological advances – which must be encouraged more than ever.



“

Water is undergoing changes on a planetary scale. Yet never has demand been as strong as it is today

”

But indefinitely increasing the water supply comes at a cost, especially given today's background of climate change and global financial crisis. Increasing the water supply jeopardises the natural environment, especially when humans fail to balance the interests of meeting essential needs and 'looting' hydrological resources.

People are behaving more and more unreasonably and inattentively. Can they continue to demand that governments meet their water needs and ask for more equipment and more infrastructure? People must stop spending ever-greater amounts of money to produce water and then waste it, as is the case now.

The time of water easily come by is over. The era of extravagant water consumption is over, now when

social tariffs should be set to protect the poorest. The days of ignoring leaks are over, given today's unacceptable water shortages. The moment has come to adopt the principle of 'virtual' water – the amount of water used to produce a good or service – for this is the only way to reduce humans' hydrological footprint. Our relationship with water must change.

People must show their willingness to bridge the divides – to find solutions that are sustainable, meaningful and interdependent. Such bridges can cross the chasms of ignorance, of injustice, of poverty. They can bring the shores of knowledge closer, as well as those of rights, wealth and good governance.





People gather around a village well to draw drinking water, Chokadi, India

The world must build the bridge of rights, because dignity is a non-negotiable human right. The world is asking the G8 leaders, as well as all other leaders, to enshrine the rights to water and sanitation in their countries' legislation, to implement minimal water allocations for those most in need, to assure drinking water supply for the populations living in unregulated housing districts and to make compulsory water-supply points and sanitary facilities in all public buildings including, as a matter of priority, in schools. They must commit to protect these rights as a matter of urgency.

The world must build the bridge to transfer knowledge about what is required for the service of water. This means providing facilities in the four corners of the world to train the technicians and managers needed for water and sanitation services. Several such maintenance schools have been created since the 2006 World Water Forum in Mexico, but there are still dozens more to build. Political leaders must make the transfer of knowledge about the service of water a clear priority.

Similarly, political leaders must pledge to cancel the water debt and reallocate financial resources in favour of indispensable infrastructure to facilitate access to water for the financially distressed. Leaders must implement a mechanism to pay for the energy necessary to provide water or issue a moratorium on increasing the price of that energy.

Innovation is needed in financing. This includes local microfinance initiatives and solidarity between the

“ Indefinitely increasing the water supply comes at a cost, especially given today's background of climate change and global financial crisis ”

haves and the have-nots in the form of decentralised co-operation.

The bridge of governance must also be built. Managing water requires democratic and decentralised institutions. Efficient water management requires joint action to bring citizens closer to the reality of water and to foster transparency.

All this is now possible, insofar as the will of the world's major leaders has been expressed. But it must be expressed in a strong and single voice. Only then will it be able to echo around the world, entitling future generations to safe and sustainable water.

The G8 summit can contribute to disseminating these ideas, bridging the divides among human beings and helping build the 'house of water', in a climate of tolerance and solidarity. ♦

Water stress

By 2025, 4 billion people could live in water stressed countries. What can we do about this challenge?

Water is the fountain of life. Maintaining this fountain for current and future generations is a challenge we all need to address. At Halcrow we believe there is a web of interrelated water scarcity drivers which creates a water security situation unique to each locality, country and region. This web is leading to an ever-worsening, water-scarce world. For example, with 70 per cent of the world's water used for agriculture, the projected need for a doubling of food production in the next 40 years would significantly impact water security. Already, 2.8 billion people live in basins affected by water scarcity, but if trends continue, this could increase to more than 4 billion by 2025.

We also believe that without concerted, co-ordinated action, founded on successful global alliances and agreements on water, our food supply will become less secure and our future less sustainable. We welcome the excellent work of the G8, United Nations, the World Economic Forum, the World Water Council, the Global Water Partnership, and other globally influential bodies in their efforts to address these issues. We are ready to join the global alliance that addresses this challenge.

Solutions from within and outside the 'water box'

Halcrow is currently working in more than 80 countries, sustaining and improving the quality of people's lives by, for example, improving irrigation supply, water resources, domestic and industrial water supply, sanitation and environmental habitats.

In Argentina work is underway with the private sector on delivery of a new water supply works for the northern area of metropolitan Buenos Aires, benefitting 4.5 million people many of whom currently lack access to safe potable water.

In Ethiopia, as part of the Nile Basin Initiative that provides a basin-wide framework to reduce water scarcity, fight poverty and promote socio-economic development, we have recently commenced feasibility studies for some 80,000 ha of new irrigation.

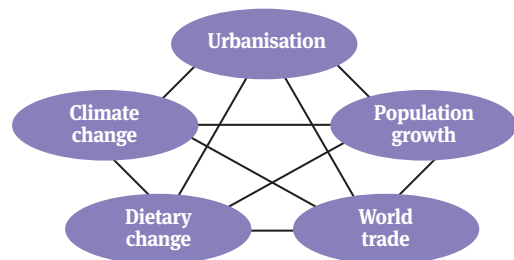
In the Lower Mekong River Basin we are providing training, system support and expert advice on river basin planning for the Halcrow-developed Mekong Decision Support Framework, a knowledge base and modelling system used by the four Mekong countries for development planning of water interventions in the basin.

But, as emphasised in the UN World Development Report 3, a water-secure world cannot be achieved by water managers alone. As water managers, we also need to 'get outside the water box' to interact with the principal actors and managers of other sectors that impact on water security.

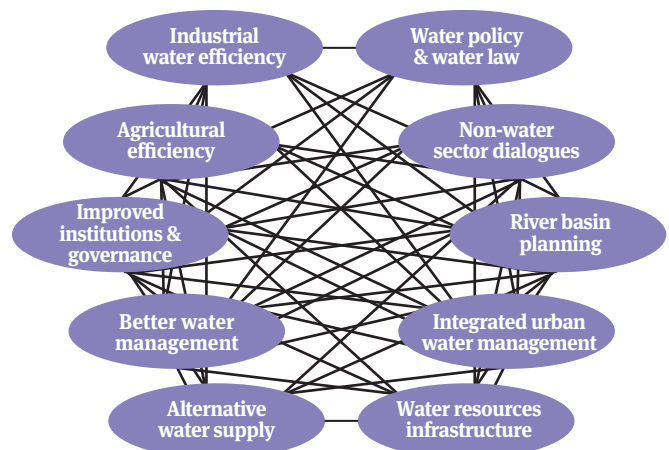
As a large multi-sector consultant, working both within and outside the water box, our experience has enabled us to form a web of solutions to global water scarcity issues, and we would be proud to join the global alliance to address the world's greatest challenge yet.



Water scarcity web



Web of solutions



For more details on how Halcrow can help the world address the web of water scarcity, please contact:

Michael Norton MBE
Managing Director
t: +44 (0)1793 812479
e: NortonMR@Halcrow.com

or Dr Richard Harpin
Director of Water Scarcity
t: +1 (813) 876 6800
e: HarpinR@Halcrow.com



— GROWING —
TO FEED THE WORLD
JUST TOOK ON A WHOLE NEW
MEANING

At Viterra, our business has always been about growing – and for decades, we have helped Canadian farmers produce and deliver high quality crops to customers and markets around the world.

Now, our company is looking at growing from a different perspective. By adopting an increasingly global focus and building relationships with an expanding network of business partners and destination customers around the world, we have a greater ability to deliver food ingredients from areas of abundance to areas of need.

Today, we are finding new solutions not limited by national borders – because to meet growing food demand we need growing companies.

Viterra aims to contribute to global food security

Feeding the world's growing population is a challenge that requires new solutions not limited by national borders. Just as economic turmoil and recession require a global response, issues such as food production require a global perspective.

Securing a reliable and sustainable supply of quality food ingredients is central to the international growth strategy of Viterra Inc. – Canada's leading agribusiness.

Viterra arose out of farmer-owned co-operatives that shaped the development of Canada's agricultural sector. Today, the company is Canada's largest grain handler and crop input retailer, with interests in livestock feed manufacturing and value-added processing.

Already an established presence in Canada, the United States and Japan, Viterra has embarked on a strategy to diversify and expand its global footprint. The company recently opened a new marketing office in Singapore, which serves as a regional trading hub for its activities in Asia. It has also established an office in Geneva, providing access to the Black Sea region and high demand markets of Europe and the Middle East.

"We are building on the strength of our assets, knowledge and people to create a global enterprise with the capability to move high quality food ingredients from areas of abundance to areas of need," says Mayo Schmidt, President and Chief Executive Officer of Viterra. "We are creating the scale, scope and diversification required to make a positive contribution to global food security."

Demand forecasts point to the magnitude of the food production challenge. Population and income growth is expected to increase the market for core commodities by 20 per cent over the next ten years, while Asian imports of wheat, barley and canola/rapeseed are expected to rise by 39 per cent.

This heightened demand comes at a time of increasing concern over the impact of climate change and a shrinking cropland area. Worldwide, arable land is declining at a rate of 0.4 per cent per year due to urbanisation, industrial growth and diminishing water supplies. In the fall of 2008, Saudi Arabia announced it would cut wheat production from 2.3 million metric tonnes to zero in order to conserve water.

Viterra is ideally-positioned to pursue solutions to the food security issue. The company is a world leader in research into drought resistant crops such as Juncea canola, which it has introduced to farmers in Canada, Australia and the United States. Viterra is in the second year of a three-year research project aimed at expanding the geographic regions where canola can be grown. The collaborative effort with Evogene Ltd. – an ag-biotech



Dr. Derek Potts, Senior Plant Breeder, Viterra

trait development company based in Israel – is focused on improved yield and tolerance to abiotic stress conditions such as drought, extreme temperatures and soil salinity.

"By harnessing Viterra's research and development capabilities and agronomic expertise, we can help farmers overcome environmental challenges to produce healthy crops and keep pace with growing world demand," says Schmidt.

In May 2009, Viterra and ABB Grain Ltd. of Australia announced a historic proposal to combine operations. Bringing together two leading agribusinesses that share similar histories of farmer ownership and involvement will create one of the largest exporters of wheat, canola and barley in the world. Canada and Australia in aggregate, account for 37 per cent of global exports of the three commodities.

The proposed combination, which is subject to shareholder approval, will further enhance Viterra's capability to originate grains from multiple origins, providing 'shock absorbers' against crop failures in any one region. It will also create opportunities to share knowledge about sustainable farming practices, crop research and grower education and training programmes between two countries that grow similar crops and share similar cultures and political systems.

"Viterra is committed to delivering essential ingredients to fulfill the world's nutritional needs," says Schmidt. "Working in partnership with farmers, we look forward to fulfilling that promise."



Mayo Schmidt,
President and CEO of Viterra

www.viterra.ca

VITERRA™

A roadmap for global food security

A clear plan for overcoming global food insecurity has become indispensable if billions are to be brought out of poverty and hunger

By Jacques Diouf, director general, Food and Agriculture Organization

First and foremost, world leaders need to reach a broad consensus to eradicate hunger completely from the face of the earth by 2025. The world must be more ambitious than it has been until now in order to put an end to the scourge of hunger once and for all. This would also facilitate the implementation of the Right to Food guidelines set out by the Food and Agriculture Organization (FAO).

Second, the world needs a global agricultural system that would provide farmers in both developing and developed countries with distortion-free support, thus allowing them to enjoy an income comparable to that earned by their fellow citizens in the secondary and tertiary sectors. This would ensure that they remain in agriculture and rural activity.

Third, an early reaction mechanism similar to the ones established for natural disasters and conflicts should be adopted to deal with food crises like the one that broke out in 2007. While there are bilateral, regional and international systems to deal with natural disasters and conflicts, there is no such mechanism for food crises.

World food insecurity has reached unacceptable levels. Together, the global financial and economic downturn and the food price crisis are driving millions into hunger and poverty. More people may now be hungry than ever before in human history. Today, some one billion hungry mouths, one thousand million empty bellies, accuse and shame us.

But the enormity of that number also goads us to do what must be done so that everyone on this planet can eat his or her fill. The world knows what that is. There is no need for new silver bullets or miracle cures, for what has been lacking so far is not solutions, but political commitment.

Yet something important has changed. With the outbreak of a world food crisis two years ago, food security has become a priority on the international agenda. The financial and economic crisis should not overshadow this fact. The meeting at Cison di Valmarino, near Treviso, of the G8's agriculture ministers – the first such gathering ever to take place – marked a start in the global political process for addressing this vital challenge.

July's summit of the G8 leaders in Italy should take that process significantly further.

The food insecurity crisis deserves focused attention. It has economic, social and political ramifications. It also represents a threat to world peace and security. It will remain unless its real causes are properly tackled at the root instead of dealing just with the consequences of the problem.

By 2050, food production will have to almost double to feed a world population set to reach 9 billion people. Rapidly increasing urbanisation will slash the agricultural labour force and will mean that more food must be grown with fewer hands. Higher temperatures, harsher weather and dwindling water reserves will impose further constraints. And the world will need to find new, more environmentally sustainable ways of farming.

Another urgent issue is agreement to ensure that agriculture's share in total official development assistance – which stood at a mere 3.8 per cent in 2006 – returns to its 1980 level of 17 per cent. The World Bank, the international and regional development banks, the bilateral funds and development agencies should all lead the way by reversing past trends. In this context, President Barack Obama's announcement of the doubling of US assistance to agricultural and rural development is exemplary. So was the decision of the G20 leaders in London to increase the resources of the World Bank and regional development banks. This ought to generate a large portfolio of grants and loans for smallholder agriculture. Such a development is most welcome, since one of the main causes of the continuing global food crisis is underinvestment in

“ More people may now be hungry than ever before in human history ”



The world needs a global agricultural system that would provide farmers in both developing and developed countries with distortion-free support

How do we feed a growing world population?



■ Farm new land

■ Get more from existing farmland

syngenta

The world needs more food. By 2050, there will be another 2 billion people on our planet. How do we provide enough high-quality food and preserve our environment? At Syngenta, we believe the answer lies in the boundless potential of plants. We develop new, higher yielding seeds and better ways to protect crops from insects, weeds and disease. So farmers can get more from existing farmland and take less new land into cultivation. It's just one way in which we're helping growers around the world to meet the challenge of the future: to grow more from less. To find out more, please visit us at www.growmorefromless.com



farming in developing countries over the past 30 years or so.

Indeed, world leaders looking for ways to save the global economy from disaster would be well advised to invest heavily in agriculture. It is one of the most potent and promising economic stimuli at hand.

Putting one billion humans in a position to feed themselves is equivalent to bringing a new player roughly the size of India or China into the global economy. The FAO has calculated that achieving the 1996 World Food Summit's goal of halving the then 800 million undernourished would have produced overall economic benefits of some \$3 trillion.

In parallel, agreement is urgently required on one key pillar: reform of the governance of world food security. The world needs an international body that can take fast, informed decisions to pre-empt new food crises and to deal quickly with any emergency situation that might occur. In setting up this body, which should have high political legitimacy and scientific backup and include different actors, the founders must avoid creating another layer to the array of organisations and

From opium poppies to wheat, Afghanistan: the US Department of Agriculture plans to spend \$27.5 million on food assistance and rural development

“ The world needs an international body that can take informed decisions to pre-empt new food crises ”

institutions that are already in place. It is more efficient and cost-effective to revitalise what is there.

None of this will be easy. Yet the world has the resources to put food in everyone's hands, both the rich and the poor, today and tomorrow. The time to relegate hunger to history is now. But doing so demands high political leadership and effectively available and well-invested resources. It is only up to us. ♦



The world sees one Africa. We see so much more.

No two countries are the same. Every country in Africa has a different culture, a different economy, a different way of doing things. We understand this. With an established presence in 17 African countries, we not only know the dynamics of each local market, its specialist sectors and its communities; we're also committed to every one of them. So when it comes to doing business in Africa, you'll know you're dealing with the bank that truly celebrates unity in diversity.

www.standardbank.com

Inspired. Motivated. Involved.

 **Standard Bank**
Also trading as Stanbic Bank

Revolutionising agriculture in Lesotho

Standard Bank is helping turn subsistence agriculture into a masterplan to feed the nation through public/private partnerships

The Kingdom of Lesotho covers 30,355 square kilometres. It is the only independent state in the world that lies entirely above 1,000 metres in elevation. Its lowest point is 1,400 metres and over 80 per cent of the country lies above 1,800 metres. In recent years, agriculture's contribution to Lesotho's GDP has fallen from around 50 per cent in the 1970s, to 30 per cent in the 1980s and to an estimated 17 per cent in 2006. Despite its declining share of GDP, it remains a critical sector in the economy.

In 2005/06 the Government of Lesotho began discussions with Standard Lesotho Bank as to how the country's ailing agricultural sector could be revived. Their vision was to "establish and expand long term sustainable commercialised agriculture in Lesotho on a block farming basis". Suitable land was identified and it was agreed that the block farming concept would be used as a case study on this 245 hectare block of land. Standard Lesotho Bank embraced the block farming concept and the Government of Lesotho's vision and offered production finance to the farmers.

Standard agricultural practices in Lesotho over the last 30 years have resulted in the development of extremely nutrient and mineral deficient soils. Omnia was brought on board and introduced the concept of nutriology (the science of growing). Nutriology is achieved by creating a favourable soil environment and the management of each stage of a crop's lifecycle. Omnia conducted a full soil analysis by taking numerous samples from across the block. These were analysed and recommendations were made that included correcting the soil's pH, potassium and phosphate levels in order to get the soil back into a balanced state.

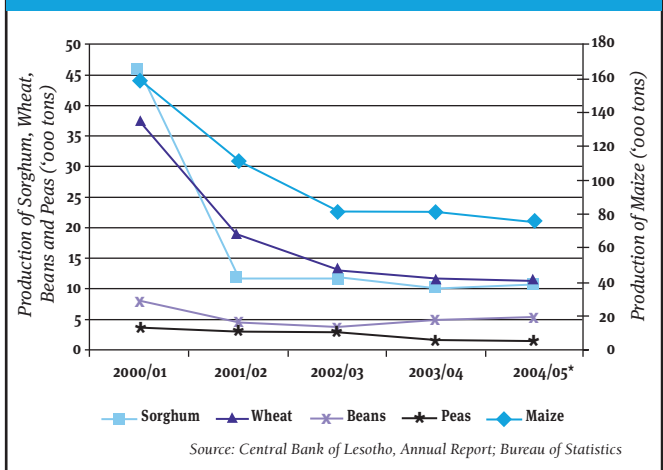
The Government of Lesotho then brought in various other companies to advise the farmers on the use of the most suitable seed cultivars, provision of machinery, etc. Whilst Lesotho currently outsources much of the technical assistance required by its block farmers to South African commercial farmers and companies, Stan Motake says that going forward the Ministry of Agriculture is optimistic that they will be able to build internal capacity and reduce their reliance on South Africa.

The initial block of 245 hectares from 2005/06 has been expanded to cover 1,000 hectares in 2008/9 and it is now termed Program 1. It was quickly followed by the launch of another block of land, Program 2, which consists of almost 2,500 hectares of land. Mentorship for the farmers within Program 2 is provided by two Lesotho Government ministers, and finance for the farmers was again provided by Standard Lesotho Bank.

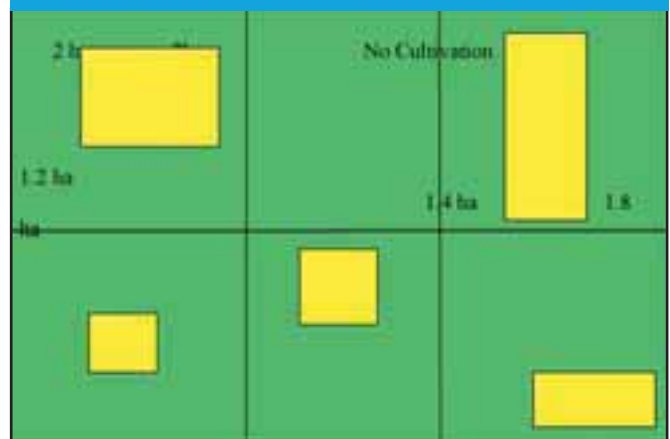
Prior to the development of block farming, each of these farmers was a subsistence farmer producing only enough to feed their family and sometimes not even this much. Almost nothing extra was produced to sell into the market. Yields for these farmers over the last ten years ranged from as low as 0.6 tons/hectare up to 1.5 tons/hectare in a good season. However, since the inception of the block farming concept, yields in the drought season of 2006/07 reached 2.5t/ha and in 2007/08 ranged between 2.5-3.5 t/ha.

Jacques Taylor, head of agricultural banking at Standard Bank

Decline in crop production in Lesotho (2001-2005)



Individual subsistence farming (yellow) changes to block farming (green), for greater land use efficiency



Africa says the results of Lesotho's block farming after only three seasons are outstanding.

"We believe there is a role for banks to play in assisting in developing communities which we operate in. We can however not do it on our own – public private partnerships are important where there is support from the government and the involvement of industry players, such as Omnia."

A green revolution

Any new green revolution must be innovative and knowledge intensive, since agriculture is key to food security and poverty reduction

By Kanayo F Nwanze, president, International Fund for Agriculture and Development

It is not surprising that increasing food security and boosting agricultural production to end hunger were on the agenda when the G8 agriculture ministers met in Treviso in April. With an estimated 9.2 billion people to feed by 2050, a dwindling amount of water and arable land, and an imperative to reduce greenhouse gas emissions, tomorrow's world will have to do more with less.

Better world food security and sustainable agricultural development go hand in hand. So do agriculture and poverty reduction. Historically, agriculture has driven economic growth, from 18th-century England to 21st-century Vietnam. Gross domestic product (GDP) growth generated by agriculture is two to four times more effective in reducing poverty than growth in other sectors.



But increased food production must come without expanding the amount of land dedicated to agriculture. Cutting down forests and woodlands to create more land for farming is no longer an option.

The question of who produces the world's food is crucially important. Most of the world's smallholder farmers struggle to live on less than \$2 a day. Local smallholders compete with large-scale industrial farms and food-exporting countries for the fast-growing urban markets of developing countries. Supporting smallholder farmers enhances world food security and makes a significant dent in poverty. Leaving them out of the equation will push many into greater poverty and hunger.

Those working in agricultural development know a new green revolution is needed. It will need to be innovative, at both the technical and policy levels. It will need consistent investment and long-term commitment to agriculture by developed countries as well as developing countries. And it should respond to the needs of the 2 billion who live and work on small farms in developing countries.

Today's green revolution must be different from the one that transformed Asian agriculture 40 years ago. The goal then was to maximise yields. It did so by developing high-yielding varieties of rice and wheat, supporting the increased use of fertilisers, pesticides and better irrigation, developing rural infrastructure and ensuring reliable markets for smallholders. It was remarkably successful in transforming agriculture in the most favourable regions of Asia, producing more food and reducing the threat of famine. But, over time, yield gains began to stagnate, and even reverse, in some countries – at significant cost to the environment and biodiversity.

In the years since, it has become clear that agricultural growth must meet the needs of future generations. A new green revolution must be flexible and suitable to local conditions rather than taking a one-size-fits-all approach. New factors, such as the impact of climate change on agriculture and of agriculture on the environment, must be considered.

This new green revolution will need to be more innovative and knowledge intensive than the last one. Agricultural research for development has already become increasingly focused on promoting environmentally sustainable systems and improving the integrated management of crop, livestock and natural resource systems, while maintaining biodiversity. Smallholder farmers themselves must be more directly involved in research and development (R&D).

Unfortunately, average global expenditure on agricultural research as a percentage of agricultural GDP is only 1 per cent. In most developing countries it is even lower. Despite this chronic underfunding, there have been some notable successes.

New rice for Africa (NERICA) is one striking case. NERICA combines the hardiness of local African rice species with the high productivity of Asian rice. Many poor African farmers cannot afford fertiliser and other inputs. With NERICA, they can double their yields under favourable conditions without having to increase their inputs. More than 100,000 farmers in 27 countries across sub-Saharan Africa currently grow NERICA.

NERICA is a case of agricultural biotechnology that did not involve genetically modified organisms (GMOs). Pest- and weed-resistant GMO crops, while prevalent in North America, remain highly controversial. Potential environmental and health risks are a concern, and yield gains from GMOs are highly variable. In addition, the use of patents for these crops tends to drive up the cost of seeds, making them too expensive for most smallholder farmers in developing countries. However, in some circumstances, GMOs may have a role in a new green revolution when other measures have failed.

Improved varieties and breeds alone are not sufficient. Low soil fertility, lack of reliable water, and of communication infrastructure, lack of disease control and highly volatile producer prices are some of the major constraints faced by smallholders in developing countries.

With climate change expected to reduce yields from rainfed agriculture by up to 50 per cent by 2020 in some countries, agricultural water management is an area where innovation is essential. One promising

Continued p142





Africa: it's possible!

A real option to tackle food security challenges

If the global community is looking at food security or reducing hunger in a sustainable way, rather than through food aid, then there is a real option that has worked and can be shown to work elsewhere. This approach has benefited an estimated 100 million consumers and over 8 million farmers countrywide in Nigeria.

When good leadership is backed up with relevant technologies and effective approaches, good things happen. The food crisis has abated somewhat, but not before it demonstrated the limitations of the world's food system. Africa can supplement and stabilise the global food system with small-farmer production in unprecedented ways. African leaders appreciate the need to accelerate food production and availability. Their challenge is how best to go about it.

The specific responses to this question vary by country. However, in all cases it means putting into greater use Africa's

immense assets – arable lands, numerous ecologies, crop yield gaps, and its people. This assumes concurrent national efforts in improving energy, transport facilities, and regulatory standards.

The Nigerian case we present here focuses on the huge impact of the country's cassava initiative in tandem with the International Institute of Tropical Agriculture's (IITA's) research-for-development (R4D) model. The former president, in an effort to address the food security challenges, decided to revitalise the country's food sector. He launched a Presidential Initiative on key food crops. One, cassava, is a major food crop in much of sub-Saharan Africa with an estimated 90 million producers and 450 million consumers, with a trade value estimated at more than US\$ 1.72 billion (FAOStat 2008). Public and private sector development and research partners worked together to reduce producer and consumer risks, enhance crop quality and productivity, and generate wealth from cassava production, processing, and trade.

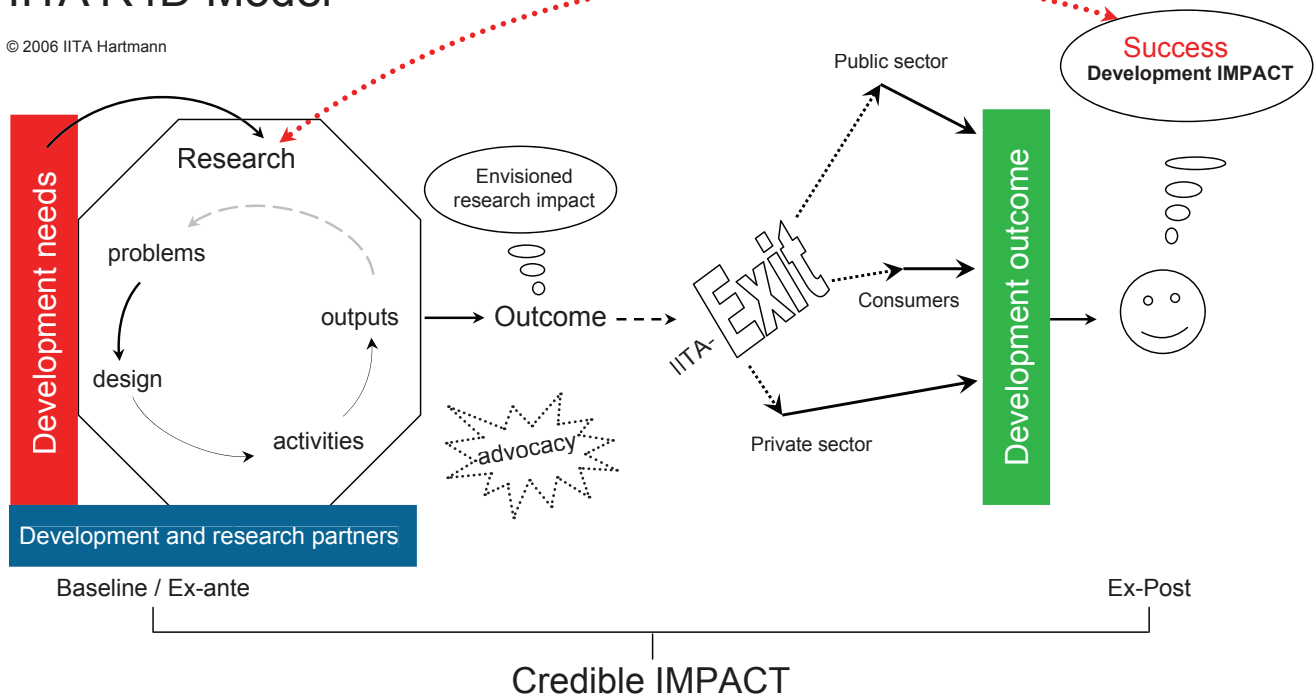
Figure 1: Cassava production, Nigeria, 1999–2007

Adapted from FAOStat 2008



IITA R4D Model

© 2006 IITA Hartmann



1. **Development needs:** Identifies societal, producer and consumer needs that require addressing. Guarantees research relevance.
2. **Research design:** Specifies research problems that can be addressed by IITA with advanced research institutes and national partners. The design demands envisioning the potential impact.
3. **Outcome:** Defines scalable research outcomes and any advocacy activities required. A successful outcome entices partners to adoption.
4. **Exit:** Once the outcome is embraced by national/regional partners IITA exits implementation and changes role to monitoring the research outcomes.
5. **Success/Development impact:** Ex-post evaluations are carried and compared to baseline information to measure the impact on the ultimate beneficiaries.
6. **Further work:** Development impact creates new challenges which are referred back to development needs.

“Over 8 million Nigerian farmers benefited and the availability of more cassava and cassava products served about 100 million customers”

In four years, yields went up and the area farmed with cassava increased substantially in Nigeria. The quantity of cassava produced increased by 10 million tons according to FAO statistics (see Figure 1). More remarkable is that the farm gate price did not drop due to moving the fresh produce into processed food products and livestock feed. Over 8 million Nigerian farmers benefited and the availability of more cassava and cassava products reached an estimated 100 million consumers.

IITA's R4D model provided a framework that guided appropriate technologies and propelled them with targeted advocacy. A key difference was the delivery of the research impact or outcome. The scale enticed and attracted the private sector, which ultimately was responsible for delivering on the greater development impact.

Powerful lessons emerged from this undertaking:

- a. **Leadership:** This was crucial. There was an accurate and clear view of the needs, why something had to be done, and what that something was. The President of Nigeria kept up the message at every occasion with the media.

- b. **Private sector (including farmers):** There would have been no success without the involvement of the private sector. They were the target group. The effort brought together farmers, bankers, transporters, and food processors.
- c. **Technologies:** Appropriate technologies are essential. The pace of success was not possible if IITA, for example, had not had the relevant research in the pipeline. But technologies alone are not sufficient. They have to be 'guided' and be part of a comprehensive model.
- d. **Effective models:** Having a comprehensive view of the undertaking and its components is necessary. IITA's R4D model proved critical to success.

While problems exist and higher-order constraints of infrastructure – energy, transport, standards – remain, the model demonstrated the possible and changed minds and attitudes across Africa.

Several African governments are attempting to replicate the model and launched similar presidential initiatives, which would benefit from the support of the G8 in obtaining similar success.

For more information on the International Institute of Tropical Agriculture, visit our website at www.iita.org



“ Today’s green revolution must be different from the one that transformed Asian agriculture 40 years ago. The goal then was to maximise yields ”

initiative is the use of planting pits in dryland areas to channel water run-off and control soil erosion and degradation.

Another innovation is integrating farming systems and management of natural resources. ‘Conservation agriculture’ is an approach to farming that is rapidly taking hold globally. The practice, which originated in Brazil, involves zero-tillage, year-round soil-cover and crop rotations, preferably with a legume.

Policy innovation is also necessary. Smallholder farmers do not compete on equitable terms in local, regional or global markets. Higher food prices do not always filter down to the farm gate, particularly in remote rural areas.



Getting farm-gate prices right through better market access, stronger producers' organisations and supportive market regulation must be an objective. Policy reforms in many countries have improved price incentives, but more needs to be done. Public investment in public goods such as irrigation, rural roads, market infrastructure, education and R&D is also essential.

There needs to be greater transparency in budget allocation and evaluation so that the public can appreciate the benefits of public investment in agriculture.

All countries, rich and poor, must work together to keep agriculture at the top of their national agendas.

Many developing countries have not invested in research, although the urgent need for such investment is increasingly recognised. Where governments are mobilising their national resources, G8 leaders can support them through greater technical co-operation and following through on their aid commitments. At the G8 Toyako Hokkaido Summit last July, the leaders pledged to reverse the decline in aid to agriculture, which had fallen from around 20 per cent of all aid in the 1980s to below 5 per cent in 2007. Some progress has been made to implement these pledges. But more is needed.

I hope the G8 leaders this year will review their progress and commit themselves to speeding it up. ♦

“The first essential component of social justice is adequate food for all mankind.”

– Dr Norman Borlaug, Nobel Peace Prize Laureate and former member of the IFDC Board of Directors

The Food and Agriculture Organization of the United Nations estimates that there are over one billion starving people worldwide. Moreover, the global population is increasing by 75-80 million people every year. “We face a daunting task – grow more food on less land with changing growing seasons,” according to Dr. Amit Roy, IFDC President and CEO. The world must: learn to harvest pollutants to use as nutrients; recycle urban waste to extract nutrients; learn how to neutralise heavy metals in urban waste; and harvest water from runoff. “Simply put, we must not waste anything, and produce more food while using fewer resources. IFDC is conducting research on these and other key food security and environmental issues,” Roy stated.

Mineral fertilisers were the fuel that powered the Green Revolutions in Latin America and Asia. However, fertilisers have received little attention over the past two decades – until now. Africa’s Green Revolution will be different from Asia’s, which was blessed with greater resources and infrastructure. Increased yields of only two crops tripled Asia’s food production. An African Green Revolution must address many different crops, grown in a wide range of agro-ecological areas.

IFDC is seeking ways to reduce fertiliser costs and make it more accessible to farmers while using natural resources more efficiently. Soil fertility is central to crop growth. Nutrient-depleted soils are Africa’s main constraint to increased agricultural productivity. But there are a range of barriers to African productivity gains: lack of access to improved seed varieties and fertiliser/nutrients because they are either unavailable or too costly; low crop management skills; non-existent or inefficient markets for crops; and limited access to credit at each stage of agricultural production. IFDC provides holistic solutions that address each barrier to value chain



creation. Within this range of needs, the surest way to increase productivity is to improve soil fertility through proper fertiliser use and to plant quality, nutrient-responsive seeds.

According to Dr Borlaug, “You can never have peace on an empty stomach.” In many areas of Africa food costs consume as much as 90 per cent of a family’s annual income. Working with a broad coalition of governments, NGOs, associations and the public-private sector, IFDC is providing the ‘tools’ and know-how to help Africa create its own Green Revolution.

IFDC

IFDC – an International Center for Soil Fertility and Agricultural Development – is a public international organisation addressing critical issues such as international food security, the alleviation of global poverty, environmental protection and the promotion of economic development and self-sufficiency. Collaborative partnerships combine cutting-edge research and development with on-site training and education. IFDC is helping to enrich and sustain the lives and livelihoods of people around the world.

IFDC is the only non-profit, science-based organisation meeting the integrated soil nutrient management needs associated with a sustainable global food supply. IFDC was established in 1974 in response to the twin crises of food insecurity and rising energy prices. These parallel crises now threaten the world again.

IFDC has helped increase sustainable agricultural productivity in more than 130 nations. This has been achieved through the development and transfer of effective and environmentally sound plant nutrient technology and agricultural marketing expertise.

IFDC has also contributed to the development of institutional capacity-building in 150 countries through nearly 1,000 training programmes, primarily as part of IFDC’s long-term agricultural development projects. IFDC staff members are currently serving in more than 20 nations throughout Africa, the Near East and the Far East.

IFDC

P.O. Box 2040, Muscle Shoals, Alabama 35662, USA
Tel: +1 (256) 381 6600
www.ifdc.org

Urea Deep Placement

Increasing Agricultural Production and Protecting the Environment

Across Asia, millions of rice farmers depend on urea fertiliser to meet the nitrogen needs of the continent's primary crop. Many farmers still spread urea into floodwaters to fertilise rice. This is highly inefficient – about two-thirds of the fertiliser is lost as greenhouse gas or becomes a groundwater pollutant.

Urea deep placement (UDP) is a more efficient and environmentally responsible method of fertilisation. IFDC pioneered UDP research and helped introduce it in Bangladesh in the 1980s. UDP technology has since been spread to other countries in Asia, including Cambodia, Nepal and Vietnam.

Farmers using UDP place urea briquettes into soil near the rice plants. UDP increases nitrogen use efficiency because most of the urea nitrogen stays in the soil, close to the plant roots where it is absorbed more effectively. The net result is that crop yields are increased while pollution is lessened. Farmers using UDP are increasing yields by more than 20 per cent while using 40 per cent less urea.

By 2008/09, the Bangladesh Department of Agricultural Extension (with IFDC assistance) spread UDP technology to 500,000 hectares (ha) of rice fields, increasing production by 268,000 metric tons (mt) annually. UDP farmers had additional annual net returns of \$188/ha.

UDP use reduced Bangladesh's urea imports in 2008 by 50,000 mt, saving \$22 million in fertiliser imports and \$14 million in government subsidies. UDP generated an additional 9.5 days of labor per hectare – almost 4.6 million additional days of labour. More importantly, the additional rice has made 1.5 million more Bangladeshis food-secure.

The Bangladesh Government began expanding UDP technology this year to 2.9 million more farm families on 1.5 million ha. By 2011, rice production is expected to increase by almost 1 million mt, ensuring food security for an additional 4.2 million Bangladeshis.

The UDP technology not only improves farmers' productivity and income, but the need for urea also creates employment



opportunities. IFDC engineers developed a simple machine to mould urea into briquettes, and helped establish village-level businesses to manufacture and distribute the machines. Nearly 2,500 urea briquette machines are in use across Bangladesh.

All farmers seek gains in efficiency and productivity, but nowhere is the need greater than in Africa. Because farmers worldwide face many of the same problems, a group of African farmers, scientists, policymakers, entrepreneurs and extension workers visited Bangladesh to see UDP use first-hand. As a result, the UDP technology is being introduced in Burkina Faso, Madagascar, Malawi, Mali, Niger, Nigeria, Rwanda, Senegal and Togo.

Visiting UDP rice fields in Niger, Chaibou Abdou, Secretary General to Niger's Minister of Agriculture, said "Spiralling food prices spurred the government decision to boost rice production and reduce costly imports. Niger has 30,000 hectares of land with rice production potential. With UDP this land could supply 30 per cent of our needs."

"It's a delight to the eyes," said Mohamed Idrissa of the Daiberi Cooperative. "Rice fields stay green throughout the growing season because nitrogen is released slowly with UDP." Abdou Morou of the Karma Cooperative said: "Farmers who visit the UDP fields are intrigued. They know that something very different is happening! We're especially motivated because of the food crisis. Even our livestock went hungry! Before, we didn't know the importance of rice husks – but we now know they make good animal feed."

In Burkina Faso, farmers and co-operative leaders toured UDP rice fields in the country's Kou Valley. Farmers using UDP harvested about 1.3 mt/ha more than those who spread urea conventionally. UDP farmers also received over \$350 more for their crops. Farmer Kindo Souleymane pointed out: "UDP takes more time, but it's only one application versus two or three using regular urea. This actually saves time."



The food and energy challenge

The food versus biofuel debate demonstrates the hard choices faced at both national and international levels

By C Ford Runge, distinguished McKnight University professor of applied economics and law, University of Minnesota

The declaration issued by the G8 agriculture ministers on 20 April 2009 acknowledged the continued crisis in global food security – an increase of 100 million hungry people in 2009, bringing the number of malnourished above 1 billion. Joined by ministers from developing countries such as Brazil and Argentina, the G8 ministers acknowledged that the food situation has not markedly improved since the crisis summer of 2008. The G8 did not acknowledge biofuel's role in the price increases – estimated at 30 per cent of the total by the International Food Policy Research Institute. Instead, the declaration called for a balanced combination of food and renewable energy from biomass, emphasising second-generation biofuels from non-food crops.

The food versus biofuel debate underlines only one aspect of the challenge, where policies are neither balanced nor co-ordinated at the national or international levels. At the national level, agriculture and energy portfolios are separate, with little real integration. Internationally, the Food and Agriculture Organization remains unmatched by a comparable United Nations energy agency and cannot make energy policies part of an already overburdened bureaucracy.

Four aspects of the food/energy challenge merit attention from the G8. The first is the role of energy in agriculture and a sustainable level of hydrocarbons used to produce, process, store and transport food. The second is whether using plant biomass as a source of fuel is truly renewable or whether it will displace the crop production needed to feed a growing world while contributing to even greater greenhouse gas emissions. The third is the heavy emphasis on energy inputs to agriculture, which have substantially boosted yields since the 1960s and may have created the illusion that humanity has outrun the Malthusian spectre, discouraging investment in agricultural research and technology when it is most urgently needed. The fourth is how agriculture and energy will come together in response to global climate change.

Food and energy have never been strangers: food is energy, expressed in calories or joules. But more than a billion people worldwide consume less than the recommended intake – some much less.

Food not only gives humans energy; it takes energy to produce. While much of this energy is solar, plants are relatively inefficient converters of the sun's energy. To boost yields, modern agriculture has borrowed from accumulated energy stores in oil and other hydrocarbons to supplement soil nutrients and to plant and harvest using large machinery. Harvested grain is dried using natural gas, processed using energy-intensive methods, packaged, transported, refrigerated and cooked before being eaten. Energy related to food production and consumption represents about 10 per cent of the total energy consumption in the United States.

Are plants a good source of energy for fuel? If they require substantial amounts of energy to produce, how do they compare to the joules accumulated over millions of years in coal and oil, or the solar energy collected at much higher efficiencies by photovoltaic cells? Recent research concludes that the energy in biofuels is about two thirds that of gasoline and that the land area needed to substitute biofuels for petroleum fuels is vast. In the US, even a 10 per cent substitution of plant-based fuels for gasoline is estimated to require 43 per cent of cropland, whether the biofuels are produced from corn or switchgrass.

The amount of substitution needed to improve greenhouse gas emissions is also questionable, since to meet global food demands, land elsewhere will be needed. Additional land clearing will emit carbon dioxide, making biofuels greenhouse-gas negative. And if intensive fertilisation of crops for food or fuel results, according to Paul Crutzen, the Nobel Prize-winning chemist, the resulting nitrogen oxide emissions will contribute at a level 296 times more harmful than carbon dioxide.

With high energy-input agriculture, it appeared that the world was winning the fight against hunger. Complacency set in, and government funding for agricultural research flagged. Despite marked expansion of agricultural subsidies among members of the Organisation for Economic Co-operation and Development, spending for agricultural assistance and research has fallen. In real 2008 dollars, US investment in agricultural development abroad fell

“

Energy related to food production represents 10 per cent of the total energy consumption in the United States

”



Gathering palm
fruits, Sepang
outside Kuala
Lumpur



Additional land clearing will emit carbon dioxide, making biofuels greenhouse gas negative

from \$400 million a year in the 1980s to \$60 million in 2006. In rich countries, public investment in research shrank by 0.5 per cent annually between 1991 and 2000, compared with annual increases of 2.3 per cent in the 1980s. Total global official aid to developing countries for agricultural research fell by 64 per cent between 1980 and 2003. This decline was most marked in poor countries, especially in Africa. Increasingly, research is led by the private sector in the richest countries and by increases in public investment in India and China. This research pays high rates of return per dollar invested – estimated at between 25 per cent and 100 per cent – but can take a quarter of a century to pay off, suggesting the need for a rapid acceleration now if the spectre of hunger is to be kept at bay.

Finally, how will agriculture and energy be related at the upcoming climate talks in Copenhagen in December 2009? Much attention has been given to agriculture's putative claim on carbon credits. But if agriculture rests on high and intensive energy inputs, or drives the expanding cultivation of previously uncultivated areas because of the pressure of biofuels, then produces plant-based fuels with less energy content and more land disturbance than do coal or oil, it is hard to imagine

“Agriculture and energy are part of the same natural and social system, affecting and affected by energy demands for food”

how or why credits are due. By contrast, if agriculture is to substitute genomic innovations for energy and land and reduce agriculture's carbon output, it may move in tandem with energy conservation in the rest of the global economy.

Agriculture and energy are part of the same natural and social system, affecting and affected by energy demands for food, biomass use for fuel and decisions to invest in improved productivity – and linked to climate change. All are thus critical issues for G8 leaders, and will remain so for years to come. ♦

Sustainability - Henkel's competitive edge



For more than 130 years, Henkel has worked toward achieving sustainable development. Sustainability and corporate social responsibility are part of the company's core DNA. Through its brands and technologies, and as an employer, Henkel works hard to meet the needs of people today without compromising the development opportunities of future generations. Christian-André Weinberger, Corporate Senior Vice President, Global Chief Marketing Officer and Chief Sustainability Officer of Henkel's Laundry & Home Care Business talks sustainability:

Mr Weinberger, there is much talk these days about sustainability – what's your point of view?

The current global economic situation makes having a competitive edge all the more important. Henkel considers sustainability to be part of its core DNA and this is paying off in today's market. Our mission is to gain an advantage by combining top product performance and sustainability with innovation. Everyone understands that a new product must show that it not only offers consumers outstanding quality, but that it is also sustainable. To Henkel, this means 'performance based on sustainability', offering consumers superior value through better solutions.

What role does the consumer play?

The role of business and the role of consumers are intrinsically linked in terms of the sustainable use of products. Consumers choose to buy a product for a combination of reasons. One is, and will remain, excellent performance at a good price. In the future, delivering performance that is both based on sustainability and recognised as added value will become increasingly important for consumer choices.

How is sustainability implemented at Henkel?

We systematically focus our activities throughout the value chain on the challenges of sustainable development according to five focal areas: energy and climate, water and wastewater, materials and waste, health and safety, and social progress. Every new product must contribute to sustainable development in at least one focal area. That means during the development process every product has to pass through the so called 'Henkel InnoGate' – a product life cycle database which secures that every new product is at least better in one focal area. This development offers great potential as a driver for innovative and trusted brands. Recent launches include low temperature enzymes on Persil Gold Cold Wash, Purex Natural Elements or our new Purex Complete 3-in-1 sheets.

Even in these tougher financial times, are consumers still keen to be green and socially responsible?

New and positive brand launches are extremely important, especially in a crisis. It's a distinguishing characteristic that when everybody is scared and nervous, Henkel stands its ground. In times of crisis, consumers concentrate more on brand quality and value through innovation. Values like trust, performance, longevity and sustainability become more important. When brands guarantee these values, consumers are willing to continuously buy these trusted brands. It's the long-term perspective that counts. With our claim 'Quality & Responsibility' on all laundry and home care products, we make clear that our brands fulfill this demand.

www.henkel.com





The war on want

In order to eradicate global poverty, the G8 needs to deliver on its promises

By Kamalesh Sharma,
Commonwealth secretary general

In a world richer than ever before, the sheer scale of absolute poverty is an abomination. Despite the progress that has been made in 25 years, the numbers remain appallingly large: there are nearly twice as many poor people as there are citizens of the G8 countries combined; 2009 will see a number equivalent to the population of France added to them; 2008 saw as many people made newly hungry as currently live in Canada and Italy combined.

We live in extremely hard times. This year, 2009, will see the first contraction in global gross domestic product (GDP) since 1945; 30 million more people will have become unemployed, of whom 23 million are in the developing world. Trade, aid and remittance flows are down. The Commonwealth is disproportionately affected by this global crisis. Its



share of global GDP is set to decline from 14 per cent last year to 10.5 per cent this year.

To eliminate poverty and to meet the other Millennium Development Goals (MDGs) is to release human potential, and to fulfil the promise of the Universal Declaration of Human Rights. Addressing what the United Nations secretary general last year called the “development emergency” thus remains the enduring task of the international community. For many of the citizens of the Commonwealth – home to more than half of the world’s poor – it is a matter of life and death. There can be no more important issue for any gathering of international leaders.

So, what can those Commonwealth citizens hope for from the G8 L’Aquila Summit?

They know well that no summit, and no single grouping, can solve global poverty and meet the MDGs

Children in Nairobi’s Kibera slum

alone. The world has learned that sustainable growth and poverty reduction require effective partnerships: nationally, between peoples and governments; and internationally, between developing countries and rich partner countries. Within the Commonwealth, these objectives are central to our work. We promote democracy and accountability at all levels within member countries, recognising that there is an inextricable link between this and development. Among the members – which range from the smallest to the largest countries in the world – we maintain a commitment to consensus and co-operation.

This year has also shown that increased and wider global co-operation is needed to meet global challenges.

“ The world has learned that sustainable growth and poverty reduction require effective partnerships ”

The G8 alone certainly cannot create economic stability. But, by virtue of its longevity and its common values, it has a role in fostering greater international co-operation. And in their quest for poverty reduction – as providers of nearly two thirds of all overseas aid – the members of the G8 matter.

The G8 should therefore look to address the immediate effects of the economic crisis and to set the course for tackling other, longer-term, global challenges. In the short term, the poorest people and countries need one thing: delivery on promises.

They need access to trade, with the largest countries honouring promises to expand trade finance, to avoid protectionism in the face of domestic pressure and to support the poorest through the provision of aid for trade. Meanwhile, some might argue that it is too soon to look for a conclusion to the Doha round of trade negotiations that put development at the heart of trade. Yet the opposite is true.

The economic crisis has given new strength to multilateralism. Now is the moment for capturing that momentum and applying it to trade negotiations. It is only through a rules-based and equitable system, applied to all – coupled with the opening of hitherto locked sectors in affluent markets – that the potential for trade to reduce poverty can be realised.

Poorer countries also need delivery on promises of access to grants and low-cost financing and, especially, of financial support to key social sectors. The current economic crisis has strengthened the case for increasing this for the poorest countries. Before it began, the 2005 Gleneagles Summit targets for aid volumes from the G8 were already at risk of not being met. With needs increasing, and the credibility of the G8 as a group at



stake, now is also the time to make the effort needed to meet these pledges.

This economic crisis is only the latest – and not unique – global challenge for developing countries. The other great challenges facing the world – those, for instance, of climate change, sustainable development, energy scarcity and food supply – have their greatest impact on the poorest. These are existential issues for some Commonwealth members. International co-operation and practical solidarity are essential in responding to them, for sustainable outcomes. The G8 must look through the economic crisis, and point the way to meeting these other needs with determination as well.

“ Climate change, sustainable development, energy scarcity and food supply have their greatest impact on the poorest ”

What role can the G8 play? First, the G8 should reassert its basic commitment to do everything necessary, not just to resolve the economic crisis, but also to work for, and finance, these other needs. The G8 cannot achieve this alone. But it can signal a new intent to tackle these deep-seated problems in sustained partnership with others.

Second, it must restate that global solutions require comprehensive global engagement, which, in turn, requires effective co-operation, especially through more representative and more effective international institutions. The G8 leaders should heed the call of the Commonwealth heads of government, who have emphasised the need for a stronger voice in these institutions for the poorest and most vulnerable countries, whose concerns must be heard in all international councils. Global democracy is no less a goal than national democracy.

The LAquila Summit – like all summits – takes place at a moment when the developed countries are ever more conscious of the developing and the undeveloped ones. And this summit – like all summits – cannot solve all of their challenges in two days.

But it can signal that the entire global community needs sustained stimulus. And it can be a milestone on the path toward our shared goal: a global approach to realising a world free of want and hunger, a world of real and expanding choices – and human solidarity. ♦

Using microfinance to reach the Millennium Development Goals

Lower income earners or marginalised people constitute the majority of the population in most developing countries, particularly Sub-Saharan Africa. Regrettably an overwhelming number still lack access to basic financial services. In many countries microfinance is seen as a risky sector, and primarily a development concern for donors, governments, and socially-responsible investors. Conversely, if we are to unleash the full potential of microfinance in reaching a large number of the poor, this emerging powerful phenomenon should become an integral part of the financial sector and mainstream economic activities.

Microfinance, unlike microcredit which involves the provision of only loans, includes an array of other financial services besides loans, such as savings, money transfers, insurance, housing finance and micro-pensions.

Microfinance and its impact, go beyond the provision of business loans. The marginalised section of the society use financial services not only for investment in their micro enterprises but also to invest in health and education of their families; to manage household emergencies; and to meet the wide variety of other domestic needs. There is empirical evidence that millions of microfinance clients around the globe that access financial services, particularly those in the rural areas, increase their household incomes, build their asset base, and reduce their vulnerability.

Access to financial services also translates into better nutrition and improved health. It encourages and allows poor people to plan for their future and more importantly send their children to school. Microfinance has made female clients more confident and assertive, thereby improving their position to confront gender inequities. Access to convenient, affordable and flexible financial services empowers and equips the lower income earners to make their own choices and build their way out of poverty with great dignity.



Microfinance is definitely unique among many development interventions, in that it delivers social benefits on an ongoing, permanent basis, and on a large scale. Properly run and managed microfinance institutions worldwide have demonstrated that they can provide financial services in a sustainable manner and free from donor funding. It therefore offers the potential for a self-propelling cycle of sustainability and massive growth, while providing a powerful impact on people's lives.

It is a sad truth though that poor people in most of Sub-Saharan Africa have virtually no access to formal financial services. Their only informal alternatives, such as family loans, savings clubs, and moneylenders are usually limited by amount, rigidly administered, or available at quite exorbitant interest rates. It is a great challenge therefore to ensure that a number of microfinance institutions that give attention to the vulnerable groups, such as FINCORP, are established in order to provide the much needed access to financial services for the neglected majority.



www.fincorp.co.sz





Qatar Foundation: Creating a Critical Culture

Ceremonial Court, Education City

President of Qatar Foundation Dr. Mohamad Fathy Saoud has participated in the planning and development of Qatar Foundation from word-go. He spoke to Brian Scudder about building an institutional philosophy that moves beyond the technical or academic: to a model that embraces civil society, human capacity-building and democratization.

Brian Scudder What has Qatar Foundation's fundamental role been since 1995?

Dr. Fathy In short, to lead some of the most important human capacity-building programmes in this country. And they are education and research.

BS When we are talking about human capacity-building, are we specifically talking about Qatari citizens?

Dr. F Our mission goes beyond that. Because although Qatari citizens are at the heart of everything we do, the regional context has always been a part of it. We want to establish Qatar as a hub of excellence for education and research in the Middle East. And through these two things, help with the development of civil society in this region.

One of the problems is that throughout the

Middle East, the government is the only place where development takes place – and many governments like it that way. They want to monopolize everything.

This is not a case in Qatar, where the Emir, the founder of Qatar Foundation, has consistently provided both the citizens of this country and its residents with options. Why should there only be one public school system? There should be other schools, and these schools should compete. It is survival of the fittest.

When we talk about Education City as a 'multiversity' campus of universities, our aspiration is to give other institutions in Qatar – as well as in the region – an example of how you can do things without compromise. We have never thought of Education City as an island. We want Education City to reach out to the

Founded in 1995 by decree of His Highness Sheikh Hamad Bin Khalifa Al Thani, Emir of Qatar, Qatar Foundation is a non-profit organization focusing on education, scientific research and community development. Under Qatar Foundation's umbrella are Education City which comprises elite universities, several academic and training programmes and Qatar Science and Technology Park which boasts more than 21 world class companies involved in scientific research and development.

Chaired by Her Highness Sheikha Mozah bint Nasser Al Missned, Qatar Foundation also aims to enhance lives through community development initiatives including Doha Debates, Reach Out To Asia and Al Jazeera Childrens Channel.

Joint venture partnerships in the areas of design, ICT, telecommunications, policy studies and event management contribute to fulfilling the objectives of the Qatar Foundation.



community – and we want the community to feel they own Qatar Foundation.

BS And this is beyond race, creed, religion and sex...

Dr. F Other countries in the region focus on their citizens and with education, for example, they might be prepared to offer educational opportunities – but not in the most important areas like medicine. Here, admission is on merit alone. The second thing is that admission is means-blind. A meritorious student cannot be denied admission because he or she cannot pay. We have a financial aid programme and we have scholarship programme to support them.

BS Is there a geographic radius where that stops?

Qatar Science and Technology Park, Education City



Dr. F No. Right now we have 70 nationalities of students in Education City and there is no restriction on faith, colour, race, nationality or sex. Nothing. We are showing to the rest of the world that a hugely diverse range of students can live together happily because they are a part of the education and research community. I always say that when you belong to a university, you believe that you belong to the community of universities around the world.

BS You went to London School of Tropical Medicine at one point. There was certainly that sense of a wider community there...

Dr. F Exactly. And when I was at the London School of Tropical Medicine, 75% of the students were coming from outside of the United Kingdom and 75% of graduates were overseas students. These people were contributing a huge amount to the research capacity of UK. We want that to happen here.

We are also hoping to create a culture where it is the responsibility of the alumni of our universities to contribute back after they have graduated. This has never been the case in this region.

And if you look at the student societies in Education City, you see many of them are trying to find the money and resources to support a particular programme. It is philanthropy. This is precisely the kind of culture-change that we want to establish.

And it's not only that. When every month you have students discussing really hot issues at the Doha Debates – issues that are normally only ever discussed behind closed doors in this region – you show them that their opinion matters. They vote, you see. Then you ask Qatari students to interview the leaders of this country on a television programme called 'The Decision Is Yours' – and they expect the minister or CEO to have a good answer. So in a way, you are supporting the democratic process. The democratization of the country.

BS Have you received any resistance against these concepts?

Dr. F I'll give you one example: co-education. When this was introduced here many people thought it would never be accepted. But every one of us is trying to understand his or her culture and heritage. And when Bedouin lived in the desert, they lived together, men and women. You go to the mosque, to Mecca, to Masjid Al Haram and the Kaaba, men and women are there, moving together.

I don't want to say it, but it was a surprise even to me. I've lived in this country for 30 years and I understand its traditional legacy. But the people have taken it gracefully and are beginning to see the benefits. Our students behave very well because each of them wants to show that they are respectable, diligent and a part of this broader community.

BS Is there anything like Qatar Foundation anywhere else in the world?

Dr. F There are smaller tie-ups, but we are the pioneers. At the beginning, our neighbours told us that we are not going to make it. They said "these partners will never go to Qatar to offer the same quality of programme they have on their main campuses". But that was my job. To create a legally binding agreement giving them full institutional autonomy but on the proviso that they provide the same degrees – identical in all material aspects to the degrees of the main campuses in the United States. Even to the extent that nowhere does it mention that 'this degree is from the campus in Qatar'.

BS Let's talk about Qatar Foundation's corporate-level approach. The GEs, the Rolls Royces and the Vodaphones. What is the approach there?

Dr. F We have a great advantage over some of the science and technology parks which may be created around us because there is such a close alignment between Qatar Science & Technology Park (QSTP) and our branch universities. At QSTP, we take basic research and develop it into applied research. From there we move into what we call research and development. And from there into what we call commercialized

research. It is the full cycle. And what is commercialized research? It is about more economic development. About more job opportunities. And it is closely tied with community development.

I don't want to name them, but some countries around us have a huge number of graduates, none of which are employed. We don't want this to happen here.

BS And in relation to the companies themselves?

Dr. F Many countries in this region outsource their research development to companies in the West. Here, if Qatar Petroleum has a problem, it is our job to make sure that QSTP is the best option to find the solution.

BS Alongside a Shell or an Exxon, for example?

Dr. F Exactly. Oil and gas are the main natural resources of this country. It is easy to sell a commodity, but it adds much more value if part of that commodity is transferred to something else which in the longer term will bring more revenue. That is one of the most important things we are trying to achieve through QSTP and through the research programmes in the Education City campuses.

BS So research is aligned to business.

Dr. F It is very much aligned. And that is why all of our universities here are classified in the West as research universities. Because although many Arab and Muslim countries used to be generators of knowledge, over the last two or three centuries we have become consumers of knowledge.

Yes, we can go and buy a Mercedes car, but we cannot make the smallest part of that car in this region. What we are trying to do is generate knowledge that can add value to the economy and to the people of this country and the region.

"Education is not just through the class room. It is in the lab, through internship programmes, student exchange programmes. It is in everything we do."

Class in session, Georgetown University



Opportunity out of crisis

Helping enterprises deal with the effects of economic crisis is a priority for the International Finance Corporation

By Lars H Thunell, executive vice-president and CEO, International Finance Corporation

These are extraordinary times, and they most affect the poor. But as challenging as today's times are economically, they also present many opportunities for the International Finance Corporation (IFC) to increase its impact. Private capital flows into emerging markets have shrunk dramatically. Global trade flows are faltering. Even sound businesses struggle to secure financing. Problems that started in the United States and Europe

are spreading to developing markets, threatening to set back decades of progress in tackling poverty.

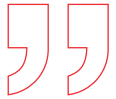
This unprecedented combination creates new needs for financing and advisory services from IFC, the largest multilateral financial institution investing in the private sector in emerging markets. Using a focused, partnership-based approach, IFC brings together a broad but targeted set of multi-faceted initiatives to help enterprises cope with the global crisis. It works closely alongside its World Bank colleagues and other



IFC has co-financed the expansion of the Panama Canal



IFC's new Infrastructure Crisis Facility supports viable private sector or PPP projects that face financial distress



partners to mobilise new resources for private sector development. IFC is supporting its clients at a critical time, helping banks and companies remain liquid so that jobs are preserved. IFC financing helps ensure that important infrastructure projects can continue as planned, that the private sector's climate change and sustainability agenda keeps moving forward in emerging markets and that many other essential needs are met. This year alone IFC has helped launch new microfinance institutions in Africa, co-financed the expansion of the Panama Canal and extended wind power to several new markets. It has also helped local banks improve their housing finance business, increasing private home ownership in the West Bank and Gaza, Azerbaijan and many other locations.

In this way IFC creates opportunities for people to escape poverty and improve lives, even amid the worst financial crisis in 80 years.

IFC is leading several new partnership-based efforts that target resources toward the most vulnerable, providing critical assistance to many businesses and entrepreneurs and reducing the impact of the crisis on the poor. IFC has invited other donors, including governments and international financial institutions, to join it in contributing financing and expertise, beginning with providing liquidity support in key areas.

The global crisis has caused many vital commercial trade finance lines to be cut, creating a need for new funding in previously well-financed sectors. As a result IFC has expanded its Global Trade Finance Program from \$1 billion to \$3 billion, guaranteeing risks that commercial banks will not take – especially for smaller companies in the poorest countries – and enabling support for an additional \$18 billion in trade.

IFC's new Global Trade Liquidity Program will also work on a larger scale, teaming up with Standard Chartered Bank, Standard Bank of South Africa, other major international banks and development partners to support \$50 billion of trade throughout the financial crisis. The programme has received commitments of \$1 billion from IFC. Other governments, including the UK, Canada and the Netherlands, have pledged support. Standard Chartered Bank and South Africa's Standard Bank are the first banks to participate.

The crisis also threatens many upcoming infrastructure projects that could play an important development role. IFC's new Infrastructure Crisis Facility supports viable private sector or public-private partnership (PPP) projects that face financial distress because of the crisis. Up to \$10 billion in debt and equity components will provide short- to medium-term financing and advisory services to help governments design or redesign PPPs. IFC is investing up to \$300 million or its equivalent in the facility's equity fund. The governments of France and Germany signed memoranda of understanding totalling more than \$2 billion on 25 April 2009. Other countries have expressed interest in contributing to the facility.

Commercial microfinance as a whole continues to perform well. But the private capital it had started attracting in recent years is now virtually unavailable.

This is why IFC and German development bank KfW have created the Microfinance Enhancement Facility with initial funding of \$500 million. More than 100 microfinance institutions will receive necessary refinancing. The initial focus will be on large players with extensive reach. The initiative will support 60 million low-income borrowers in the world's poorest countries.

Another group of initiatives works toward the goal of helping emerging markets rebuild their financial infrastructure by, for example, investing in leading local banks. As losses mount among private banks, local financial sectors will need strengthening. But developing countries lack the resources to take the same approach as the United States and several European countries. Even in countries receiving support from the International Monetary Fund (IMF), local banks often prefer to receive new private capital in order to stay independent.

The IFC Recapitalization Fund provides additional capital for major banks in developing countries so that they can keep lending and supporting economic recovery and job creation through the crisis. IFC investment totals \$1 billion. It attracted another \$2 billion from the Japanese government, and other investors may join as well. The fund's first investment is one of \$20 million in Paraguay's Banco Continental, helping strengthen one of that country's leading financial institutions and ensuring continued lending to small and medium enterprises.

IFC's advisory services are important for private sector growth, improving the business-enabling environment and reinforcing public policy reform. IFC has a strong advisory capacity and unique expertise that could serve clients well during the crisis. It complements the work of the IMF and the World Bank, which play a lead role in providing policy advice.

IFC is refocusing existing advisory programmes to make them better geared to helping clients in the crisis. It is scaling up specific programmes to respond to growing client needs. IFC is also designing new crisis response programmes in risk management and non-performing loan management. It is raising between \$40 million and \$60 million from donors to supplement its own resources to be used in advisory work at the firm and bank levels (such as risk management and corporate governance) and also at the policy level (for example, insolvency frameworks).

It is clear that IFC can achieve more working in partnership than it can do alone. It is thus collaborating with the World Bank, the regional development banks and others in co-ordinated rapid response initiatives for Central and Eastern Europe, Africa, Latin America and the Caribbean, drawing from a rich knowledge base that will lead to increased lending and investments.

All these efforts carry a strong commitment to addressing climate change and social and environmental sustainability. This commitment is central to everything IFC does. It remains unshaken – no matter how challenging the times. ♦



Asia's paradox

Asia has been hit hard by the current financial crisis, and the threats to poverty reduction programmes, growth and competition are real

By Haruhiko Kuroda, president, Asian Development Bank

Investing in Asia's development has been very rewarding. Since the founding of the Asian Development Bank (ADB) 40 years ago, the world has seen East Asian tiger economies rapidly industrialise their economies through the benefits of outward-oriented policies and macroeconomic stability. They were followed by the Southeast Asian nations. Now the world is witnessing the rise of the world's two most populous countries, India and China, join the ranks of the world's ten largest economies. Along the way, millions of people have risen out of poverty, become economically productive citizens and come to share in society's growing wellbeing. Having recovered from the Asian financial crisis of 1997-98, the region's developing countries enjoyed unprecedented economic growth in the last decade, which led to poverty reduction at rates unknown in the past.

Despite these great achievements, Asia remains predominantly poor. Asia and the Pacific are home to nearly 903 million people living on less than \$1.25 a day and a further 900 million highly vulnerable to poverty and living on between \$1.25 and \$2 per day. With an estimated 400 million people lacking basic sanitation in cities, 566 million rural residents without access to clean water and 4 million children dying each year before reaching the age of five, the development of Asia and the Pacific is central to achieving the Millennium Development Goals. As the current crisis unravels, slashing developing Asia's growth from the peak of 9.5 per cent in 2007 to 3.4 per cent in 2009, the impact on the most vulnerable concerns ADB the most. It is determined to do all it can to prevent a reversal of their hard-won social and economic gains.

The causes and effects of the global economic crisis must be examined carefully before any definitive conclusion can be drawn. But many economists already point to global imbalances as the key underlying cause. Some suggest that lax monetary policy and loss of fiscal discipline coupled with inadequate prudential regulations led to serious imbalances in the United States, contributing to lower savings and an extension of credit to high-risk borrowers. Others consider excess savings and under-investment in emerging markets, particularly developing Asia, as a major cause for the low global interest rates that allowed major industrialised economies to maintain high current account deficits. The phenomenon of high savings and



low investment in developing Asia remains paradoxical, given Asia's vast investment needs with attendant high economic returns. Solving this paradox must be part of the equation for developing Asia to restore its robust economic growth and return to a path that is both sustainable and inclusive for poverty reduction.

In response to the crisis, many countries, including those of developing Asia, have announced fiscal stimulus packages to augment faltering demand. Infrastructure development is one area that will do much, not only to supplement demand in the short term, but also to help in the longer term to alleviate the region's under-investment. Many fiscal stimulus

“

Unless Asia's infrastructure network can be improved, it will continue to be a bottleneck to growth

”



“

India and China join the ranks of the world's ten largest economies

”



packages already include programmes for infrastructure – which is also an area of ADB's comparative strength, knowledge and experience. Asia's investment in infrastructure has not kept pace with its rate of economic growth and development. Increased commercial activities have put enormous pressure on Asia's infrastructure, particularly transport and energy, but also communications. Asia's population, forecast to increase by 15 per cent by 2020 – from 3.6 billion to 4.2 billion – will further strain the existing infrastructure.

While in some areas the region's infrastructure is world class, much remains below average. Even today, only three out of ten Asians have access to a

telephone. Little more than half of the region's roads are paved. Unless Asia's infrastructure network can be improved, it will continue to be a bottleneck to growth, a threat to competitiveness and an obstacle to poverty reduction. Vast parts of Asia – inland and remote areas, landlocked countries, distant islands – are isolated economically as well as geographically, impeding access to commercial activities and basic social services and limiting opportunities to rise out of hardship and poverty.

The Asian Development Bank Institute estimates that Asia's overall national infrastructure investment needs between 2010 and 2020 will be almost \$8 trillion – 68 per cent for new investment and 32 per cent for maintaining existing infrastructure – with average investment needs of \$726 billion per year. Investment in electricity and roads will account for 51 per cent and 29 per cent of the total, respectively. The top ten developing Asian countries in infrastructure investment needs, in descending order, are China, India, Indonesia, Pakistan, Thailand, Malaysia, Vietnam, Bangladesh, Philippines and Kazakhstan.

Can Asia channel a portion of its excess savings to infrastructure investments? Clearly, this will benefit the region greatly and may aid in evening out global imbalances. But ADB sees numerous challenges ahead. For one, in economic terms, the asymmetric distribution of the costs and benefits of the region's infrastructure projects must be re-examined and better managed. The socioeconomic impacts of road traffic accidents, human trafficking, displacement of people from their lands and the impact to the environment must be carefully handled. Most importantly, without proper financing, Asia's vast infrastructure needs will go unmet. A stream of both sound and bankable projects must be developed. The region also needs a more advanced financial system to direct regional savings toward productive investments. Strengthening national and regional bond markets, notably through regional co-operation such as the Asian Bond Market Initiative, will help increase financial intermediation, particularly for the long-term funds required for infrastructure development.

ADB is working with its developing country members to overcome these challenges. Together with its clients, it is developing a strong pipeline of infrastructure projects, front-loading financing, utilising guarantee instruments to cover risks not manageable by the private sector, providing technical assistance to create viable public-private partnerships and supporting the region's bond market development.

The path toward a more sustainable global economy will involve emerging markets, in developing Asia in particular. Solving their problems will benefit not only them, but also the world at large. In this time of global crisis, everyone is coming together in search of a new paradigm. To find it, we need to take into account the diverse views of the world, including those of emerging economies and low-income countries. As we find our new path, I firmly believe we will realise that investing in Asia's development will continue to be exceptionally rewarding. ♦

Rediscovering the Americas

The downturn in the world economy need not be a crisis for firms in the Americas with liquidity and tenacity



Cargo ships off the coast of Rio

By Alicia Bárcena, executive secretary, United Nations Economic Commission for Latin America and the Caribbean

Despite the global economic and financial crisis and decreasing global flows of foreign direct investment (FDI), Latin America and the Caribbean received a record of approximately \$120 billion of FDI in 2008. This figure marks the peak in a wave of investment that began in 2004, fuelled by macroeconomic stability and growth in the region, increased global demand for natural resources and sustained investment in export-oriented manufacturing. In the late 1990s, when the previous record was set, privatisations and takeovers by foreign firms accounted for a large share of FDI. The more recent wave reflects a different mix of mergers and acquisitions and greenfield investments. This took place in parallel to a strengthening of local groups, evident in rising outward FDI volumes as Latin American and Caribbean companies expanded to regional and global markets.

The negative effects of the global crisis on FDI flows to the region have been stronger and more immediate in Mexico and the Caribbean basin, where a large share of foreign investment goes into export-oriented manufacturing for the United States. Flows here decreased by more than 20 per cent in 2008, in contrast to the rise of approximately 10 per cent in South America. The crisis hit investments in South America with a lag due to ongoing projects and to good economic performance. The first signs of a fall appeared in the first quarter of 2009. The speed and extent to which FDI flows to the region will recover will depend on the dynamics of the global economy and on how the major transnational corporations (TNCs) emerge from the crisis. Several of the large investors in the region have been profoundly hit. But where there is crisis, there is opportunity for firms with liquidity and competitive strengths.

The main challenge for Latin America and the Caribbean regarding FDI is, nonetheless, not in the



A bridge devastated by natural disaster, Venezuela

quantity of investment but rather in ensuring that investment effectively contributes to development. As the region's experience in the past two decades has shown, the benefits of FDI are not automatic. If the policy focus in the 1990s was on attracting investment, now it is in the more complex task of developing local capacities, building linkages between local firms and TNCs, and ensuring efficient regulation. Effective government action is a necessary but insufficient factor here. The private sector plays a crucial role as the main channel between regional capacities and global production systems and markets. Companies stand to gain from independent and critical evaluation of the opportunities of investment and public-private partnerships in each of the region's countries, and from factoring into choosing their location the advances in macroeconomic management and political stability that different countries in the region have made.

There is a crucial role for the private sector in investment in infrastructure, particularly to manage the impacts of the global climate crisis. Investment in infrastructure is one of the most important issues for the development of countries in Latin America and the Caribbean in the medium and long terms. Its absence is one of the main causes of underdevelopment and contributes to poverty, marginalisation and environmental degradation, when it is built up without considering the ecology, particularly in fragile territories.

Climate change – defined as significant changes in long-term mean trends in rain and temperature – and increased climate variability – especially the growing virulence of more frequent extreme events – touch infrastructure with dramatic consequences. Small countries in the Caribbean basin and the Americas have recently suffered serious damages to harbours, roads, bridges, irrigation systems, flood control systems, railroads and airports. This has meant millions of dollars lost, in many cases money invested with great effort on the part of countries.

The repair of infrastructure and new investment must take into consideration such climate change conditions. This means more financial resources, technical improvements and policy regulation. The last aspect is not rhetorical: in many countries of

the region, infrastructure development has been successfully undertaken by private firms following the patterns established by governments. New challenges coming from global warming must also be included in concessions of infrastructure development to the private sector, as a way to ensure that adaptation requirements are met.

Moreover, in many instances the only long-term option will be infrastructure relocation, following the climate-related relocation of the production activities it supports. That is particularly the case in agriculture. Long-term changes in average weather can modify the conditions that make agriculture possible, favouring it in some places and disfavouring it in others. The relocation of agricultural systems induced by such changes will require investment to support infrastructure development along the entire agri-food chain, including irrigation systems and storage, transportation and food processing facilities. Similar situations can be expected in other activities such as hydro energy, because of climate-induced spatial changes in water distribution.

Another aspect of infrastructure development associated with the fight against the negative consequences of climate change is the need to reduce carbon emissions. This is valid even for Latin American and Caribbean countries, despite the fact that they are not the main actors responsible for global carbon emissions. Eco-efficiency in the use of materials, energy efficiency, low-carbon processes, use of alternative sources of energy and many other means, available to all countries, can have investment in infrastructure that contributes to climate

“ Latin American and Caribbean countries are not the main actors responsible for global carbon emissions ”

protection. It can also contribute to energy security by lowering the dependence on fossil sources and can create more sustainable development that improves the quality of life of the citizens in the region.

A constant message from ECLAC has been that countries should focus on the quality rather than the quantity of FDI, on the building of linkages and the strengthening of local capabilities. ECLAC has thus promoted the public-private link to the benefit of economic, social and environmental goals, by providing first-hand knowledge and analysis of regional reality and trends. G8 countries have historically accounted for the lion's share of FDI flows to the region. Action by the G8 is fundamental for recovering growth and for ensuring that knowledge, trade and investment flows are enhanced, and not hampered, in a time of crisis. ♦

UNION BANK OF NIGERIA

PROMOTING GLOBAL VISION



Barth Ebong
GMD/CE
Union Bank of Nigeria

Union Bank and Its Vision

Union Bank of Nigeria PLC's vision is national, regional, continental and global in outlook. From all perspectives, the Bank's vision is simply to be **the best of the banks to bank on**. In furtherance of this, our mission is to become the foremost financial institution with the most satisfied customers.

Today, the Bank has a full-fledged subsidiary in London (UK) and a representative office in South Africa. In the West African sub-region, we have high stakes in HFC Bank (Ghana) Limited and Banque Internationale du Benin (BIBE). These subsidiaries add to our network of correspondent banks which facilitate our global operations. The latest being our partnership with Black Rock/Merrill Lynch in the management of the highest allocation of Nigeria's external reserves.

Post Consolidation

Poised to keep ahead of the post-consolidation challenges in readiness for the Financial System Strategy (FSS 2020), Union Bank has launched Project **GEAR**, a business transformation initiative that aims to **Grow** the bank from **Good** to **Great**; **Eclipse** the competition; **Align** the bank's strategy, people, processes and technology; and **Redefine** the Bank's position as a leader in the Nigerian banking industry.

Prior to the consolidation programme of the Nigerian banking industry, Union Bank had proactively positioned itself and came out of the exercise stronger, bigger and better. The Bank as at today, has shareholders' fund in excess of N125 billion as well as assets and deposits bases among the highest in the country. As at March 31st 2008, the Bank had an assets base of N907.07 billion and deposit of N649.33 billion.

Integration

The Bank has concluded its business processes by upgrading its banking software, flexcube. The Business Process Redesign (BPR)

project led to the establishment of efficient processes in accordance with best practices that was aligned with the new version of flexcube. The essence is to delight our customers world wide with unmatched service, with a view to running all operations on cutting edge technology.

The Union Bank and its Subsidiaries

Union Bank's subsidiaries specialize in mortgage, insurance, trusteeship, stockbroking, property development and share registration. The uniqueness of these approaches is that they have emerged market leaders in their various sub-sectors and are contributing substantially to the Group's earnings as 'one shop financial institution' in Nigeria.

These most formidable subsidiaries and associate companies in the Nigerian financial market are: Union Homes Savings and Loans PLC, Consolidated Discount Limited, Union Assurance Company Limited, Union Trustees Limited, UBN Property Company Limited, Union Registrars Limited, Union Capital Markets Limited, Saffer-Union (West Africa) Limited, Unique Venture Capital Management Company Limited, Union Express Limited, Banque Internationale du Benin (BIBE), HFC Bank (Ghana) Limited and Union Bank (UK) Plc.

Economic Growth/Awards

For over 90 years, the Bank has been in the vanguard of Nigerian economic development and growth and have won many laurels. For instance, it has won the Nigerian Stock Exchange President's Merit Award twelve times, which is more than any other bank in the country. Four out of the last six years, i.e. 2000, 2001, 2002 and 2004, it was named **The Bank of the Year** for Nigeria by **The Banker** magazine, a sister publication of the influential **Times of London**. Also, the magazine ranked the Bank among the best banks in the world. It won 2006 **Euromoney** Award as **The Best Bank in Nigeria**.

Apart from excellence as the best bank in Nigeria, it has also won Central Bank of Nigeria (CBN) **Best Agric Support Bank** award since its inception in 1993; CBN **Best State Farmer of the Year** award. Recently, the Bank was also rated by Fitch Global Ratings, a foremost international rating agency, assigning it **National Long and Short-term Ratings of "A+(nga)" and "F1(nga)"** respectively as well as **Issuer Default Rating ("IDR") "B+"** with stable outlook.



HEAD OFFICE:

STALLION PLAZA, 36 MARINA,
P.M.B 2027 LAGOS, NIGERIA

Tel: 234-1-2630361, 2631430,
2644374, 2644255
Fax: 234-1-2669873, 2644306
e-mail: info@unionbankng.com

www.unionbankng.com





The hour of need

Africa's relative isolation from the global system has not protected it from the effects of the global crisis. It has only delayed it

By Donald Kaberuka,
president, African
Development Bank

A decade of painful economic reform in Africa was necessary to turn around negative per capita growth. It took another seven years of sustained discipline and effort to create the momentum for continued positive recovery. Now, however, in six short months, that momentum has been lost. In 2009, per capita income will be flat for most African countries. Others may even experience declining income for the first time in 15 years.

In 2009, the shareholders of the African Development Bank (AfDB) met in Dakar for its annual general meeting. They were buoyed by a shared sense of urgency to tackle the emerging risks.

A crisis of this nature and magnitude calls for balancing short- and medium-term responses. In countries with limited fiscal space, short-run crisis management will require budget adjustments to match resources by cutting spending in social and infrastructure sectors. Impacts are not only immediate,

because fiscal retrenchment generates long-term effects. Since the onset of the financial crisis, major infrastructure projects, necessary to support region-wide productivity enhancements, are being delayed or cancelled. Failing to fill the infrastructure financing gap will undermine Africa's position to catch up when global economic activity recovers.

To achieve the pre-crisis growth rates, African countries would need \$50 billion to finance the investment-saving gap. To achieve the 7 per cent growth rate that is required to achieve the Millennium Development Goals, the financing gap rises to \$117 billion.

African governments are struggling to raise the resources domestically required to mitigate both short- and long-term impacts. Governments are striving to minimise the impact of the crisis by enlarging domestic resource mobilisation. But contracting private sector activity is undermining the fiscal base. Countries are confronting deteriorating current accounts deficits. Declining export receipts accelerate the process.



While in developed economies the crisis translates into rising unemployment figures, many members of the Organisation for Economic Co-operation and Development have systems of effective social safety nets to lessen such effects. Very few low-income countries have means to do so in order to ensure continued access to basic life-sustaining goods and services. In post-conflict states, with weak civic cohesion and extremely weak fiscal bases, this exacerbates social tensions.

A phenomenon of great concern is the way in which previously well-managed economies are affected. While it is not surprising that in countries with pre-existing vulnerabilities the crisis is biting deeply, even countries that have traditionally filled their financing needs with accumulated reserves and private capital inflows are now seeking budget support. This is the case for Botswana, where the diamond market has severely contracted; it has requested support from the AfDB to fill a large gap. Other similar middle-income

Cotton harvest for export, Ivory Coast

African countries, such as Mauritius and Namibia, are probably equally affected.

The G20 has provided substantial additional resources and commitments through the International Monetary Fund (IMF). But these are essentially for short-term balance of payment support. Africa is still severely short of resources for development finance to fill the growing gaps and protect achievements. The G20 members agreed to a plan of recovery of unprecedented scale, making ambitious commitments to restore the flow of credit and stimulate the global economy. Stimulating global demand and avoiding deep recessions will assist African economies affected by lower demand for commodities and retrenchment of capital flows. Resources set aside for the IMF will assist poor countries needing short-term balance of payment support. Yet crisis-induced financing needs extend beyond balance-of-payment requirements. As the AfDB has heard clearly from its regional members, demand exists for the long-term funds required for



investment in development. This gap must be filled. The most effective way to do so is by strengthening the multilateral development banks. Doing so is especially critical for the vast majority of countries. Historically, development assistance has reinforced Africa's economic cycles, not offset them. Between 1975 and 2005, it has been pro-cyclical. It may be so again. The G20's call to multilateral institutions to play a countercyclical role at this time is the right one. And the multilateral institutions have begun to do so.

Insofar as the low-income countries are concerned, the AfDB has responded by frontloading its resources and putting new instruments in place. It has stepped in swiftly, to preserve the very foundations of growth, by combining short-term crisis responses with attention to long-term needs, such as filling the infrastructure gaps.

In recognition of Africa's extreme economic diversity, its approach has been to customise solutions to different country profiles. For low-income countries, the challenge is to accelerate resource transfers to

“ The bank continues to channel resources to its priority sectors – infrastructure, regional integration and private sector development ”

them, as they address fiscal and current account deficits. For middle-income countries, the AfDB takes a two-pronged approach. It has established emergency instruments that are making rapid and flexible disbursements for immediate response: the Emergency Liquidity Facility of \$1.5 billion and the Trade Finance Initiative of \$1 billion. The latter is also available for banks in low-income countries. While necessary, these short-term measures must not distract attention from Africa's long-term investment needs. That is why the bank continues to channel resources to its priority sectors – infrastructure, regional integration and private sector development – to lay the foundation for recovery on the continent, once global recovery sets in.

The scale and pace of requirements and the response will more than double the rate at which concessional resources and the ordinary capital of multilateral development banks are utilised. The AfDB is already taking measures to optimise available resources and innovate. But frontloading does not increase the size of the envelope. As it accelerates resource transfers, close to 70 per cent of the bank's concessional window will be used in 2009, virtually exhausting the fund one year ahead of time. Playing a countercyclical role may also force the bank to reach its prudential limits earlier than expected. A worsening economic outlook may affect the quality of its portfolio, as its private sector clients feel the pressure.

It is imperative, as the G20 observes, to reinforce the multilateral development banks at this time. I very much welcome the call to review the capital base and requirements of the international financial institutions, and the evolving willingness to replenish the concessional windows earlier than planned. This dual imperative must be met with the same sense of urgency and commitment as that demonstrated by G20 countries in tackling systemic issues. It will be reinforced by commitment of African governments to continue adhering to the path of regulatory and fiscal reform. Africa's governments have concluded that failing to adhere to the path of reform will eliminate the gains achieved to date. But external support at this stage is more critical than ever in order to stimulate global demand, the flow of credit and overall confidence. The G8 must also come forward with a bold agenda to address the critical requirements of countries seen as peripheral to the system. Reinforcing the resource base of the multilateral development banks is the most effective way to do so. The time is now. ♦

Transforming Ghana's financial sector towards economic growth and global integration

Ghana has achieved a remarkable record of growth, macroeconomic stability and poverty reduction during the past several years, based on sustained reforms including governance. The reforms increased the pace of economic activity in an increasingly friendly business environment for the private sector. The economy has moved to the 'frontier' of an emerging market status with strong economic performance supported by a deepened and robust financial sector. The year 2008 marked the third consecutive year of economic growth above 6 per cent, underscored by massive infrastructural investments and strong export growth. Economic prospects in the medium term remain positive, but challenging against the backdrop of a large fiscal deficit recorded in the past year, and a deepening global economic and financial crisis.

Restructuring the financial sector

Wide ranging financial sector reforms initiated by the Bank of Ghana in 2002, have broadly sought to enhance and facilitate the role of financial intermediation in economic growth as well as integrate the Ghanaian economy with global capital markets. Its immediate objectives were to deepen the financial system, remove deficiencies and promote competitiveness in the industry. Also important, was improving the monetary policy framework and effective prudential supervision and regulations to promote financial stability.

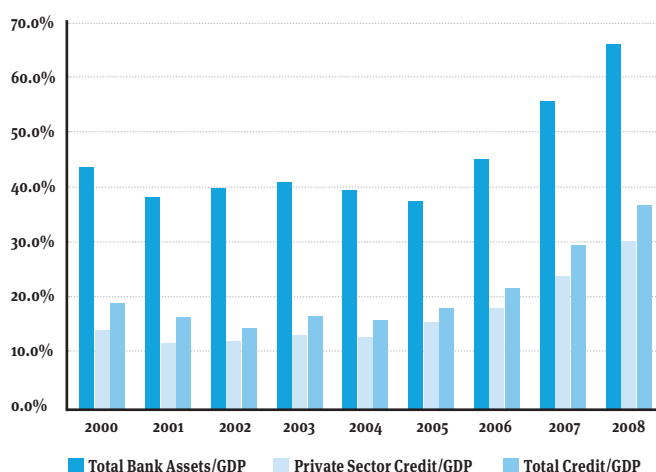
To start with, a new Bank of Ghana Act 612 was passed in 2002 which introduced a level of independence into the central bank's operations. First, the Act refocused the prime mandate of the Bank on price stability. Secondly, it established a Monetary Policy Committee (MPC) to set the stance of monetary policy. In 2003, the Bank introduced universal banking and new capital requirements for the banking system and further liberalised bank entry. These policy shifts fostered a competitive environment for financial services, increased strong business practices and innovative financial products, and enhanced usage of technology in financial operations. From 17 banks in 2000, the number of banks has increased to 24, bearing a mix of diverse country origins including Nigeria, India, Libya and France.

Additional changes were also made to the legal and regulatory frameworks underpinning the financial sector to enhance efficient operations and open up the economy to global capital. Two pieces of legislation – the Banking (Amendment) Law, Act 738 (2007) and the Foreign Exchange Act (2006) – established the legal basis for an International Financial Services Centre (IFSC). Operations of the IFSC are supported by an anti-money laundering legislation. The Foreign Exchange Act also partially liberalised the capital account and paved the

way for foreign investors to participate in the longer end of Ghana's money market. The promulgation of a Credit Reporting Act (Act 726) also provided the necessary framework for the operation of credit reference bureaux which should help lower information asymmetry, enhance risk assessment and improve financial intermediation.

A dynamic growth-oriented financial system must be underpinned by efficient and safe payment and settlement systems. The Bank of Ghana therefore moved to reform the payments system infrastructure. A state-of-the-art payments and settlement infrastructure that includes a Real Time Gross Settlement System (RTGS) and a Central Securities Depository (CSD) was developed. In addition, the Bank set up a national electronic and payments platform (e-zwich) together with e-zwich smartcards to deliver financial services to all segments of the population including the 'unbanked', irrespective of the level of numeracy.

Banking Industry Indicators (% of GDP)



Impact

The volume of financial intermediation has risen, significantly contributing to economic growth. Domestic credit to the private sector has remained robust, growing by about 30 per cent in 2008 up from 13 per cent in 2006. Similarly, total bank assets moved up to 66 per cent in 2008 from 45 per cent in 2006. As a ratio of GDP, bank deposits have increased from 30 per cent in 2006 to 42.6 per cent in 2008. The composition of lending has also changed and Ghana is witnessing an emerging mortgage and consumer loans market. In July 2007, the Bank of Ghana successfully re-denominated the currency, knocking off four

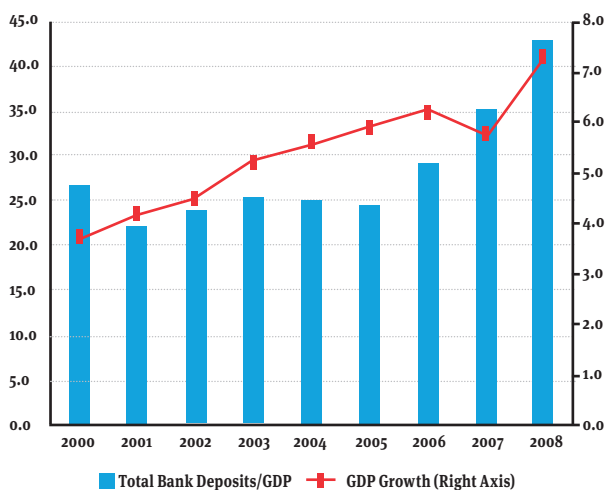
Bank of Ghana, Accra



zeroes. This removed the significant dead-weight burden that the old currency regime had placed on the economy, leading to significant efficiency gains and enhanced business transactions. In September 2007, another milestone was chalked in line with the objective of global financial integration. Ghana successfully issued a sovereign bond and raised \$750 million from the international capital market to finance specific energy and road projects. The over-subscription of the bond – the first by a post HIPC country – affirmed the level of confidence in the Ghanaian economy by the international community.

of Ghana has begun a recapitalisation of the banking sector, especially in the face of expanding economic activities and Ghana's recent oil find, to effectively handle high value transactions. The minimum capital requirement of banks have been raised from GH¢7 million to GH¢60 million. With these policy measures, the Bank of Ghana envisages in the medium to long term, that Ghana's financial sector will emerge as a strong and resilient financial sector that is integrated with the global economy and can forge Ghana's growth process towards a middle income status.

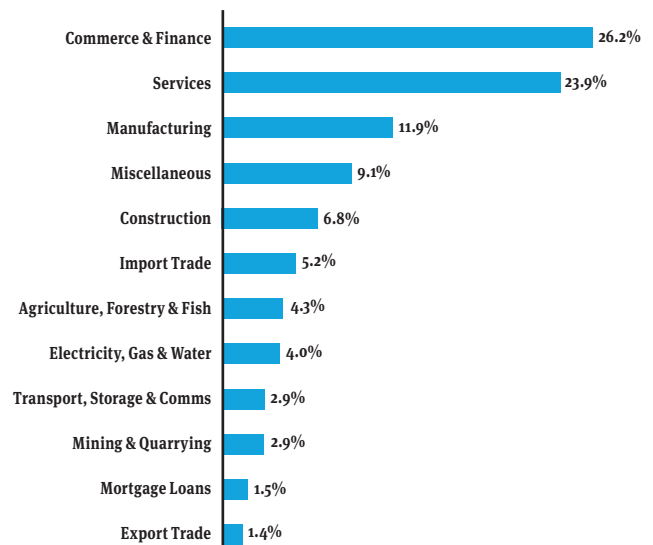
Bank Deposits and GDP Growth (%)



Looking ahead

The financial sector reforms have consolidated growth in the financial services industry with diversified products from micro credit operations, domestic universal banking, and international banking. This is part of a commitment to an overall macroeconomic agenda to deliver a policy environment that is targeted at accelerated growth. The next wave of financial sector reforms in the medium term will focus on deepening secondary capital markets and alternative financing schemes for small and medium-sized enterprises. The Bank

Sector Distribution of Bank Outstanding Credit (2008)



Restructuring development

Developing countries are hardest hit by the global economic downturn. Policy measures must be taken to shore up their trade-related infrastructure

By Diéry Seck,
director, Centre
for Research on
Political Economy

In an attempt to mitigate the fallout, developed countries are spending considerable energy trying to understand the causes of the unprecedented global economic crisis and financial meltdown that grip the world. It is widely recognised that the developing world is also affected, but the extent and nature of the challenge that it faces are less scrutinised and are the object of fewer specific recommendations regarding remedial policies. With respect to trade and investment, developing countries must tackle pressing issues that are heightened by recent events. As a result of the global credit crunch, they find it harder to secure external financing for their imports, with adverse consequences for their economies, while fragile states struggle to procure basic necessities for their populations. Least developed countries (LDCs) that rely disproportionately on commodity exports face declining demand. They cannot increase – at least in the short run – the level of aid that they receive in the form of grants or concessionary loans, or borrow externally on commercial terms. In recent years, aid flows have proved insufficient in volume and inadequate in composition to represent a meaningful tool for development or a proper substitute for trade finance.

Consequently, developing countries need to find suitable answers to the following two policy questions. First, through what channels does the current crisis affect their trade-related development prospects and what are the appropriate remedies? Second, how can the volatility in the availability of trade finance be reduced so that economic growth can proceed smoothly and exposure to contagion regarding global economic and financial downturns can be lessened? One of the overriding priorities of developing countries is sustained social development



“ Aid flows have proved insufficient in volume to represent a meaningful tool for development ”

in line with the Millennium Development Goals, a process predicated on fast and consistent economic growth. The empirical evidence of the last 30 years shows that the fastest patterns of economic growth have been led by exports, underlining the importance of significant investment in export-supporting infrastructure. Therefore, in the current context, more attention should focus on identifying adequate policies for trade-related infrastructure investment.

Policy formulation that seeks to address the adverse impact of current and future crises on export-induced



economic growth should take three considerations into account. First, developing countries need to integrate further into the global economy in order to reduce their increasing marginalisation and to avail themselves of the world's massive trade and investment opportunities. Yesterday's Asian tigers and today's India and China have shown the way. Many other countries can follow suit. Second, efforts should be made to reduce the distortions introduced in developing countries' economies by heavy reliance on mispriced foreign loans obtained from concessionary windows. These distortions tend to induce non-optimising use of capital and chronic over-borrowing, which lead to crippling debt service burdens. Finally, in their attempt to catch up with the rest of the world, LDCs face the conundrum of choosing between advanced infrastructural technology, for which they are not endowed with the required human capital, or being content with investments that are labour intensive for the sake of job creation, but may not be competitive in an export-oriented strategy.

The policy reform proposed below is based on the dual assumptions that official development assistance will not significantly increase in the coming years and

Larger export volumes secure a higher capacity to finance imports

that built-up infrastructure can unleash the export potential of developing countries. Furthermore, larger export volumes secure a higher capacity to finance imports, rather than external debt service, and provide some hedge against variations in the availability of external trade finance. Developing countries could attain considerably higher levels of export-supporting infrastructure through public-private partnerships at the global level. For the purpose of development, it is more vital to provide adequate infrastructure to economic agents than for governments to claim ownership of it. Therefore, developing countries should identify projects and globally attract profit-seeking concerns that would build and operate to make money.

If its domestic resources are not sufficient, a country could – at its convenience and with the help of an investment bank or an international financial institution, or perhaps both – convene a forum of global firms and the donor community to present its portfolio of planned infrastructure investment projects. The country's public and private sectors would expose the nature and extent of their intended involvement in each project and match it with the stated interest of foreign firms and the pledges of donors for the programme as a whole or on a menu basis. The meeting would commit all actors to a level playing field for all projects and help enforce compliance with standards and norms of human rights, the environment and international trading rules.

Operationally, the process could be inspired by Paris Club meetings, but the global private sector would take the lead and precedence over donors. The forum could be dubbed the Infrastructure Public Private Partnership Paris Meetings or I4P Meetings. I4P Meetings would be ideal for regional initiatives with considerable economies of scale or scope, such as the New Partnership for Africa's Development (NEPAD), because they would easily accommodate projects of a transnational magnitude and help deal with the complex issue of the harmonisation of national legislation or policies. The developed world would also benefit from the proposed initiative because utilisation of its existing productive capacity would be enhanced – especially in times of economic crisis – and a more integrated developing world would contribute more meaningfully to global welfare.

Relevant projects include airports, harbours, railway systems or networks of toll roads serving main export crop areas. The provision that end-users pay prices subsidised below market rates could be accommodated if government or a foreign donor settles directly with the operator the shortfall of revenues caused by the subsidy. The scheme differs from a classic Build, Operate and Transfer arrangement because, even in the presence of government contributions, it is not a sovereign investment and the operator owns it in perpetuity, unless contractually stated otherwise. In this manner, infrastructure becomes a public good in private hands and need not compete with other developmental or social priorities for government funding. Then, trade and growth can proceed unimpeded. ♦

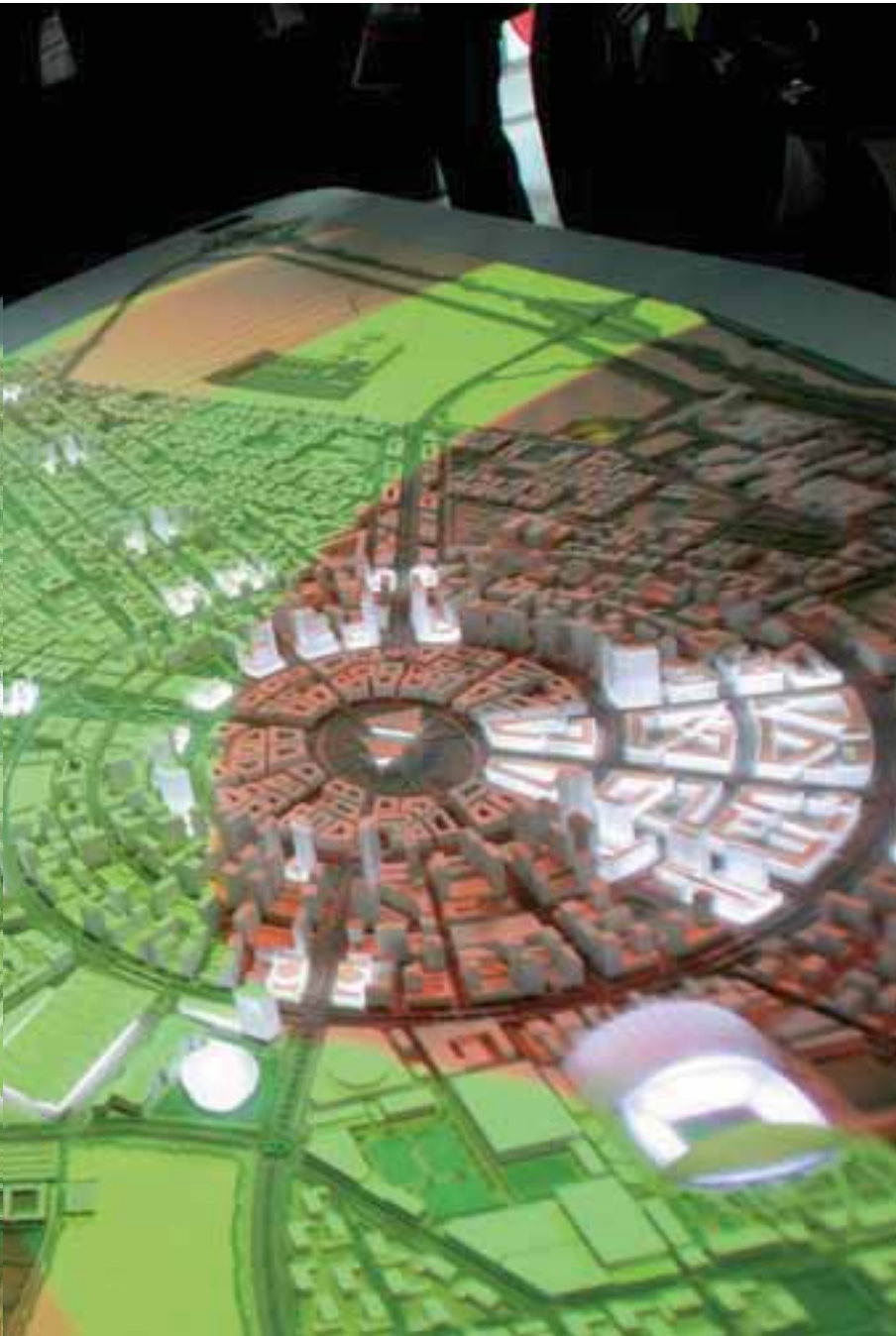


Looking east

The popular image of the Middle East as troubled will change as major investment transforms it into an attractive market and business destination

By Hisham
El-Sherif, chair,
Nile Capital

The Middle East needs a new vision, a comprehensive strategy and a relevant plan. The region's population today exceeds 360 million and will reach 435 million by 2020, 487 million by 2030 and 560 million by 2050. 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 Middle East requires major investments 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 one 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 would exceed \$8 trillion. This is an attractive market for companies and countries in the region and around the world.

Where are the sources of such investments? One answer is to look at the Middle East positively, as a region with opportunities, rather than negatively, as a region with continuous problems. The G8 and other leading partners, if they have the will, can help build the future of the region.

Over the years, the Middle East has had its share in the history of peace and war, stress and tension, co-operation and partnership, and investments and decline. The region has lately been making the news headlines on a daily basis. It has had its share of crises, with the war in Iraq, the political turmoil in Lebanon

The Middle East is a region with opportunities: Cityscape 2009 international real estate exhibition, Abu Dhabi

“ Although the Middle East, as everywhere, has been hit by the global financial crisis, it is still considered by some to be a safe haven ”

and the longstanding Palestinian-Israeli conflict. It has also been fighting terrorism and fundamentalism since the assassination of the late Egyptian president Anwar Sadat more than two decades ago. Recently, waves of financial crisis have hit almost all countries of the region. After a period of skyrocketing prices that had reached \$147 per barrel, oil prices collapsed to \$35, a record low since 2003 for this century. The region's growth averaged 6.2 per cent and 5.8 per cent in 2007 and 2008 respectively. In 2009, the growth rate is projected to drop to 3.3 per cent. National growth was also at a record high since the 1970s, with Egypt at 6.8 per cent in 2006, 7.1 per cent in 2007 and 7.2 per cent in 2008. But its quarterly growth fell to 4.1 per cent in December 2008; job creation fell by 30 per cent and unemployment rose to 8.8 per cent.

Although the Middle East, as everywhere, has been hit by the global financial crisis, it is still considered by some to be a safe haven. The region has escaped the direct impact of the crisis, because most non-oil producing countries were not exposed to the \$200 billion subprime write-off of US banks. The exceptions are a few Gulf states and Dubai, which have \$80 billion in debt and are struggling to refinance their speculative decade of economic boom and real estate development. Nonetheless, the oil-producing countries have suffered from the collapse of oil prices and its direct impact on financing, after almost a decade of major investments in national economies such as Saudi Arabia. Consequently, poverty is increasing in most Middle Eastern countries.

The region is also suffering from growing unemployment among expatriates, whose remittances represent a major source of income for their families and the region. Most countries have double-digit unemployment, and illiteracy rates in some countries are higher than 40 per cent. Tourism revenues have dropped by more than 40 per cent in the region in less than six months.

Can one envisage the Middle East of 2050 being different from the one today? Can intellectual assets, knowledge bases, think tanks, research, consulting firms and academia be mobilised to deliver a blueprint for a new Middle East? Can today's Gaza be transformed into a new Singapore, and the West Bank to a Switzerland, by 2030? Could Iraq be the Germany of the region, Egypt a developed country and the Middle East the new European Union of the 21st century? The accumulated lessons from the vision and



Toward a peaceful, socially developed and just Middle East: a public school in Baghdad's Sadr City

realisation of the EU and the emergence of Germany, Italy and Japan after the Second World War, as well as the transformation of China, can provide the basis for a Middle East renaissance.

To transform this 2030 Middle East from a dream to a vision, and from a vision to a 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 region's countries – peace and development, prosperity and growth. There are two prerequisites for this. The first is an implementation plan for peace and the second is a master plan for growth.

In a crisis, what is needed is not to bail out the institutions of the past but to strengthen the Middle East in preparation for future growth. The G8 can help lead and support the formulation of the regional Marshall Plan that is required to build a new region, a Middle East that is peaceful, modern, economically integrated and socially developed and just. A trillion dollars in investment funds are needed over 10 years to initiate and energise such a Marshall Plan – \$100 billion a year. Can the countries of the region, G8 countries

“ To transform this 2030 Middle East from a vision to a reality requires the commitment and drive to establish long-lasting peace and security ”

and growing industrialised economies partner in this plan? This is not a classical stimulus package but a catalytic direct investment fund that aims 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. ♦



Only connect

While a significant proportion of the world has basic access to the internet, a new digital divide threatens to create a wider gulf between rich and poor

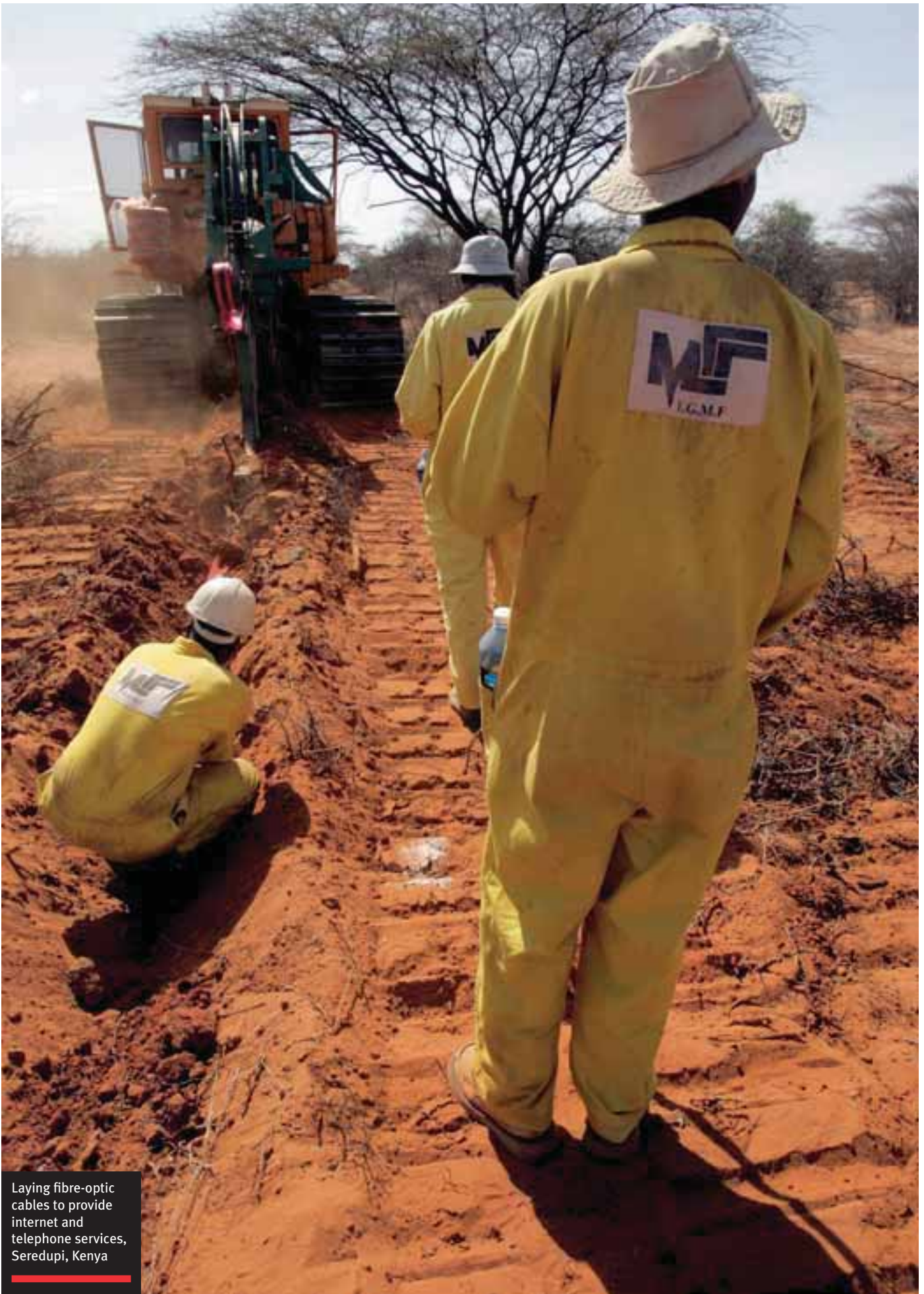
By Hamadoun Touré,
secretary general,
International
Telecommunication
Union

In 2000, when world leaders approved the Millennium Declaration, they reiterated their firm belief that information and communication technologies (ICTs) would be instrumental in meeting all eight Millennium Development Goals (MDGs). They understood that greater access to ICTs would improve farming practices and assist micro-entrepreneurs, help prevent HIV/AIDS and other communicable diseases through better information and better healthcare, promote gender equality by empowering women to take control of their lives, and foster environmental protection through climate monitoring and early response. One MDG target explicitly promotes the increased availability of the many benefits of ICTs throughout the developing world.

The world is now more than half way to the 2015 MDG deadline. ICTs have indeed played a huge part. ICT-based systems and services – such as electronic commerce, distance learning, telemedicine and e-government – are improving the quality of life for countless people around the world.

From the richest country to the poorest, ICTs are now ubiquitous. The number of mobile cellular subscribers globally has passed the 4 billion mark. Well over 1.5 billion people now have at least basic access to the internet.

In many ways, it has been a miraculous moment for most of the world's poorest countries – the 49 United Nations-designated least developed countries (LDCs). The total number of mobile cellular subscribers in the LDCs rose from under 2 million in 2000 to almost 120 million in 2007.



Laying fibre-optic cables to provide internet and telephone services, Seredupi, Kenya

Although encouraging, this is inadequate. Another digital divide may be opening just as the world is succeeding in bridging the original gap. A new 'broadband breach' separates those communities that enjoy fast access to an online world increasingly rich in multimedia content and those communities still struggling with slow, shared, dial-up links.

In the 21st century, affordable broadband access is as vital to social and economic development as are networks such as transport, water and power. While there are positive growth trends, growth and access speeds are still nowhere near fast enough. Moreover, there are major issues with affordability as well as price.

According to the 2009 *Measuring the Information Society*, published by the International Telecommunications Union (ITU), broadband subscriptions cost less than 1 per cent of per capita gross national income (GNI) in the top 15 countries assessed and under 2.5 per cent of GNI per capita in a further 25 countries. At the other end of the scale, in the lowest 30 countries in the list – most of which are LDCs – broadband subscriptions cost more than 100 per cent of per capita GNI.

By the end of 2007, some 85 countries worldwide had launched and were commercially exploiting IMT-2000/3G networks. But a comparison of developed versus developing economies shows that mobile broadband uptake is clearly dominated by the developed world, with penetration at 14 per cent, compared to just 0.9 per cent in the developing world.

Nonetheless, by the beginning of 2009 there were an estimated 335 million mobile broadband subscribers worldwide. In some countries there are more broadband mobile subscriptions than fixed broadband subscribers. In Indonesia, in 2007, for example, mobile broadband subscriptions outnumbered fixed broadband subscribers by a factor of ten to one.

But these remain the exceptions. Just because mobile broadband subscriptions allow users to communicate at broadband speeds, it does not necessarily indicate actual use. Subscribers may be using their mobiles only for telephone calls or text messaging.

Enlightened regulation is critical. Countries should open their telecom markets to the fullest extent possible, so that competition can drive additional infrastructure deployment and reduce prices. Competition is particularly important for internet access and – critically – for international connectivity. Governments should consider alternative ways to reduce wholesale prices where regulatory obstacles persist.

One way to build capacity is through training ICT professionals to create a pool of skilled personnel to support network rollouts, maintenance and management. ITU has long been active in this area through its Internet Training Centre (ITC) initiative, which has established 66 ITCs in 56 countries, including 20 LDCs. These centres have more than 3,000 graduates, with 3,000 students currently enrolled.

ITU has also contributed \$9 million in seed funding to help set up ICT centres of excellence around the world. Designed to offer continuous

“ Public-private ICT deployment projects will be even more critical in bringing access to those who need it ”

distance-learning education to senior ICT managers in the public and private sectors, these centres are regional focal points for professional development, research and knowledge sharing, and provide revenue-generating consultancy services.

Also important are programmes to raise awareness of the benefits of the internet and train potential users. Governments can attract internet users by developing e-government services that citizens regularly need and by ensuring that these applications are available nationwide through community access centres.

In the wake of the current economic crisis, public-private ICT deployment projects will be even more critical in bringing access to those who need it. Governments can provide the much-needed stimulus for an industry confronting a crisis in end-user demand, and in turn can benefit from competitive prices as suppliers strive to win new business. Users and the economy should benefit, with ICT investment providing the necessary boost to kick-start other sectors of the economy into forward motion.

It was encouraging to see the G20, in April 2009, produce a \$1.1 trillion package primarily for developing countries in crisis, rather than for the countries of the rich world. It was also encouraging to see the G20 reaffirm its commitment to meeting the MDGs and call on the UN to establish an effective mechanism to monitor the impact of the crisis on the poorest and most vulnerable.

The international community's role is critical, particularly in assisting the LDCs – where simple economics cannot foster widespread access because of extremely low per capita incomes.

In an effort to target these countries region by region, ITU launched its ITU Connect events in 2007. The first event welcomed more than 1,000 top-level delegates in Rwanda and raised \$55 billion in investment in intra-regional connectivity. It saw commitments to interconnect all African capitals and major cities with ICT broadband infrastructure and strengthen connectivity to the rest of the world by 2012, and to extend broadband and ICT services to all African villages by 2015.

ITU is now extending this highly successful initiative to other world regions. The next ITU Connect event, which targets the Commonwealth of Independent States, will take place in Belarus in November 2009. ♦

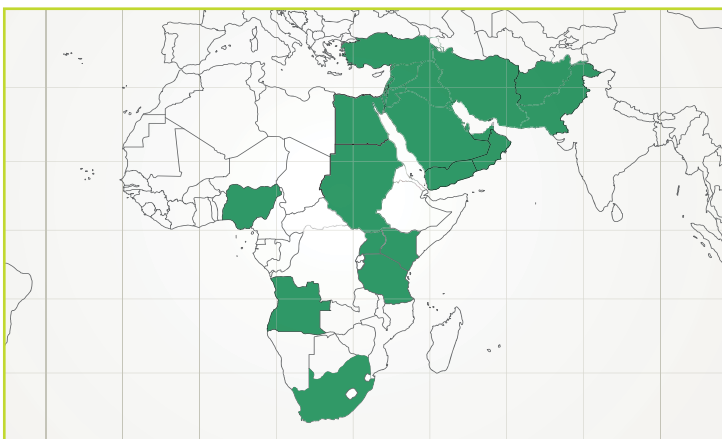
Move faster with YahClick^{*}



Introducing a **revolutionary** **broadband** service

YahClick, a revolutionary satellite broadband internet service by Al Yah Satellite Communications Company PJSC (Yahsat) will be offered for the first time in many countries of the Middle East, North Africa, Sub-Saharan Africa and South West Asia. The YahClick service will be available for both home users and enterprises through Yahsat 1B, Yahsat's second satellite to be launched in mid 2011.

Faster, **uninterrupted**, **affordable broadband**



Yahsat 1B will deliver internet connectivity through its Ka-band multi-spot beams, with reusable frequencies to maximise spectrum efficiency. The multi spot-beam technology means greater efficiency on the ground, which enables the use of a smaller antenna size with a low power amplifier. The stronger satellite signals require smaller dish sizes and ultimately bring down costs to subscribers. Broadcasters can reach very specific target areas and provide uninterrupted service. The technology will enable faster, reliable and affordable broadband to urban and remote areas of the region.

YahClick^{*} **coverage** Ka Band

A broadband **offering** **customised** for the market

Shortly after the launch of the Yahsat 1B in mid 2011, the YahClick service will be available through service partners throughout the coverage area. Service partners will bundle hardware and software services, offering packages tailor-made for specific markets and user segments. They will be given technical, operational and marketing support to bring high-speed internet to users in many countries across South West Asia, Africa and the Middle East.



satellite broadband service

Connectivity **going beyond** terrestrial limitations

YahClick will rise above the limitations of existing terrestrial and satellite systems and will fast track the deployment of broadband service and bring the internet to a large number of underserved and unserved people and organisations at costs comparable to terrestrial services. Yahsat will bring connectivity to home users, schools, NGOs, and enterprise customers in remote and under-served regions and will help grow economies through informed societies and connected communities.

Connecting communities with **multiple** applications

With a wide portfolio of voice, data, video and internet connectivity solutions, Yahsat satellites are designed based on market requirements and future applications. Communication opportunities are vast with Yahsat's powerful beams, which will enable telecom operators, government agencies and business enterprises to reach out across Africa and the Middle East, and connect to Europe. Yahsat hopes to play a key role in the economic development of the nations it covers by connecting rural and urban communities.

Developing a **knowledge base** in the region

The demand for satellite communications in the Middle East is growing and Yahsat is focusing on this geographic region, which is booming in terms of demand and right now is underserved. The geographic areas that Yahsat will serve are developing at an incredible rate, especially in mobile telecommunications, satellite TV and finance industries. Traditionally these areas have been underserved and Yahsat believes that this also presents a valuable chance to help develop its communications knowledge base, supporting its aim to be at the forefront of global technological advances.

Building **the region's first** hybrid satellite

Yahsat is the UAE's first nationally-owned satellite communications company that will provide hybrid satellite communications services to commercial and governmental clients in the Middle East, Africa, Europe and South-West Asia. The first satellite Yahsat 1A is currently being built and will be launched in the fourth quarter 2010. The second satellite, Yahsat 1B, will be launched in mid 2011.

Yahsat is initiated and owned by Mubadala Development Company: Abu Dhabi government's strategic investment and development vehicle

A better Web for a better society

The internet opens up opportunities and helps bring the most disadvantaged out of the isolation of poverty. Governments must invest greater amounts in the development of the Web to make access truly global

By Tim Berners-Lee, Steve Bratt and Daniel Dardailler, World Wide Web Foundation and World Wide Web Consortium

The new World Wide Web Foundation will be launched this year as the next step toward fulfilling the original vision for the Web: humanity connected by technology, not technology in isolation. The foundation's mission is to advance the Web, connect humanity and empower people. Through focused funding and efforts from governments, organisations and individuals, the foundation will accelerate deployment of the Web as a bridge across the digital divide. In turn, the Web will empower people and accelerate tangible benefits, such as access to education, economic growth, sustainable development and poverty reduction.

Stories of the deployment of mobile voice- and text-messaging applications in emerging economies foreshadow the even greater potential of the Web as the next logical step to an open, easier-to-implement, richer and more cost-effective medium for global connectivity. (Many of those stories are available at www.w3.org/2008/MW4D/wiki/Stories.) However, there are serious challenges on the road to realising the Web's full potential. Currently, almost 75 per cent of the world's population cannot contribute to or benefit from the Web. Illiteracy, inexperience, language, disability and cost are significant impediments. As a result, usable, useful services are in limited supply, especially for those who need them most.

The World Wide Web Consortium (W3C) is developing the standards that will make the Web accessible for people with disabilities (through its Web Accessibility Initiative) and for people from the world's diverse cultural and language groups (through its internationalisation activity). With the number of mobile phones approaching 4 billion, and with the most rapid growth in emerging economies, W3C's standards will make the Web work easily on mobile phones, including the low-cost mobile devices prevalent in developing regions.

The Web Foundation will fund and co-ordinate new efforts to deploy W3C's work in the field and to address the other challenges that have not yet been addressed by others. The greatest promise in the developing world



is the mobile platform, using graphical, text- and voice-browsing technologies as interfaces to the global Web. The foundation will provide tools and training, and build communities of Web authors and users. The creative energies of the next billion Web citizens will be unleashed to advance technology and human connectivity in ways not yet imagined, offering people the knowledge and tools to build applications of value.

Examples include enabling a mother to register the birth of her child by mobile phone, without travelling by foot for two days; helping a healthcare worker, with minimal training, in a remote region, obtain a professional diagnosis and treatment for a child's swollen lymph nodes; providing market data to help a farmer to decide where to drive an ox cart full of bananas to get the best price; providing a student with the education, tools and capital to launch a service directory website in his or her local language or, perhaps, launch the next Google.

Students in Myanmar access the Web at an internet café

“ The Web Foundation aims to address challenges that threaten the advancement, freedom and openness of the Web on a global scale ”

In addition to empowering people at the grass-roots level, the Web Foundation aims to bring together leading experts to address challenges that threaten the advancement, freedom and openness of the Web on a global scale.





Internet access in China: censorship threatens the vision of the Web as a single, universal medium for sharing information

The risk of fragmentation of the internet and of the Web platform itself is real, with the proliferation of non-standard, proprietary technologies and Domain Name System disagreements (with language-support issues not completely resolved, such as .com in Chinese). Other challenges – such as censorship – threaten the vision of the Web as a single, universal medium for sharing information.

For 15 years, the W3C community has developed the free and open Web standards that make the Web work, including HTML, XML and dozens of others. W3C has advanced work on societal issues, such as privacy and security, and has developed an industry-leading, royalty-free patent policy that enhances the growth and value of the Web. W3C's eGovernment work aims to improve citizens' access to their governments through more effective use of the Web, supporting the concept of 'E-governance for Development' referred to in the Genoa Action Plan for the Digital Divide, launched at the 2001 G8 summit and being given a fresh boost at the 2009 L'Aquila Summit.

The Web Foundation is working with the Web Science Research Initiative (WSRI) to expand Web science as a field of academic study and research. This will improve understanding of how the Web works and educate a new generation of experts who will lead the Web into the future. WSRI is building a network of higher education institutions and engaging researchers and funders who are working toward this goal. The Semantic Web – the Web of linked data – has moved from research to application, and could revolutionise the Web and its value to society.

The Web Foundation, along with partners W3C and WSRI, shares the vision of a society in which everyone can create, share, access and be informed by a free

“The Web has the potential to empower people through deployment of health, education, commercial and governmental services”

and open Web. A second part of this vision is that more people are directly contributing their ideas and energies to developing the Web as a positive force in the world. The Web has the potential to empower all people through deployment of the health, education, commercial and governmental services needed by the 5 billion people not currently on the Web, most of whom are living below the poverty line. The Web can play an increasingly crucial role in solving other grand challenges, such as preventing and resolving conflict; sustaining fair economic growth; satisfying energy needs; saving the environment; mitigating and recovering from crises; discovering, and deploying, preventions and cures for deadly diseases; and spreading good governance.

Government agencies, especially those from the G8, should increase their support and funding of open Web standards, Web science and the application of the Web to empower and enable positive change. These ideas are elaborated in *The Web and the Promise of a Global Sustainable Future* (available at www.w3.org/2009/01/paradiso.html). ♦

Shaping a vibrant ICT landscape through people, research and innovation

What is the Meraka Institute?

The Meraka Institute is South Africa's information and communications technology (ICT) centre of excellence. We were established as a national research centre of the Council for Scientific and Industrial Research (CSIR) in 2005, as the implementation of the African Advanced Institute for ICT (AAIICT) by the South African government.

In 2009 we became an operating unit of the CSIR and now function as a national organisation with laboratories in two cities: Pretoria and Cape Town. Our business is research, innovation and advanced human capital in ICT.

With more than 200 staff and students working in ten research groups, Meraka is the largest organisation in South Africa dedicated to ICT research. Meraka has a long-term goal to create new ICT industries for South Africa. We aspire to be one of the leading ICT research centres in the developing world.

Meraka contributes to enhanced quality of life and economic competitiveness in South Africa and the continent through ICT by pursuing advanced human capital development, building critical mass ICT research capacity, and contributing to a strong and robust innovation chain.

Research focus

Meraka focuses on strategic, basic and applied research and experimental development to maximise impact on socio-economic needs and address technology challenges facing industry, communities and the national priorities. Our five research themes highlight our ICT capabilities:

- Pervasive, trusted networks and services infrastructures – mobile, wireless, multimedia, software, information security, telephony, internet, next-generation networks, mobile systems and services, software infrastructure
- Technology-enhanced interaction – human language technology, human computer interactions, robotics
- Next-generation web-semantic web, ontologies, Web 2
- Geospatial and sensing technologies – ICT for Earth observation, remote sensing and distributed sensor networks
- Cyber-infrastructure – high performance computing (HPC), South African National Research Network.

Research impact

Meraka's research is aimed at addressing the needs of South Africa and the continent by supporting society and enabling science through ICT:

- **ICT for Society – working towards an inclusive information society by addressing challenges related to:**
 - *Access – researching and developing technology and associated deployment models to extend access to broadband internet connectivity and computing facilities*
 - *Inclusion – addressing barriers to access due to language, disability, illiteracy and affordability*
 - *Use – intensifying the use of ICT through development of key technologies and applications addressing priority areas such as education, health, disaster prevention etc.*

• ICT for Science

- *Cyber-infrastructure – HPC, high-speed, high-bandwidth networks, large-scale data sets*
- *Leveraging cyber-infrastructure for scientific applications*
- *Innovative and affordable platforms for scientific computing, such as the Ubuntu Linux for Scientists distribution.*

Areas such as industrial development, safety and security, and environmental management also benefit from our activities.

The technology developed through our many research projects will be transferred through spinning out of companies, commercial licensing or selling technology, open source release of technology, entering into joint ventures, or a combination of these mechanisms.

Partnerships and funding

Meraka has research and development (R&D) collaboration with 12 South African universities and works with local, provincial and national departments (Science and Technology; Arts and Culture; Education; and Communications). We have close ties with the Department of Science and Technology in the framework of the National ICT R&D and Innovation strategy. We represent a hub of ICT expertise situated in South Africa with strong links into Africa and vigorous international collaboration. We are also one of the most successful sub-Saharan participants in the European Union's FP7 and have formal research relationships with a number of prestigious institutions across the globe.

Meraka operates on a full-cost basis and is primarily funded by the South African government through parliamentary grant allocation and strategic contract R&D funding. We undertake contract R&D with the private sector and compete for competitive research funding.



www.meraka.org.za

Connecting Africa to the world

SEACOM is open for business and ready to supply complete solutions for Africa's 'Broadband on Demand' needs.

Today, it is widely recognised that information technology goes hand-in-hand with sustainable economic development. Africa has lagged behind other continents in terms of information technology infrastructure and associated bandwidth availability. One of the means to reverse this current state of affairs is through the provision of fibre optic connectivity to the rest of the world, which is much less expensive than current African satellite connectivity.

SEACOM's partnership with southern African research and education networks through TENET is an example of how SEACOM plans to facilitate faster development by providing subsidised international bandwidth. SEACOM's commitment to supporting research and education networks will provide 40 universities, education and research institutions in South Africa with 50 times more bandwidth at the same price currently being paid annually. The bandwidth provided will almost equal that currently available to the entire Southern African population. After six years, the institutions will own the capacity for the remaining life of the cable resulting in substantial annual savings whilst enabling institutions to develop and increase their international research collaborations and distance learning programmes. SEACOM is currently working to replicate this programme in east Africa.

Significantly lowering the cost of international bandwidth will also fuel change in areas of communication, health, technology, research and education. The project has been structured to meet the policy objectives of governments and NEPAD. Through its knowledge and experience SEACOM has partnered with the NEPAD e-Commission in the project development of UHurunet. Negotiations are underway to replicate the TENET agreement throughout eastern and southern Africa to provide capacity in volumes and prices never before available in the region.

Providing broader access to Information and Communications Technologies (ICT) in Africa will be a catalyst to unlocking sustainable economic and social development. By supporting



governments, businesses and individuals to develop, create growth and promote the continent as a real player in the global economy through the enablement of ICT linked opportunities, we will most certainly see acceleration towards the attainment of the 2015 Millennium Development Goals.

The tremendous growth in mobile communications across the continent has been a marker of Africans' readiness to use technology to improve their lives. Of course, in today's world, ICT can only truly be exploited through the availability of broadband to establish effective and efficient international communications systems. Words such as high definition TV, peer-to-peer networks, IPTV and real internet are not that far away... in fact, it can be a reality subject to one requirement – the availability of affordable and plentiful bandwidth. When fully functional in June 2009, SEACOM will provide high-capacity international fibre optic bandwidth along the east coast of Africa and onwards to the rest of the world via landing points in France and India.

Critical SEACOM construction milestones were completed during the early part of 2009. Cable stations have been constructed; land cable has been installed and tested; and



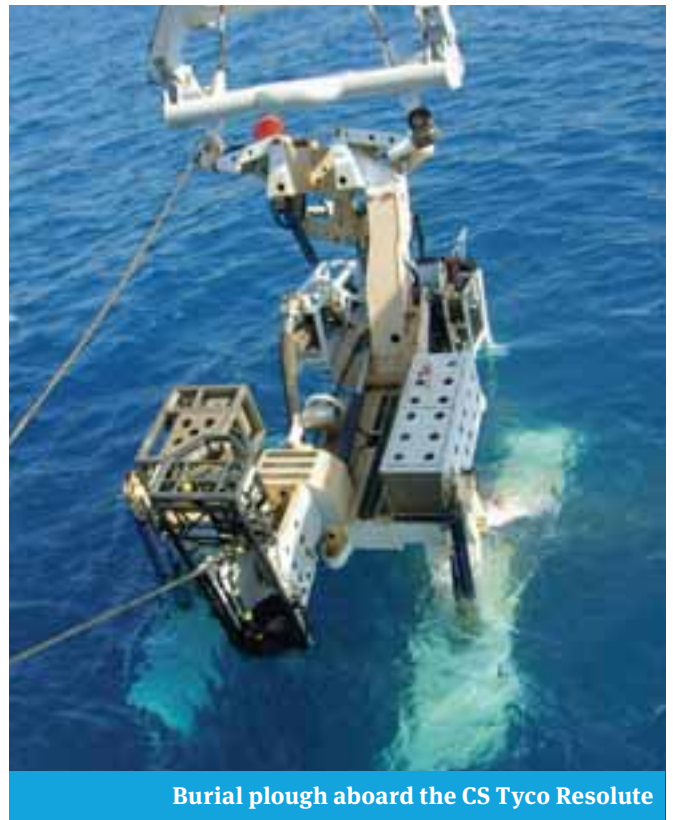
Cable landing event in Dar es Salaam on 17 February 2009. Left to right: Jon Avery, Anna Kahama-Rupia, Michael Njumba and Nikos Rousos



Drill at Mtunzini landing station



Excavation in progress at cable landing in Maputo



Burial plough aboard the CS Tyco Resolute

special transmission equipment has been installed and tested at SEACOM's landings. At each site, SEACOM took special precautions to assure the construction activity was consistent with environmental policy and regulations.

At sea, the process of laying SEACOM has entailed three special-purpose cable laying ships, that have installed the cable from Egypt, South Africa, and India all towards the Horn of Africa, where the cable segments will be spliced together. Shore end cable installation at the landing countries has been done with smaller local vessels able to navigate shallow water.

SEACOM will be ready to provide services to customers in June. Experienced local telecommunications professionals are on-site, overseeing final stages of SEACOM testing, in each of the SEACOM cable stations. They are ready to operate and maintain the network, after receiving special SEACOM training at the SEACOM Network Operations Centre in India. SEACOM is pleased to have been able to tap into the huge resource of talented young African telecommunication professionals, who are now ready to provide customers with the required support from June onwards.

With a capacity of 1,280 gigabits, SEACOM's state-of-the-art cable will enable bandwidth-hungry African economies to enjoy HDTV, IPTV, true broadband internet and peer-to-peer networks. Through its high-volume, low-cost business model, SEACOM is able to offer high-capacity bandwidth at prices significantly lower than current satellite or fibre offerings.

SEACOM is a privately funded and 76.25 per cent African-owned undersea cable company. Its investors now include:

- Industrial Promotion Services (26.25 per cent), an arm of the Aga Khan Fund for Economic Development
- Venfin Limited (25 per cent)
- Herakles Telecom LLC (23.75 per cent)
- Convergence Partners (12.5 per cent)
- Shanduka Group (12.5 per cent)

For further information, email: info@seacom.mu; or visit our website: www.seacom.mu



Uraduct installation aboard the CS Tyco Reliance



Burial plough being lowered into the sea with Rad Sidr, Egypt in the background

Down but not out

The G8 model is in need of some restructuring, but the challenge of inclusion and representation does not mean that its time is up

By Andrew F Cooper, The Centre for International Governance Innovation

Many increasingly argue that the G8 is fading in relevance. Amid the shockwaves of today's global economic crisis, the need is for authentic and effective global solutions. On top of its well-known flaws concerning legitimacy are the G8's accentuated problems of efficiency. When the financial tsunami hit last autumn, it was not the G8 that moved to the pivotal position as the hub of global decision-making but the G20, elevated to the leaders' level.

The G8 may be down in comparative import, but it is far from out. Although ascendant as a crisis committee, it should not be assumed that the G20 is in a position of longer-term superiority. The G20 is very much driven by an ad hoc process; its agenda remains highly technical and – while it boasts wider representation than the G8 – questions remain about the nature of its membership, including its degree of euro- and anglo-centrism.

The big question is whether the G8 will reinvigorate itself. One notion that has gained some traction is that the G8 should re-brand itself as a like-minded entity. Symbolically, this emphasises the 'back to the basics' theme voiced by some G8 leaders who play up the democratic credentials of the membership. Instrumentally it focuses on some key strategic issues, such as Afghanistan and Iran. Still, these advantages come with some obvious disadvantages. This model is far more consistent with the old G7 composition rather than the expanded G8, which includes Russia. Although Russia has had competitive elections, its democratic pedigree is not as strong as several members of the G20 from the global South. In any case, the image of a like-minded caucus has the effect of downgrading the status of the G8 from its centrality in global governance.

Another idea is that the G8 should highlight its variable architecture. This feature has been evident in the numerous revisions to Italy's summit in July 2009, including the change in location from La Maddalena to L'Aquila. Following the 2008 Toyako Hokkaido Summit, Prime Minister Silvio Berlusconi stressed the participation of the big emerging states of China, India, Brazil, South Africa and Mexico – that is, the Group



Italy's Silvio Berlusconi and Egypt's president Mubarak: Berlusconi stressed the participation of the G5 plus Egypt

of Five (G5), which have attended since 2005 – plus Egypt. Since then, Italy has emphasised diversity by expanding participation to include members of the Major Economies Forum on energy security and climate change, as well as the presidents of the African Union and Nigeria.

Do such additions help the G8 regain a comparative advantage over the G20? In some ways they do. The presence of Egypt and Nigeria gives African issues added weight. It also tilts the participation argument away from strictly economic criteria toward functional capabilities on both global and regional scales. Although Italian officials acknowledge that Nigeria does not yet have the same stature as the big emerging states in the G5, they explicitly argue that it has the potential to be in the same league and even now assumes important tasks such as peacekeeping.

Such a model reinforces the image of competition



“ By increasing the number of chairs around the table, an overloaded model of diversity may prompt fragmentation of the process ”

between the G8 and the G20, however. The G20 leaders started with set representation going back to the formation of the G20 finance ministers' forum in 1999, in response to the 1997-98 financial crisis. Because of concern about contagion, debtor states such as Argentina and Turkey were included. Reusing this model in the current crisis has detracted from the claim of other countries for G20 membership, most notably Spain and the Netherlands, in recognition of the size of their economies, and the privileging of Saudi Arabia over Egypt for a regional balance. At the same time, the G8's 2009 shift toward diplomatic capabilities as a criterion has opened up other tensions, as some G20 members are invited to the G8 summit and others are not.

By perpetually increasing the number of chairs around the table, an overloaded model of diversity may prompt fragmentation of the process

and concentration of the decision making. The most compelling development is talk of a G2, consisting of the United States and China, responding to their pattern of economic interdependence and complementarity. It also reflects the growing sense of confidence of China as a rule-maker in international affairs, as recently witnessed by the call of the Bank of China governor for a standardised special drawing rights-type of global currency.

Reinvigorating the G8 is thus valuable, not only vis-à-vis the challenge of the more representative G20, but also in regard to privileging the bilateral track through a G2. Such a narrow duopoly of powers has problematic implications for global governance more generally. Moreover, it may be at odds with Chinese interests in that it elevates (and separates) China from membership in the global South.

An alternative for revamping the G8 draws on the original idea of the Italian-hosted G8 summit: showcasing a new and equitable partnership between the G8 and the emerging powers. To be sure, there are some risks in this approach, above all the prospect of polarisation between the established powers in the old G7 and the members of the so-called BRICs grouping of Brazil, Russia, India and China. Yet these appear to be worthwhile risks to contemplate. The relationship between the G8 and the major emerging powers has been nurtured via the Heiligendamm Process (HP) convened for a two-year period from 2007 to 2009. Although low-key and focused on specific issues, the HP has brought key changes, most notably the transition from outreach to a structured dialogue.

If the G8 is to differentiate itself from the G20's economic focus by acting as a catalyst on issues such as climate change and development, it is the configuration of G8-G5 (perhaps adding a Muslim-majority state, such as Egypt or Indonesia) that works best. This would prevent the loss of the structured dialogue built through the HP. Moreover, it allows flexibility. If, alternatively, the G20 fades after its strenuous activities as a crisis response committee, the G8 – with the representation from the big emerging economies – is well placed to deal with the core issues on the economic agenda. Either way, reinvigoration through focused and embedded reforms is required, not a patchwork of measures that dilute rather than reinforce the traditional strengths of the G8. ♦

A civil society

In advance of Italy's 2009 summit, the spectre of riots in Genoa highlights how G8 government and civil society synergies can break down

By Peter I Hajnal and Jenilee M Guebert, G8 Research Group

As the 2009 G8 leaders' summit unfolds, it is useful to recall the background to this event, as well as the preparations, on the part of both civil society and the Italian host government. This is the fifth summit in Italy: first as the G7, in Venice in 1980 and 1987; and in Naples in 1994; and then as the G8 with the full participation of Russia, in Genoa in 2001.

The ghost of Genoa still haunts the summit scene. The 2001 summit revealed the best and the worst in G8 government-civil society interaction. On the positive side, demonstrations – with an estimated participation of between 70,000 and 200,000 people – were largely peaceful. The Genoa Social Forum, an umbrella organisation of about 700 Italian, international and local non-governmental organisations (NGOs) and other groups, advocated for progress on debt relief, health and education and protested the excesses of globalisation. Civil society engaged in dialogue with the host government, including the foreign and interior ministers. Celebrities met with several G8 leaders. On the negative side, the Black Bloc (Tute Nere) and other



Demonstrators march peacefully at the 2001 G8 summit in Genoa

anarchists disrupted the demonstrations. The ensuing confrontation with inexperienced, combative police resulted in some 230 injuries, 280 arrests and the tragic death of one protestor.

Fast forward to 2008-09. The global economic and financial crisis struck with full force in the autumn of 2008. The leaders from the G20 countries met for the first time in Washington on 14-15 November 2008 and then again in London on 1-2 April 2009. Four days later, Italy's Abruzzo region was devastated by an earthquake. To help the region's economy, the Italian government, headed – as it was at the time of the Genoa Summit – by Prime Minister Silvio Berlusconi, announced a change of venue from the island of La Maddalena to Abruzzo, near the town of L'Aquila, which suffered great damage and loss of life from the earthquake. Another factor may well have been security concerns over La Maddalena location, which is vulnerable to attacks from the sea.

The financial and economic crisis has meant that NGOs and other groups, while still pushing G8 leaders to keep their promises on aid, health, development and the environment, are also feeling a massive strain on their resources. With the leap of the G20 process from finance ministers to leaders, civil society has another target institution for advocacy and monitoring. And the shift in G8 summit venue means changes in planning are already underway.

Despite these additional challenges, civil society remains very active. On 13 February 2009, in Rome, the second Global Health Forum brought together participants from government, business, academia, NGOs and the media, as well as Margaret Chan, director general of the World Health Organization. They prepared policy recommendations for the G8 in the hope of keeping health on the leaders' agenda. The recent outbreak of H1N1 influenza, which has turned into a global pandemic, increases the likelihood of this.

On 15-19 March, Milan's Bocconi University hosted the third annual G8 Youth Summit, with participants from 21 countries. On 19 March, leaders of farmers' unions from the G8 countries met for the first time to discuss hunger, food security, climate change and the economic crisis. The ideas from their meeting were incorporated into a document given to the G8 agriculture ministers at their own first-ever meeting a month later. It will also be presented to the leaders at their summit in July. Civil society has been involved in other G8 ministerial and meeting processes, as with the environment ministers' gathering on 22-24 April.

On 26-27 March, in Rome, delegations from national academies of science met for the fourth time, this year bringing together scientists from the G8 countries and the Group of Five (Brazil, China, India, Mexico and South Africa), as well as Egypt (participating for the first time as an observer, in anticipation of Italy's invitation to attend part of the L'Aquila Summit). The delegations discussed international migration trends and technologies for producing energy.

The Roma Civil G8, organised by the Municipality of Rome with the Italian prime minister's office and foreign ministry and the Global Coalition Against Poverty (GCAP) Italy, met in Rome on 4-5 May. All nine sherpas engaged in a dialogue with a small group



of civil society representatives in front of the entire forum of some 200 participants. NGOs presented the sherpas with a list of concerns regarding basic necessities, climate change and the environment, food and agriculture sovereignty, global governance and labour. The host sherpa expressed willingness to continue the dialogue in the run-up to the L'Aquila Summit. Italian foreign minister Franco Frattini considered involving the Civil G8 in the 11-12 June G8 development ministerial. GCAP Italy is pressing for NGO access to the G8 media centre. Such access has been a feature of some, but not all, recent G8 summits. Providing or denying access will be one test of the Italian host's willingness to engage with civil society.

Religious leaders have held two previous meetings in connection with G8 summits. The third was held in Rome on 16-17 June, where leaders from a variety of faith communities discussed the challenges of health, development and Africa, and issue a joint statement to the G8 leaders.

Other events include an indigenous peoples' summit, a G8 university summit and an alternative summit. In the lead-up to Japan's 2008 G8 summit in Hokkaido, all three such events occurred. It was anticipated that they would be followed up with similar formats in Italy in 2009, so they could contribute to the fruitful interaction between these diverse civil society groups and the official G8.

Public demonstrations at the L'Aquila Summit are likely: they have been a feature of summit-related

Italy's prime minister Silvio Berlusconi announced a change of venue from La Maddalena to Abruzzo, near the town of L'Aquila

“ Civil society can counter disruptive influences by self-policing and establishing distance from ‘uncivil’ elements ”

NGO activity for many years. They tend to be peaceful advocacy and protest. But the danger of small extremist groups disrupting such events or staging their own, sometimes violent, activities is also a real concern.

This is a great challenge, both to the host government and the vast majority of peaceful demonstrators. Civil society can counter such disruptive influences by self-policing and establishing a distance from ‘uncivil’ elements. The government, for its part, must ensure the democratic right of peaceful protest, while policing potential violence in a professional and sensitive way.

Both the Italian host government and participating civil society groups face great challenges this year. It is to be hoped that not only will they rise to these challenges but that they will also seize the opportunities for positive, fruitful interaction. ♦

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 October 2008 and returned to the House of Commons with a stronger minority. Before running for politics he served as a policy adviser for the Reform Party. Harper was first elected member of parliament in 1993. He served as leader of the opposition for a number

of 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 Harper, have two children. This will be the fourth G8 summit that Harper has attended. He is scheduled to host the next G8 summit in Muskoka, Ontario, on 25-27 June 2010.

France

Nicolas Sarkozy



Nicolas Sarkozy became president of France in May 2007, taking over from Jacques Chirac, who had held the position since 1995. Sarkozy worked as a lawyer while he pursued politics. From 1983 to 2002, he was mayor of Neuilly-sur-Seine. He has been president of the Union pour un Mouvement Populaire since 2004. During his time in parliament he has held a number of cabinet portfolios including minister of state of the economy, finance and

industry, minister of the budget and minister of the interior. Sarkozy was born in Paris on 28 January 1955 and received his law degree from the Université de Paris in 1978. He is married to Carla Bruni and has three children from his two previous marriages. This will be the third G8 summit that Sarkozy has attended. He is due to host the 2011 summit.

Germany

Angela Merkel



Angela Merkel became the first female chancellor of Germany on 22 November 2005, replacing Gerhard Schröder, who had been in power since 1998. Before entering politics Merkel worked as a researcher and physicist. She was first elected to the Bundestag in 1990 and has held the cabinet portfolios 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 the fourth G8 summit that Merkel has attended. She hosted the 2007 G8 summit in Heiligendamm.

Italy

Silvio Berlusconi



Silvio Berlusconi became prime minister of Italy for the fourth time after winning the April 2008 election. Before entering politics, he started his career as a building contractor. In 1980, he established Canale 5, the first private national television network in Italy. He also became a leading Italian publisher with Mondadori. In 1994 he resigned from Gruppo Fininvest in order to establish the political movement Forza Italia. In the same year, he

became president of the Council of Ministers for the first time. In June 2001 Berlusconi became prime minister again, an office he held until 2006. Born in Milan on 29 September 1936, he received his law degree from the University of Milan. He is married to Veronica Lario and has five children. This will be the seventh G8 summit that Berlusconi has attended and his third as host.

Japan

Taro Aso



Taro Aso became prime minister of Japan on 24 September 2008, replacing Yasuo Fukuda, who had held the position since September 2007. Before entering politics, Aso worked in mining. He was first elected to the House of Representatives in 1979 and has been re-elected eight times. He has served in a variety of positions in government, including minister of foreign affairs and minister of international affairs and communications. Aso was born

in Iizuka, Fukuoka, on 20 September 1940. He studied politics and economics at Gakushuin University, as well as Stanford University and the London School of Economics. He was also a member of the Japanese shooting team that competed at the 1976 Olympics. He is married to Chikako Aso and they have two children. This will be the first G8 summit that Aso has attended.

Russia

Dmitry Medvedev



Dmitry Medvedev became president of Russia on 7 May 2008, after winning the presidential election in March and replacing Vladimir Putin, whose term in office had expired. Before entering politics, Medvedev worked as a legal expert and lawyer. He was officially endorsed as a presidential candidate in December 2007, by Russia's largest political party, United Russia. Medvedev served as deputy prime minister from 2005 to 2008. He was born in

Leningrad (now St. Petersburg) on 14 September 1965 and earned a degree in law in 1987 and a doctorate in private law in 1990 from Leningrad State University. He is married to Svetlana Medvedeva and they have one child. This will be the second G8 summit that Medvedev has attended.

United Kingdom

Gordon Brown



Gordon Brown became prime minister of the United Kingdom of Great Britain and Northern Ireland in June 2007, three days after becoming leader of the Labour Party. He was first elected to parliament in 1983 as representative for Dunfermline East. Since 2005 he has been the representative for Kirkcaldy and Cowdenbeath, also in Scotland. Before entering politics he worked as a lecturer and journalist. He served as chancellor of the

exchequer from 1997 to 2007. Brown hosted the second G20 summit on 1-2 April 2009. Born in Govan, Glasgow, on 20 February 1951, he studied history at the University of Edinburgh and completed his doctorate in 1982. He and his wife, Sarah Brown, have two children. This will be the second G8 summit that Brown has attended.

United States of America

Barack Obama



Barack Obama became president of the United States on 20 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 his bachelor's degree from Columbia

University in 1983 and a law degree from Harvard University in 1991. Obama is married to Michelle Obama and they have two children. This will be the first G8 summit that Obama has attended. He is scheduled to host the third G20 summit in September 2009.

European Union

John Fredrik Reinfeldt



John Fredrik Reinfeldt has been prime minister of Sweden since October 2006. Sweden holds the six-month presidency of the European Council from 1 July to 31 December 2009, taking over from the Czech Republic's Mirek Topolánek one week before the LAquila Summit takes place. Reinfeldt has been a member of the Swedish parliament since 1991. Born in 1965 in Österhaninge, Stockholm Country, he graduated from Stockholm

University with a degree in business and economics. He is married to Filipa Reinfeldt and has three children. This will be the first G8 summit Reinfeldt has attended.

José Manuel Barroso



José Manuel Barroso became president of the European Commission on 23 November 2004. Previously, he was prime minister of Portugal from 2002 to 2004. Before entering politics Barroso 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 the fifth G8 summit he will attend.

China

Hu Jintao



Hu Jintao has been president of the People's Republic of China since March 2003. He replaced Jiang Zemin, who had held the position since 1989. Hu also serves as general secretary of the Communist Party of China's (CPC) Central Committee and chair of the Central Military Commission. Before entering politics he worked as an engineer. He joined the CPC in April 1964 and began working with the party in 1968. In 1992,

he was elected to the Standing Committee of the Political Bureau of the CPC Central Committee and was re-elected in 1997. He became vice-president of China in March 1998 and vice-chair of the Central Military Commission in 1999. In November 2002, Hu was elected general secretary of the CPC Central Committee. Born in Jiangyan, Jiangsu, on 21 December 1942, he received his engineering degree from Tsinghua University in 1965. He is married to Lui Yongqing and they have two children. This will be the sixth G8 summit that Hu has attended.

Brazil

Luiz Inácio Lula da Silva



Luiz Inácio Lula da Silva first assumed the office of the president in January 2003, after being elected in October 2002. He was re-elected in October 2006, extending his term until January 2011. Lula first ran for office in 1982 in the state of São Paulo and in 1986 was elected to congress. He did not run for re-election in 1990. Instead, he became more involved in the Workers' Party, where he continued to run for the office of president.

Lula was born in Caetés, Pernambuco, on 27 October 1945. He received no formal education and began working in a copper pressing factory at the age of 14. He became heavily involved in the workers unions at a young age. He is married to Marisa Leticia and has five children. This will be the sixth G8 summit that Lula has attended.

India

Manmohan Singh



Manmohan Singh became prime minister of India in May 2004, replacing Atal Bihari Vajpayee, who had held the position from 1998 to 2004 and also for a short period in 1996. Singh was re-elected in May 2009. Before entering into politics, Singh worked as an economist, including for the International Monetary Fund. He was governor of the Reserve Bank of India from 1982 to 1985. Singh was first elected to the upper house

of the Indian parliament in 1995. He was re-elected in 2001 and 2007 and has held cabinet positions including minister of finance and minister for external affairs. Singh also served as minister of finance from November 2008 to January 2009. He was born in Gah, Punjab (now known as Chakwal district, Pakistan), on 26 September 1932. He received his bachelor's and master's degrees from Punjab University in 1952 and 1954. He also received an additional undergraduate degree from Cambridge University in 1957 and a doctorate from Oxford University in 1962. He and his wife, Gursharan Kaur, have three children. This will be the fifth G8 summit that Singh has attended.

Mexico

Felipe Calderón Hinojosa



Felipe Calderón Hinojosa became president of Mexico in December 2006, replacing Vicente Fox, who had held the position since 2000. In his early twenties Calderón was president of the youth movement of the National Action Party. He later served as a local representative in the legislative assembly in the federal chamber of deputies. In 1995 he ran for governor of Michoacán. He served as secretary of energy from 2003 to 2004. Born

in Morelia, Michoacán, on 18 August 1962, he received his bachelor's degree in law from Escuela Libre de Derecho in Mexico City. He later received a master's degree in economics from the Instituto Tecnológico Autónomo de México, as well as a master's degree in public administration from Harvard University. He and his wife, Margarita Zavala, have three children. This will be the third G8 summit that Calderón has attended.

South Africa

Jacob Zuma



Jacob Zuma became president of South Africa on 9 May 2009, succeeding Petrus Kgalema Motlanthe, who had held the position since September 2008. Zuma joined the African National Congress (ANC) in 1958 and started serving on the ANC's National Executive in 1977. In 1994, he was elected National Chair of the ANC and chair of the ANC in KwaZulu-Natal. He was re-elected to the latter position in 1996 and selected as the deputy president

in December 1997. Zuma was appointed executive deputy president of South Africa in 1999 and held that position until 2005. He was elected ANC president at the end of 2007. Born on 12 April 1949, in Inkandla, KwaZulu-Natal Province, he has received numerous honorary degrees. He has three wives and several children. This will be the first G8 summit that Zuma has attended.

2008 Hokkaido-Toyako G8 Summit interim compliance report

By Allison Martell, Sarah Yun and Erin Fitzgerald, G8 Research Group, and Katya Gorbunova, State University Higher School of Economics G8 Research Centre, with Jenilee M Guebert, G8 Research Group

Each year since 1996, the G8 Research Group has produced a compliance report on the progress made by the G8 member countries in meeting the commitments issued by their leaders at the annual summit. Since 2002, the group has published both an interim report, timed to assess progress at the moment of the transition between one country's year as host and the next, and, subsequently, a final report issued just before the leaders meet at their annual summit. These reports, which monitor each country's efforts on a careful selection of the many commitments issued in the leaders' names at the summit, are intended to help make the work of the G8 more transparent and accessible, and to provide scientific data to enable the meaningful analysis of this unique and informal institution. The *2008 Final Compliance Report* will be published on the eve of the 2009 LAquila Summit, and will provide an analysis of the full year's performance since the 2008 summit.

For the *2008 Interim Compliance Report*, 20 priority commitments were selected from the total of 296 commitments identified by the G8 Research Group as having been made at the Hokkaido-Toyako Summit, hosted by Japan from 7 to 9 July 2008. The report is based on an analysis of compliance by G8 members and the European Union during the period from 10 July 2008 to 15 January 2009. This timeframe allows for an assessment of compliance approximately at the time of the transfer of the G8 presidency from Japan to Italy on 1 January 2009.

The 20 selected commitments include:

- four commitments from the G8 Leaders' Declaration on the World Economy;
- four commitments from the G8 Leaders' Declaration on the Environment and Climate Change;
- five commitments from the G8 Leaders' Declaration on Development and Africa;
- two commitments from the G8 Leaders' Declaration on Political Issues;

- two commitments from the G8 Leaders' Declaration on Global Food Security;
- two commitments from the G8 Leaders' Statement on Counter-Terrorism; and
- one commitment from the Declaration of the Leaders' Meeting of Major Economies on Energy Security and Climate Change

Scores are 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 is reserved for those countries that fail to comply or that take action that is directly opposite to the stated content of the commitment.

From July 2008 to January 2009, the G8 members and the EU received an average compliance score of +0.16. This score is substantially lower than interim scores in previous years: overall scores have never before dropped below +0.27. The 2008 interim score is also significantly lower than the 2007 interim compliance score of +0.33.

However, although average compliance scores are lower than in previous years, G8 members' rankings are roughly in line with past interim reports. The United Kingdom and United States are tied for first this year. This corresponds to past trends for the UK, which has historically placed first, but is substantially higher than the long-term average rank of the US, which is fourth. Both Italy and France are ranked the same this year and historically, ninth and seventh respectively. Canada, frequently in second place, is in fourth place. The EU is also in fourth place, one rank below its historical average. Germany is third this year, although it is fifth overall, and Japan is eighth this year and sixth overall. On average, Russia has been ranked eighth in past years; this year it is in sixth place.

The difference between the highest and lowest G8 member compliance scores is 0.67. This is lower than last year's gap of 0.74. It is also substantially smaller than the highest interim compliance gap of 0.90 after the 2005 Gleneagles Summit.

Overall compliance by commitment is almost evenly distributed from -1 to +1. Seven commitments were scored above +0.50, which is consistent with past years. Four commitments received a score of zero. The main difference between this report and past reports is the preponderance of commitments scored below zero. There are five scores below zero this year, compared to one last year and none the year before.

Three of Japan's priority issue areas going into the Hokkaido-Toyako Summit were climate change, the world economy and African development. Compliance scores on these priorities varied widely. Compliance with commitments drawn from the World Economy communiqué averaged a score of +0.64, well above the overall compliance score. Commitments on the environment and climate change also showed higher than average compliance, at +0.38. However, commitments on development and Africa show very low scores, averaging -0.28.

“ Although average compliance scores are lower than in previous years, G8 members' rankings are roughly in line with past interim reports ”

The full 2008 Interim Compliance Report, as well as past years' reports, are available at the G8 Information Centre at <www.g8.utoronto.ca/compliance> along with an explanation of the methodology for conducting these reports. The 2008 Final Compliance Report will also be available there. ♦

2008 Hokkaido-Toyako interim compliance scores

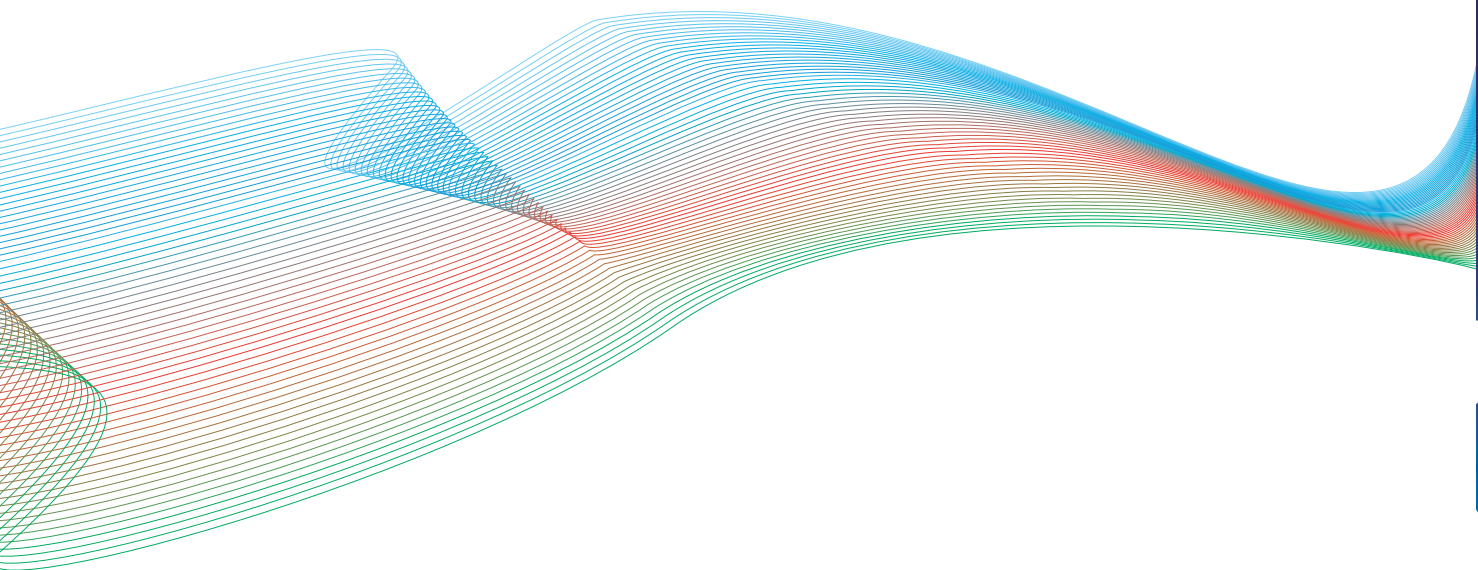
Commitment name	Canada	France	Germany	Italy	Japan	Russia	UK	US	EU	Average
Finance	+1	+1	+1	+1	0	+1	0	+1	0	0.67
Energy: efficiency and diversification	0	0	+1	+1	0	+1	+1	+1	+1	0.67
Intellectual property rights	0	0	+1	+1	+1	0	0	+1	+1	0.56
Corruption	+1	+1	0	0	0	+1	+1	+1	+1	0.67
Climate change: mid-term goals	+1	+1	+1	+1	-1	0	+1	-1	+1	0.44
Energy efficiency	-1	+1	0	0	-1	+1	+1	+1	+1	0.33
Climate change: CCS*	+1	-1	0	-1	+1	-1	-1	+1	+1	0.00
Biodiversity	+1	+1	+1	-1	+1	+1	+1	+1	+1	0.78
Africa: official development assistance	-1	-1	+1	-1	-1	0	-1	-1	-1	-0.67
Health systems and infectious diseases	+1	-1	+1	0	-1	-1	+1	+1	-1	0.00
Health: neglected tropical diseases	-1	-1	-1	-1	-1	-1	0	0	-1	-0.78
Education	-1	0	0	0	0	0	+1	-1	0	-0.11
Africa: trade	0	0	0	0	0	-1	+1	+1	0	0.11
Nonproliferation	0	-1	+1	-1	-1	+1	+1	0	0	0.00
Africa: peace support	+1	0	-1	-1	+1	0	+1	+1	0	0.22
Africa: food and agriculture	0	-1	+1	+1	0	-1	0	0	0	0.00
Biofuels	0	0	+1	-1	+1	+1	+1	+1	+1	0.56
Terrorism	0	-1	-1	0	-1	-1	-1	-1	0	-0.67
Regional security	0	0	0	-1	-1	0	0	+1	-1	-0.22
Climate change: developing countries	+1	+1	+1	-1	+1	0	+1	+1	0	0.56
Country average	0.20	-0.05	0.40	-0.20	-0.10	0.05	0.45	0.45	0.20	
2008 interim compliance average										0.16
2007 final compliance average	0.65	0.52	0.57	0.17	0.30	0.30	0.70	0.91	0.48	0.51
2007 interim compliance average	0.22	0.17	0.48	0.13	0.04	0.17	0.61	0.78	0.39	0.33

*CCS = carbon capture and storage



Accordia Global Health Foundation	102	India Tourism	57
African Development Bank (AFDB).	8	International Bank of Azerbaijan	2, 37
Alanod-Solar	96	IITA	140
African Medical and Research Foundation	122	Itaú	32
Banco Central do Brasil	40	Kuwait Fund for Arab Economic Development	58
Bank of Ghana	166	Lilly MDR-TB	110
BASF	114	Maestrale Green Energy	71
BG Group	196	Merloni Progetti	101
Central Bank Of Barbados	45	myclimate	89
CIGI	54	National Research Foundation.	112
CSIR Meraka Institute	181	Ontario	48
DONG Energy	90	Qatar Foundation	154
Eidesvik	85	Roche	108
Enel	95	RPS	92
ESA	72	Seacom	182
European Malaria Vaccine Initiative	116	Siemens	4
Evonik	80	Sparkle (Telecom Italia)	14
Fincorp	153	Standard Bank	136
Ford Foundation	118	Syngenta	134
G8 Research Group.	195	Tällberg Foundation.	66
Global Alliance for Improved Nutrition	31	TDR (WHO)	10
Global Bioenergy Partnership	65	Union Bank of Nigeria	162
Global Health Workforce Alliance	107	Vestergaard Frandsen	27
Halcrow	129	Viterra	130
Henkel	149	World Diabetes Foundation	124
IFDC	144	Yahsat	176

The International Bank of Azerbaijan is the leading financial institution in Azerbaijan and plays a vital role facilitating Azerbaijan's integration with the world economy



As a National Development Bank, IBA contributes significantly to the strength, stability and transparency of Azerbaijan's banking system and fundamentally supports Azerbaijan's socio-economic development.

IBA is a universal bank and full-service financial services firm that creates opportunities for enterprises, investors and individuals to realize their business visions within Azerbaijan and abroad. IBA offers world-class investment services and advanced technology solutions and has become the premier banking platform in the region.

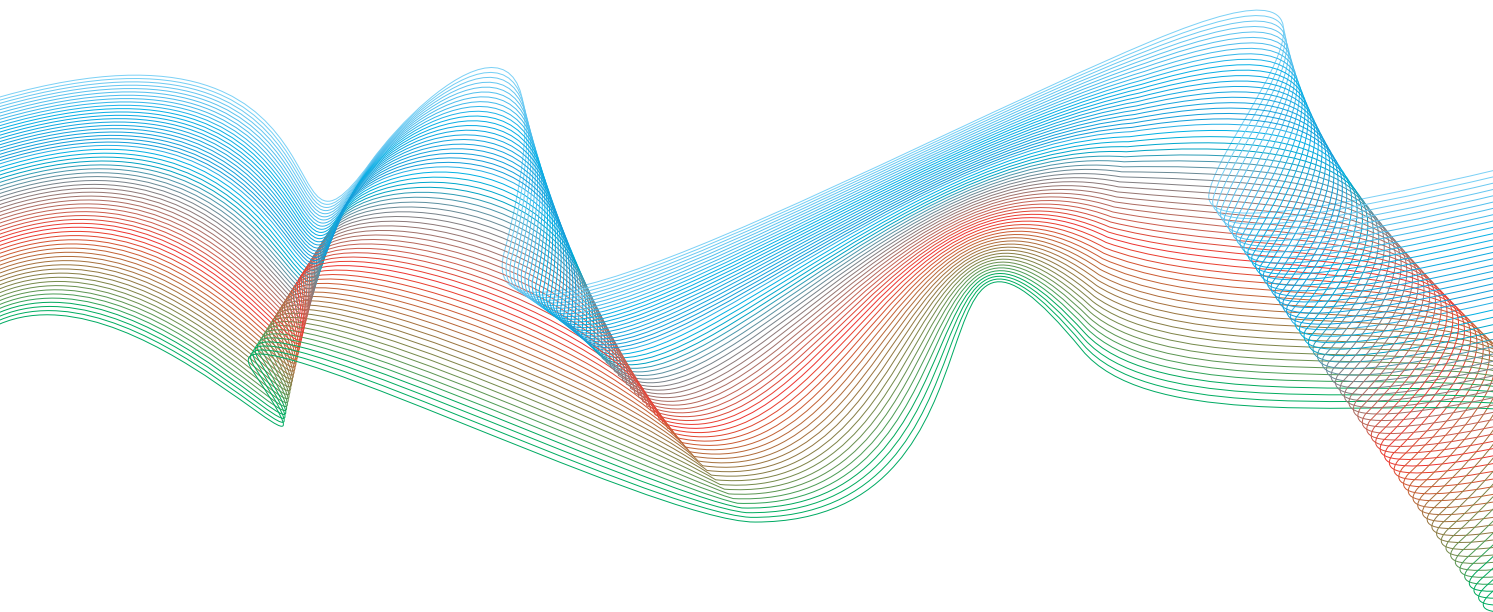
Achievements in 2008

- Total **assets** exceed \$5.2 billion
- IBA holds **24.5% of the total capital** in the national banking system and **41.8% of assets**
- **Loan portfolio** represents **42.6%** of total domestic volume
- Entrusted with **48.6%** of domestic **customer deposits**
- **Credit card** market share rose to **44.1%**
- **National service network** grew to 36 branches, more than 90 service divisions, over 600 ATMs (market share of **45.1%**) and 2500 POS-machines (market share of **45.7%**)
- IBA has the highest ratings in the national banking system: **Baa2** from **Moody's Investors Services** and **BB+** from **Fitch Ratings**, equivalent to Azerbaijan's sovereign rating



The Best Emerging Market Bank

THE INTERNATIONAL BANK OF AZERBAIJAN



The International Bank of Azerbaijan offers a wide range of global banking services through its headquarters in Baku, major subsidiary banks in the Russian Federation and the Republic of Georgia, and international offices in Frankfurt, London, Luxembourg, Dubai and New York.

The International Bank of Azerbaijan – Moscow

IBA-Moscow is a registered full-service bank in Russia founded in 2002 with 100% foreign capital. It maintains regional offices in Saint Petersburg and Ekaterinburg and provides a diversified range of banking services to international and domestic corporate and individual clients. In 2008 IBA-Moscow was nominated “Best Bank With Foreign Capital, Contributed Significantly to the Development of the Economy of Russia” by National Bank Magazine of Russia.

The International Bank of Azerbaijan – Georgia

IBA-Georgia is a registered full-service bank in Georgia that was founded in 2007 to provide a full range of banking and finance services.

The International Insurance Company

The International Insurance Company, is the leading insurance and reinsurance underwriter in Azerbaijan and has transformed the domestic market with a wide portfolio of innovative products and services. IIC was founded in 2002 and is a wholly-owned subsidiary of IBA.

AzeriCard

AzeriCard is the leading credit card provider and clearing agent in the Caucasus region. AzeriCard is the largest certified payment system provider partnering with VISA International, MasterCard International and American Express and serves 26 banks in Azerbaijan and abroad.



**THE INTERNATIONAL BANK
OF AZERBAIJAN**

67, Nizami Street, Baku, AZ1005; +994 12 493 0091; www.ibar.az

THE INTERNATIONAL BANK OF AZERBAIJAN

FUELLING CASPIAN GROWTH



THE INTERNATIONAL BANK OF AZERBAIJAN

The International Bank of Azerbaijan is the leading financial institution in Azerbaijan and plays a vital role facilitating Azerbaijan's integration with the world economy

The International Bank of Azerbaijan offers a wide range of global banking services through its headquarters in Baku, major subsidiary banks in the Russian Federation and the Republic of Georgia, and international offices in Frankfurt, London, Luxembourg, Dubai and New York.

The International Bank of Azerbaijan – Moscow

IBA-Moscow is a registered full-service bank in Russia founded in 2002 with 100% foreign capital. It maintains regional offices in Saint Petersburg and Ekaterinburg and provides a diversified range of banking services to international and domestic corporate and individual clients. In 2008 IBA-Moscow was nominated "Best Bank With Foreign Capital, Contributed Significantly to the Development of the Economy of Russia" by National Bank Magazine of Russia.

The International Bank of Azerbaijan – Georgia

IBA-Georgia is a registered full-service bank in Georgia that was founded in 2007 to provide a full range of banking and finance services.

The International Insurance Company

The International Insurance Company, is the leading insurance and reinsurance underwriter in Azerbaijan and has transformed the domestic market with a wide portfolio of innovative products and services. IIC was founded in 2002 and is a wholly-owned subsidiary of IBA.

AzeriCard

AzeriCard is the leading credit card provider and clearing agent in the Caucasus region. AzeriCard is the largest certified payment system provider partnering with VISA International, MasterCard International and American Express and serves 26 banks in Azerbaijan and abroad.

As a National Development Bank, IBA contributes significantly to the strength, stability and transparency of Azerbaijan's banking system and fundamentally supports Azerbaijan's socio-economic development.

IBA is a universal bank and full-service financial services firm that creates opportunities for enterprises, investors and individuals to realize their business visions within Azerbaijan and abroad. IBA offers world-class investment services and advanced technology solutions and has become the premier banking platform in the region.

Achievements in 2008

- Total **assets** exceed \$5.2 billion
- IBA holds **24.5% of the total capital** in the national banking system and **41.8% of assets**
- **Loan portfolio** represents **42.6%** of total domestic volume
- Entrusted with **48.6%** of domestic **customer deposits**
- **Credit card** market share rose to **44.1%**
- **National service network** grew to 36 branches, more than 90 service divisions, over 600 ATMs (market share of **45.1%**) and 2500 POS-machines (market share of **45.7%**)
- IBA has the highest ratings in the national banking system: **Baa2** from **Moody's Investors Services** and **BB+** from **Fitch Ratings**, equivalent to Azerbaijan's sovereign rating



THE INTERNATIONAL BANK
OF AZERBAIJAN

67, Nizami Street, Baku, AZ1005; +994 12 493 0091; www.ibar.az



GLOBAL
FINANCE
The Best Emerging Market Bank

G8 Research Group

Munk Centre for International Studies
at Trinity College in the University of Toronto

The G8 Research Group is a global network of scholars, students and professionals in the academic, research, media, business, non-governmental, governmental and intergovernmental communities. The G8RG follows the work of the G8 major market democracies and related institutions, such as the G7 and G20. Its mission is to serve as the world's leading independent source of information, analysis and research on the G8. Founded in 1987, the G8 Research Group is managed from the Munk Centre for International Studies at Trinity College in the University of Toronto, with regional offices in London, Tokyo, Paris, Rome, Moscow, Montreal, Mexico City, Beijing and Shanghai. It has Professional Advisory Council members, Special Advisors and participating researchers spanning the world.

The G8 Information Centre (www.g8.utoronto.ca)

The world's most comprehensive permanent collection of information and analysis on the G8 – available at no charge – including studies of G8 performance and compliance, the G8 Governance Working Paper series, the results of conferences, stakeholder consultations and fact sheets. Links to **G8 Live** (www.g8live.org), which has current news about the G8, and **G8 Online** (www.g8online.org), which has educational material, including video, audio and expert commentary on the G8 Summit and processes, aimed at university, college and high school users as well as the interested public.

Books on the G8 and Related Issues, from Ashgate

G8 against Transnational Organized Crime, Amandine Scherrer (Global Finance series)

Governing Global Derivatives, Chiara Oldani (Global Finance series)

Innovation in Global Health Governance, Andrew F. Cooper and John Kirton (Global Environmental Governance series)

Governing Global Health, Andrew F. Cooper, John Kirton and Ted Schrecker, eds. (Global Environmental Governance series)

The G8 System and the G20, Peter I. Hajnal (Global Finance series)

Financing Development, Michele Fratianni, John Kirton and Paolo Savona, eds. (Global Finance series)

Staying Together, Nicholas Bayne (G8 and Global Governance series)

The New Economic Diplomacy (2nd edition), Nicholas Bayne and Stephen Woolcock (Global Finance series)

Elements of the Euro Area, Jesper Berg, Mauro Grande and Francesco Paolo Mongelli (Global Finance series)

Corporate, Public and Global Governance, Michele Fratianni, Paolo Savona and John Kirton, eds. (Global Finance series)

Global Financial Crime, Donato Masciandaro (Global Finance series)

New Directions in Global Economic Governance, John Kirton and George von Furstenberg, eds. (G8 and Global Governance Series)

New Directions in Global Political Governance, John Kirton and Junichi Takase, eds. (G8 and Global Governance Series)

Governing Global Banking, Duncan Wood (Global Finance series)

New Perspectives on Global Governance, Michele Fratianni, John Kirton, Alan Rugman and Paolo Savona, eds. (Global Finance series)

These books and more are available from Ashgate Publishing at www.ashgate.com



In the energy business, strong working partnerships are the key to success. At every stage, from gas exploration to LNG delivery, we work closely with our partners. We share with them our technical expertise, employ local people, invest in their communities and work together to find the right markets to maximise the value of our partners' natural resources. Their potential, our expertise. It's a partnership you can rely on.

A world leader in natural gas

www.bg-group.com

Turning partnerships into prosperity

