

# Development divides and digital bridges: why ICT is key for achieving the MDGs



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The Millennium Development Goals (MDGs) encompass a set of ambitious international targets to reduce poverty and hunger, address child and maternal mortality, HIV/AIDS, malaria and TB, increase gender equality, access to education, clean water and sanitation, and reduce environmental degradation. They also include a global partnership for development focusing on measures related to trade, aid, debt and increasing access to the benefits of information and communication technologies – among other things. While the need for increased development finance to scale-up interventions and social and physical infrastructure has been acknowledged as being essential for achieving these objectives, the important role of information and communication technologies (ICT) in facilitating a more effective and transparent use of resources, scaling-up of services, and in catalysing learning, investment and trade, have not always been factored into MDG-related strategies. The upcoming World Summit in September 2005, the Commonwealth Heads of Government Meeting (CHOGM) and the second phase of the World Summit on the Information Society (WSIS) in November 2005 provide valuable opportunities to link the MDG, the ICT for Development and Connectivity agendas and to agree on priority actions for a more integrated approach to development moving forward.

The Millennium Development Goals (MDGs) encompass a set of ambitious time-bound targets to be achieved by 2015 that were set out in the Road Map towards the Implementation of the United Nations Millennium Declaration, had been adopted with unprecedented political support at the UN Millennium Summit in 2000. Since that time, progress has been made at the global level, particularly on the water and income poverty targets. Economic development, in parts of Asia, a region with significant numbers of poor people, has led to dramatic reductions in poverty rates, even as many still remain in poverty. Some of the other regions have been more challenged. The UN Millennium Development Goals Report 2005 points out that while there has been progress in many parts of sub-Saharan Africa, “growing numbers of people have failed to find productive employment opportunities and agriculture has stagnated, with HIV/AIDS taking a brutal toll on people”, many of them during their most productive years, with major impacts for the health, education and service sectors in the affected regions. For some of the other human development goals, the risks of falling behind are more pervasive.

Investments in the social sectors and economic growth, where it has helped to create opportunities for the poor, have been central to the progress made to date. On the other hand, the overhang of debt, adverse

commodity prices, trade-related measures that have worked to the detriment of the exports of developing countries, and restrictive fiscal ceilings have limited policy options and investments in developing countries. Achieving the MDGs requires rising above current growth rates, ensuring that the gains are more equitably distributed and substantially accelerating

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investments in healthcare, education and physical infrastructure – particularly in the poorer and underserved areas. This necessitates not just leveraging increased private sector investment, financial flows and development assistance, but also securing efficiencies, transparency and expanded capacities in the context of scaling-up and enhancing critical public sector service delivery and implementation.

These are all areas where the integration of information and communication technologies (ICT) is strategic, given its potential to facilitate complex planning processes, cross-sectoral coordination, increased information sharing, outreach and delivery of services; as well as because of the importance of its role in catalysing investment and innovation. ICT can assist in managing logistics and monitoring the impact of expanded distribution of life-saving drugs, addressing capacity gaps created in the wake of the HIV/AIDS pandemic, scaling up the delivery of educational content and teacher training, and enhancing rural extension, financial and business support services. And when the inter-linkages between the goals are taken into account and the role of ICT as a facilitator of integrated approaches and of cost-effective scalable solutions is built into the implementation strategy, the total implementation and operational costs are likely be

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considerably lower. To date, however, there has been a limited awareness of ICT's scaling-up and implementation potential among the broader development and policy-making community. To some extent this is a reflection as much of the 'development policy divide' as much as the 'digital divide' that exists in developing countries. Some of the key drivers and areas of focus that need to be addressed in the context of an integrated approach are outlined below.

### ICT is necessary for investment, livelihood support and entrepreneurship

ICT needs to be viewed as part of the set of core physical and social infrastructure investments necessary to facilitate the delivery of various types of services to attract private investment and catalyse development activities in different areas of the economy and to facilitate more broad-based access to the benefits of globalization. The report of the Secretary-General, *In Larger Freedom*, points out: "...without dynamic, growth-oriented economic policies supporting a healthy private sector capable of generating jobs, income and tax revenues over time, sustainable economic growth will not be achieved. This requires significantly increased investments in human capital and development-oriented infrastructure, such as energy, transport and communications."

The UN Millennium Project's *Investing in Development: A Practical Plan to Achieve the Millennium Development Goals* (2005) elaborates on this further: "If every city has a reliable electricity grid, competitive telecommunications, access to transport, accessible and

affordable housing for the poor, a water and sanitation system, and access to global markets through modern ports or roads, jobs and foreign investment will flow in – rather than educated workers flowing out. Investing in core infrastructure, human capital, and good governance thus accomplishes several things: • It converts subsistence farming to market-oriented farming. • It establishes the basis for private sector-led diversified exports and economic growth. • It enables a country to join the global division of labour in a productive way. • It sets the stage for technological advance and eventually for an innovation-based economy."

This is especially true for rural areas, where the vast majority of the world's population currently lives, and which tend to be greatly underserved by transport and other infrastructure. In such instances, ICT can help to compensate for some of these other infrastructure 'deficits'. For example, increased access to mobile telephony in Africa, public and private ICT-enabled service centres and kiosks in India and Brazil, and the village phone ladies in Bangladesh have enabled rural populations to save both time and money and grow their businesses. Where growth, or even survival, increasingly depends upon innovativeness, access to information about market trends and the ability to respond quickly, ICT becomes key. Local governments are beginning to see ICT as important not only for attracting external investment but also as a tool for coordinating local development efforts. In the case of the 'informal sector', ICT is also useful as the experience of the over 700,000-strong Self Employed Women's Association in India makes clear ICT is being used to strengthen poor women's empowerment and income generation strategies and to enable them to better access social support, microfinance and financial services.

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### ICT facilitates cost-effective public and private services

Rural populations, which are already relatively underserved in terms of infrastructure and services, have in recent years frequently seen a *decline* in access to various types of financial and social services, as attention has shifted to more well-to-do customers in urban areas; and public services delivered through traditional means have suffered on account of shortfalls in budgets. As initiatives from Fiji, South Africa, Bolivia and India demonstrate, ICT can be particularly useful since its use permits the low-cost delivery of financial (banking, credit and microfinance), business support and extension services that are critical for expanding economic activity,

and some of these might not otherwise be available. In the context of public support services, ICT can not only facilitate increased outreach but also a scaling-up of development activities through permitting 'joined-up' or integrated approach to the delivery of services. Joined-up approaches seek to benefit from a more effective use of public resources and attempt to make government services more accessible to citizens. According to the UK government's 2000 *e-government – A Strategic Framework for Public Services in the Information Age*, "People should not need to know which department or agency does what, or whether a function is exercised by central or local government" to get access to services and information. While savings from the use of ICT to facilitate coordination and better access to patient

Assistant Committee (DAC) review of ICT in Poverty Reduction Strategy Papers (PRSPs) suggest that while ICT is often mentioned as a priority, it is not comprehensively integrated into the poverty reduction priorities and programmes. There are also few systematic linkages between the poverty reduction strategies and the national e-strategies that many countries use to stimulate broad-based access to and use of ICT. More recently, UNDP has been working to support developing countries to integrate ICT into their national development strategies and also to enhance synergies with their e-strategies. Without such integration, there will be no impetus to move away from 'development as usual' or to secure financing for needed investments. For many developing countries the PRSP is both a major policy

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information in the delivery of healthcare are estimated to be very significant in many of the developed countries (for instance, various scholarly studies have put the cost of paperwork and administrative overhead at anywhere from 7.6% to 31% of the total cost of healthcare in the US), it is clear that even developing countries can use ICT to improve the quality of care and use the resulting savings to expand desperately needed coverage and outreach for prevention.

### ICT fosters effective use of development resources

Governments are also using ICT to facilitate a more effective use of development resources by fostering greater accountability, transparency and reducing corruption through better financial, public information management, procurement and administration systems. ICT is also key in the context of facilitating the types of multi-sector and cross-sectoral coordination and planning activities that are integral to the achievement of the MDGs. Further, to the use of ICT to enhance participatory democracy and interaction with citizens, who typically lack voice in the local, political policy and development processes that shape their lives is critical. The MDGs require not just efficiency in the use of resources but also the involvement of stakeholders to ensure that resources are allocated to areas of greatest need and development impact, and that relevant policies are initiated to enable these developments to take place.

### Development divides and digital bridges: what's needed?

#### Integration into MDG-based poverty reduction is required

The results of the Organisation for Economic Co-operation and Development (OECD)/Development

and financial instrument and inclusion in the PRSP is critical in signalling development priorities for funding.

#### Moving beyond a pure technology focus is critical

To the extent that ICT for development is viewed primarily through a technology or infrastructure lens, without sufficient recognition of the interplay between development use and infrastructure development or the need for a re-organisation of development and business processes, the results are predictable: ICT does not appear to be critical to development. Further, a number of analyses (e.g. by Richard Heeks, Robert Schware) have found that a large number of e-governance projects in developing and developing countries were 'doomed to failure' because they were merely the 'electronic versions' of existing and often dysfunctional economic models.

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#### Private and public sector actions are necessary

Transformations under way in the ICT landscape suggest that significant opportunities to address the digital divide are now at hand. Dynamic developments in the realm of the technology (e.g. wireless technologies and the convergence of voice and data platforms) and the greater involvement of the private sector have rapidly expanded the potential reach of ICT, including in some of the least developed countries, and helped to dramatically lower costs of access. For instance, the number of mobile phone subscribers in Africa has gone up from 2 million in 1998 to 82 million in 2004, according to the International Telecommunication

Union (ITU). However, while private sector investment has been critical for this success, inequities in the pattern of network expansion have also emerged. As indicated by the report of the UN-led Task Force on Financial Mechanisms for ICTD, and the Report of the World Bank on *Financing Information and Communication Infrastructure Needs in the Developing World: Public and Private Roles*, there is now an emerging recognition of the need for incentives for network development and for public financing to complement private sector

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investment, following the dramatic cutbacks in public and development financing for ICTD since the late 1990s. Many countries are deploying minimum-cost subsidies and/or innovative licensing policies are being deployed to create incentives for investment and provision of ICT services in areas of 'market failure'. Similarly in sub-Saharan Africa, which suffers from a major 'infrastructure deficit', a case is being made for seed or consortium financing to address market failure and facilitate coordination at the regional level. Further, expansion in telephony – important though it is – is not sufficient to leverage the full potential of ICT or to serve as an effective channel to deliver the range of services critical to development. Increased access needs to be matched by strengthened capacities, locally relevant content, increased ICT deployment in sectors that result in benefits for the poor, and development of solutions that can help local governments and communities to catalyse social and economic development activities in under-served areas.

#### **Without ICT, scaling-up to achieve the MDGs will not be practical**

There is a larger 'public good' argument that must be made for a development-focus on ICT for development. Increased access to knowledge, increased cooperation for peace and development, as well as many of the MDGs themselves, can be viewed as public goods. The benefits

from education for all, improved health outcomes and poverty reduction can be seen to accrue to people the world over in terms of increased wellbeing, mutually beneficial growth, potentially reduced costs for security and control of communicable disease. However, left to the market alone, investments necessary to secure basic education, particularly the education of girls or the provision of life-saving drugs, are not initiated in keeping with needs or the social benefits that can accrue. They require the concerted cooperation and partnership actions between public and private sector, and developing and developed countries. They also require a broad-based deployment of ICT tools and networks (which can also be seen as public goods in themselves) without which a scaling-up of the MDG agenda will not become a practical reality.

*The views expressed in this article do not necessarily represent the official position of UNDP.*

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