Global Economy and Development at BROOKINGS

SCENE SETTER

INNOVATION AND TECHNOLOGY FOR DEVELOPMENT

Global development challenges are of massive scale: 2 million preventable infant deaths a year from pneumonia and diarrhea; 61 million children out of school and many more failing to learn basic literacy and numeracy skills; 850 million facing hunger; 1 billion living in slums; 1.3 billion without access to electricity; 1.5 billion living in conflict-affected states and 2.3 billion without any form of banking services. Yet remarkably little is understood about successful strategies for designing scalable solutions, the impediments to reaching scale or the most appropriate pathways for getting there.

One school of thought maintains that more credible evidence on successful interventions, underpinned by rigorous evaluations, will provide the information and confidence for development practitioners to move forward in concerted fashion. An example of that approach is the spread of conditional cash transfers from Mexico to other countries. Another school of thought reasons that scientists and innovators could quickly solve major development problems if they focused sufficient attention on the problems of the poor. The Green Revolution is an example of that approach. Overall, however, examples of either approach are few and far between.

A batch of new technologies offers the promise of a breakthrough by encouraging innovative business models, pushing down transaction costs and disintermediating complex activities. Mobile money could realistically reach over 1 billion poor people in the next decade and directly connect millions of rich individuals with millions of poor people. Real-time data can allow resources to be better targeted and managed. New media can sharpen accountability and reduce waste and overlap.

Additionally, there is convergence between the problems of rich countries and poor countries which sharply increases the resources made available for "development" problems. Technological advances in energy-saving and renewable resources, recycling, agricultural

yields, micro-irrigation, soil management, communications, e-government and many other fields are relevant to countries irrespective of their level of income. Developing countries are increasingly early adopters of new strategies such as mobile money, microfinance or frugal innovation, allowing them to leapfrog outdated technologies and business models of the West.

A further impetus is provided by the diverse range of institutions that are working to support technological innovation for development. Effective partnerships between researchers, financiers and propagators can transform new technologies and additional resources into solutions at scale.

The 2012 Brookings Blum Roundtable will examine how the potential of technology and innovation for development can be seized. By bringing together international thought leaders, entrepreneurs and practitioners to debate issues and exchange knowledge on development, the conference serves to promote innovation and best practice, advance policy debates and identify the most promising pathways for reform.

On the first day, discussions will begin by considering the role of recent innovations in changing the way in which global efforts to tackle poverty are forged: What kinds of interventions are attempted and how are interventions from different development actors organized? Participants will specifically look at the path to achieving universal access for mobile money among the world's poor as well as the implications of this service for the base of the pyramid market and for the design of social safety nets.

The second day will explore the ways digital networks are sharing and generating information to advance development. This includes understanding the role of social media, crowdsourcing and big data in supporting key development objectives such as transparency, accountability, inclusiveness and ownership. One area where technology and innovation are critical is the nexus of economic growth and environmental protection. Cultivating technical knowledge, supporting new business solutions and attracting finance remain daunting challenges in unleashing green growth and are areas where the need for more concerted effort from the development community is key.

On the final day, participants will examine the role of the public and private sector in supporting innovation. The private sector is recognized for its strengths: business model designs that can reach scale through market propagation and expertise in selection and valuing risk. Central issues include understanding the constraints to private sector involvement in base of the pyramid markets and, more broadly, private sector development in low-income countries. Even when constraints have been identified, whether governments are well placed to remove these through public interventions remains unclear. Participants will assess the appropriate scope for government and donor involvement, focusing on the U.S. government, which is committed to enhancing the role of technology in development and catalyzing the involvement of other U.S. actors. Critical recommendations for U.S. policy will be debated.

Over the three days, roundtable discussions will be complemented by a number of additional events on related topics, including the Aspen Institute hosted Madeleine K. Albright Global

Development Lecture, a public event held jointly with the Aspen Strategy Group, and lunch conversations with featured speakers.

The following sections provide an introduction to each of the six roundtable sessions. Individual policy briefs, as well as selected background readings, delve more deeply into each topic. Participants are asked to review these materials in advance of the sessions.

SESSION I: TRANSLATING TECHNOLOGICAL INNOVATIONS INTO TRANSFORMATIONAL IMPACT

Some of the greatest successes in global development—India's Green Revolution; stemming the spread of HIV/AIDS—have come about through the application of technology. Today, a combination of identification, communication and payment technologies augur the arrival of a new generation of solutions for reducing global poverty. However, translating technological innovations into transformational impact hinges on securing investment and establishing reliable delivery mechanisms to enable a transition to scale.

In this opening discussion, participants will explore the overarching questions for the roundtable.

Key Questions:

- *If the poor can readily be identified and if they have access to financial services and participate in technology-driven communication networks, how does this change the development paradigm?*
- *How can effective partnerships be forged to combine the efforts of different international and local actors (businesses, governments, foundations, NGOs, and universities) in propagating solutions?*
- *Can scalable technologies raise the profile and potential of new business models, approaches and partnerships?*

SESSION II: MOBILE MONEY AND MASS PAYMENTS

Mobile money represents one of the most exciting and potential-laden innovations in the developing world. Financial transactions are becoming less expensive and more convenient, secure and accessible, not only spurring financial inclusion, but also facilitating basic service delivery, social safety nets and the creation of countless new markets.

Key Questions:

- *Is the rapid uptake of mobile money/payment technology throughout the developing world assured and if not, what (or whom) are the impediments?*
- *What is required to enable successful mass payments systems that employ mobile money technology?*

- *What is the optimal role of government, non-profits and private actors in supporting mobile money services?*
- *How can mass payments systems be used to implement national safety nets?*

SESSION III: MASS NETWORKS—LEVERAGING INFORMATION FROM THE CROWD

Improving access to, the quality of and the timeliness of information can empower the poor and raise levels of public accountability in the developing world. Information-sharing is also driving efficiency gains in areas such as agriculture and health. New communication technologies have spawned virtual networks that support these goals through facilitating the exchange and aggregation of knowledge and opinions obtained through SMS, e-mail, the Web and Twitter.

Key Questions:

- *What are the most promising examples of using social media, crowdsourcing and "big data" to advance development and humanitarian outcomes?*
- *How can traditional foreign assistance make use of virtual networks to support transparency, democratic governance and improved service delivery?*
- *How can technologies be used to understand clients, promote beneficiary feedback and learning to fine tune business models in base of the pyramid markets?*

SESSION IV: INNOVATION AND TECHNOLOGY FOR GREEN GROWTH

The pivotal role of innovation and technology in delivering green growth was confirmed at this year's G-20 summit and the Rio +20 conference on sustainable development. Achieving sustainable and widespread prosperity for the world's 7 billion people depends on dramatically increasing the use of renewable energy and raising energy efficiency, especially in the developing world where energy use is projected to expand the fastest.

Key Questions:

- *How advanced is green growth technology vis-à-vis the scale and urgency of the global climate challenge?*
- *What is the role of pricing and intellectual property and push and pull mechanisms in speeding up propagation within developed and developing markets?*
- *How can the goal of "sustainable energy for all" be achieved, and is it feasible in all countries?*

SESSION V: BUSINESS SOLUTIONS AND PRIVATE SECTOR DEVELOPMENT

The private sector represents a rich source of ideas for solving many of today's development challenges. Entrepreneurship is a key driver of innovation, while market forces, where applicable, offer the quickest and most efficient means to deliver and disseminate solutions. Nevertheless, private sector interest is constrained by the presence of multiple market

failures and the narrow commercial opportunities that exist in low-income consumer markets.

Key Questions:

- *What role can the new breed of socially conscious private actors (e.g., social enterprises and impact investors) play in overcoming finance and delivery constraints and scaling up development impact?*
- *Where is the need for investment finance most acute, and who or what can fill these gaps?*
- *How are management approaches evolving to suit base of the pyramid markets?*
- *What are the impediments to the adoption or adaptation of scalable technologies by developing country enterprises, and are southern innovations being efficiently spread?*
- *What is constraining private sector development in Africa, and is technology a key bottleneck?*

SESSION VI: DELIVERING U.S. LEADERSHIP—ROLES FOR THE PUBLIC SECTOR

The U.S. government has long been a leading proponent of technology in addressing global development challenges. The Obama administration has sought to build on this tradition with the launch of a number of initiatives which seek to draw on the country's strength in scientific research and entrepreneurialism.

Key Questions:

- *What is an appropriate role for the U.S. government in promoting technological solutions for development and scaling these up?*
- *How should the government leverage new private sector players?*
- *What are the best examples of, and lessons learned from, earlier and on-going public private partnerships?*
- *How can the U.S. government work more effectively to support local innovation and technology in developing countries?*