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Harnessing the use of ICTs towards the Millennium Development Goals
Session 2:
“New solutions for the needs of disadvantaged communities: The ICT villages”
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Addressing the disadvantage of women and girls in ICT and development
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I welcome the opportunity to participate in this panel on “New solutions for the needs of disadvantaged communities: The ICT villages”. I will speak on the need to ensure the full involvement in, and access to benefits of, ICT for women and girls as an important means to achieve the Millennium Development Goals (MDGs). ICT can provide enormous opportunities for promoting gender equality and empowerment of women (MDG3). However existing inequalities between women and men, in relation to education, access to and control over resources, employment, and involvement in decision-making, as well as inadequate safety and security in some contexts – all of which, in themselves are clear indications that the MDGS have not been achieved, have led to a gender digital divide where women and girls have unequal access to and benefit from, and less influence on ICT policies and programmes, than men and boys. Unless this gender digital divide is explicitly addressed, ICT may exacerbate existing disadvantage and inequalities between women and men and can even lead to new inequalities, for example in access to information and employment opportunities, and new forms of discrimination and violence.

Strong global framework on gender equality

A strong global framework for gender equality and empowerment of women is in place through the Beijing Platform for Action adopted in 1995, and the human rights treaty: The Convention on the Elimination of All Forms of Discrimination against Women (ratified by 185 States, as of April 2007).

The Millennium Declaration recognized that gender equality was essential for eradication of poverty, disease and hunger and for achieving development that is truly sustainable. One of the MDGS, Goal Three, is specifically focused on gender equality and empowerment of women, with a target on gender disparities in education and indicators on education, wage employment and representation in parliaments.

At the 2005 World Summit, world leaders declared that “*progress for women is progress for all*” – illustrating that none of the goals of development, human rights and peace and security can be achieved if equality between women and men is not ensured. Persistent gender inequalities involve a major development constraint.

Despite the common global framework, and the considerable efforts of many actors at national level, no country has yet achieved gender equality and empowerment of women.

Gender equality and ICT

Among the new challenges in a globalizing world, is systematically and effectively mobilizing the new information and communication technologies (ICT) in support of gender equality and women's empowerment.

In the context of the growing importance of information technology, in 2003 the Commission on the Status of Women discussed and adopted recommendations on women and ICT. It recognized that if existing gender disparities in access to and use of ICT were identified and eliminated, ICT could be a powerful catalyst for gender equality and empowerment of women.

The Declaration of Principles, adopted at the World Summit on the Information Society (WSIS) in 2003, also recognized that information and communication technologies provide enormous opportunities for women and that women should be key actors in the information society. The WSIS II, in 2005, recognized the gender digital divide in society and committed to overcoming this divide.

The Millennium Development Goals and gender equality

The Millennium Declaration and the MDGs provide an important unifying framework for the development activities of Member States and entities of the United Nations system. Non-governmental organizations have also embraced the opportunity the MDG framework provides to address the critical development goals of eradicating poverty, achieving universal primary education, promoting gender equality and empowerment of women, reducing child mortality and improving maternal health, combating HIV/AIDS, ensuring environmental sustainability and promoting global partnerships and solidarity.

While it is important to have one goal specifically focused on gender equality and empowerment of women, it is also essential to ensure that gender perspectives are incorporated into all other MDGs. Where the millennium development goals have not given explicit attention to gender equality it is important to ensure that gender perspectives are clearly addressed in concrete plans for implementation.

It is increasingly clear that unless sufficient attention is given to MDG3 on gender equality and empowerment of women, and to the gender perspectives in all other MDGs, none of the development goals in the MDGs can be achieved.

ICT and the Millennium Development Goals

ICT has potential to support the achievement of all the MDGs by facilitating the involvement of a broad range of stakeholders and increasing the inclusiveness of development processes. It facilitates communication and collaboration (networking) between stakeholders. It also provides tools for cost-effective and timely tracking of the achievement of the MDGs.

In recent years, e-governance has become a priority area of many governments resulting in the implementation of programmes that apply ICT in delivering government services and providing information to the public using electronic means, thus promoting transparency and accountability. E-governance uses new technologies to strengthen the public voice to revitalize democratic processes and public debate, and refocus the management, structure, and oversight of

government to better serve the public interest, all of which is central to the effective implementation of all the MDGs.

Linkages between MDGs, gender equality and ICT

Taking into account the importance of the MDG framework, the fact that gender equality is central to the achievement of all MDGs, and the potential of ICT to impact positively on social and economic development and on the achievement of the MDGs, it is critical to identify and build on the linkages between MDGs, gender equality and ICT.

ICT can support the achievement of MDG3 on gender equality and empowerment of women in many different ways. Access to ICT can enable women to gain a stronger voice in their communities, in their governments and at the global level. E-governance is significant for the exercise of citizenship and direct public participation in government activities, both of which are key elements in women's empowerment and achievement of gender equality. ICT can also offer new education, training and employment opportunities. Women's sustainable livelihoods can be enhanced through expanded access of women producers and traders to information and markets through ICT.

There is a growing body of evidence on the benefits of ICT for women's empowerment, through increasing their access to health, nutrition, education and other human development opportunities, such as political participation, as well as providing spaces and opportunities for interaction and sharing of information and experiences. ICT offers women flexibility in time and space, in relation to accessing information, education and training and employment, which can be of particular value to women who face social isolation, including many women in developing countries.

The advent of new technologies has also had a major impact on the information and communication work undertaken by the women's movement as they offer potential for innovative social interaction, including peer and bottom-up communication, and creative opportunities for the creation, reproduction and dissemination of information relevant for women. There are increased opportunities for national, regional and global distribution of women-generated news, much of which, in the past, was limited in outreach. The Internet has brought women's news and views into the public domain, with countless websites targeted specifically to women and focused on gender equality and empowerment of women.

Reducing disadvantage faced by women and girls

Despite all the positive potential linkages outlined, existing gender discrimination, for example, in labour markets, in education and training opportunities, and allocation of financial resources for entrepreneurship and business development, negatively impact on women's potential to fully utilize ICT for economic, social and political empowerment, thus constraining full implementation of the MDGs..

This session of the conference is specifically focused on finding solutions for meeting the needs of the disadvantaged. While the potential of ICT for stimulating economic growth, socio-economic development and effective governance is well recognized, the benefits of ICT have been unevenly distributed. A 'digital divide' - in terms of disadvantage in relation to resources and capabilities to access and effectively utilize ICT for development - exists within and between countries, regions, sectors and socio-economic groups.

The former UN Secretary-General, Kofi Annan, aptly referred to the digital divide as being comprised of several gaps. “There is a **technological** divide – great gaps in infrastructure. There is a **content** divide. A lot of web-based information is simply not relevant to the real needs of people. And nearly 70 per cent of the world’s websites are in English, at times crowding out local voices and views. There is a **gender** divide, with women and girls enjoying less access to information technology than men and boys. This can be true of rich and poor countries alike”.

The **gender digital divide** involves disadvantage in access to and use of ICT, opportunities to influence policy, programmes, content and resource allocations for ICT, and potential to benefit from employment and other opportunities. Factors that affect access to and use of ICT by both women and men, including technical infrastructure, connection costs, computer literacy, as well as poverty, illiteracy and language barriers, are particularly acute for women. Women are, for example, less likely to own communication assets, such as radios, mobile phones and computers, than men.

High illiteracy rates of women and girls and their lack of ICT training are two of the most serious barriers that prevent them from entering the information economy. Continuing gender gaps in education (MDG2), due to domestic responsibilities, lack of mobility and socio-cultural practices that downplay the importance of education of girls, constitute enormous challenges for women and girls. The under-representation of women in science and technology adds to the gender differences and inequalities in this field.

The development of **infrastructure** includes many decisions which are critical for women and girls – such as decisions about the location of facilities, the type of technology, and issues of costs and pricing. Failure to explicitly consider access for rural areas and poor and marginalized social groups can negatively influence access to and use of ICT by women.

One of the strategies to increase access of remote areas and marginalized groups to ICT is the development of **public access centres**, such as telecentres, information centres or cyber-cafes. Telecentres can be part of existing institutions – such as health centres, schools and community centres. In many cases, the location of and arrangements around public access centres are decided without considering the constraints for women and girls, such as inappropriate opening times (including evenings), security issues and lack of transport. The multiple responsibilities of women and girls may limit the time they have available to use such facilities. In addition, women tend to have less disposable income to spend on communications than men.

Many public ICT facilities become men-only spaces, effectively inhibiting women’s access. The availability of women support staff and trainers in these facilities can facilitate women’s and girls’ access and use of ICT resources. Other solutions proposed to increase access and use by women and girls include having women-only times at existing telecentres or developing women-only spaces in these centres.

- *There have been many positive examples of use of community telecentres to increase women’s access to and use of ICT in many Latin American countries, such as centres like the Somos@telecentros Virtual Community Project, coordinated by the Chasquinet Foundation of Ecuador and Proyecto LINCOS and SISCOM in Costa Rica.*

Facilitating women’s access to appropriate and relevant **content** is critical to ensuring that women can fully utilize the opportunities of ICT. Repackaging and supplementing information (downloading, simplifying, adapting information to local contexts and translating

into local languages), and documenting and uploading local information, is key to providing relevant information to many women, particularly in rural areas. Many ‘connected’ women – particularly in developing countries – act as bridges to unconnected groups in their communities by repackaging information they find online and sharing it through alternative communications channels and in different languages.

- *In Latin America, the women’s movement has made concerted efforts to produce relevant Spanish content on the Internet, for example through the “Women’s Agenda” portal in Argentina and the “Women Today” portal in Chile. The portals provide access to important information produced in the region on gender equality issues. Women can contribute directly to the contents of these portals.*

Investment in content development at the **local level**, based on local information needs, is key to increasing women’s access to and relevant use of ICT. Women, including poor women, should be recognized as information producers, and supported through the provision of relevant training in collecting, packaging and disseminating local knowledge.

Experience has shown that reaching women in developing countries, particularly in rural areas, is facilitated by using **multiple forms** of media and communications technologies, i.e. ensuring that new technologies, such as computers and the Internet, are combined with technologies that reach more women such as radio, television and print media.

- *A project in rural Malawi, Farmwise, used a computer database with a web-based interface and email facility to help women farmers access information needed to improve productivity. Requests for advice from farmers were sent by email to the advisers in the agricultural extension office and to presenters on “Farmers Radio” who provided advice to farmers.*
- *Radio FIRE in Costa Rica is a feminist radio on the Internet. The website contains the audios of the radio programmes as well as written information and a photo gallery of events where women are key actors. Radio FIRE supports the women’s movement in campaigns, for example on violence against women.*

Areas where efforts are needed to increase access to and benefits of ICT for women

ICT can provide **economic opportunities** by creating business and employment opportunities for women as owners/managers or employees of ICT related projects or business ventures; by creating an environment, including through training, where women feel comfortable to participate in community development activities and advocate for their needs and priorities; and by using ICT to enhance women’s economic empowerment (for example, through literacy programmes, business planning courses, ICT training, access to market and trading information services and e-commerce initiatives).

Many women are already active as software developers in emerging export markets, and employment opportunities exist in the field of network administration and maintenance. ICT education and training should be an area with high potential for women given their traditionally high representation in the education sector in many countries. New opportunities can also be found for women to be employed in innovative and non-traditional sectors, including e-commerce and other ICT-enabled businesses, such as marketing of telecommunications and Internet services.

- *For example, in Ghana, a large number of women-owned businesses sell fax, e-mail and telephone services to a largely female clientele of small entrepreneurs and traders.*

Research on **employment** opportunities for women related to ICT has, however, indicated that patterns of gender segregation are being reproduced in the information economy with women concentrated in end-user, lower-skilled ICT jobs related to word processing and data entry while men dominate in more senior managerial, administration and design of networks, operating systems and software.

Internationally outsourced jobs, such as medical transcription work or software services, have made a considerable difference to women's work opportunities in developing countries. In the information technology sector, however, women make up a small percentage of managerial, maintenance, and design personnel in networks, operating systems and software. Little data is available on women's participation in computer science, engineering research and employment in the private sector as well as in research institutions.

ICT can support small-scale **entrepreneurship** among women and assist poor women to improve the economic return of their traditional activities. Using the Internet, mobile telephony or satellite based radio, women can access and share valuable information, for example on markets. E-commerce initiatives can link women producers and traders directly to markets, allowing them to bypass and exploitative middlemen and local structures. Using CD-ROMs and distance learning, they can access training which improves their productivity and the quality of products.

- *In Guyana, a women weavers' cooperative used the Internet to market hand-crafted hammocks, resulting in a very high income by local standards.*
- *In Argentina, the non-governmental organization PROMEDU trained young women from a poor rural community in the use of ICT for improving the design and marketing of handicrafts, which helped them increase their sales.*
- *The Self-Employed Women's Association (SEWA) of India supports an artisan handicraft network of 5000 women who use village mobile phones to access market information.*

Although ICT have not yet had a significant impact on creating employment and generating income for very poor and marginalized women, particularly in rural areas, there is potential through increasing their engagement with ICT to expand social networks and introduce new modes of learning which can play a key role in overcoming poverty in the future.

ICT can facilitate the gender-sensitive achievement of MDG 2 on **education**, including through distance learning. Traditional ICT, such as radio and television, can be used to convey messages on the importance of primary school attendance, particularly in areas with strong social or cultural barriers to girls' attendance at school.

In many developing countries, computers are being introduced in schools as a tool to support the learning process. Gender-sensitive planning of ICT interventions is a precondition to ensure equal access and effective use of computers in the classroom environment by girls. Research has shown that classrooms are not free from gender bias. Proposed measures to correct this include encouraging schools to develop 'fair use' policies in computer labs, conducting gender sensitivity sessions for both teachers and students and advocating for reduced after-school duties of girls to give them more time.

- *A study of schools in Uganda and Ghana found that girls did not enjoy equitable access to computer labs. High student-to-computer ratios, alongside first-come, first-served policies, disadvantaged girls who are typically heavily outnumbered by boys at the secondary level. Girls also had earlier curfew hours and domestic responsibilities that limited their access time.*

ICT can play an important role in achieving the **health**-related MDGs. ICT - both traditional (radio, TV, video, CD) and new (wireless, Internet) - have enabled cost-effective distance consultation and diagnosis, access to medical information and coordination of research.

ICT have potential for delivering locally-adapted health information to women through community access points. There has, however, been too little attention given to how ICT can directly address women's health concerns, or how they can build on women's roles at household and community levels as the primary users and disseminators of health information. Some successful efforts have been undertaken by health promoters to use radio and other technologies (for example, email, online newsletters and listservs) to effectively disseminate information related to women's health, including sexual and reproductive rights and health.

- *UNFPA, in collaboration with Uganda's Ministry of Health and Population and district authorities, initiated the project (RESCUER) to reduce high maternal mortality rates. The project utilized high frequency radios and walkie-talkies which allowed rural health personnel to reach patients and provide advice even when transport was not available.*

ICT can help women in **HIV/AIDS** affected households. In Africa where AIDS remains a major problem, women and girls often bear the brunt of the pandemic in terms of both their vulnerability to infection and their responsibility for caring for HIV/AIDS victims and for the survival of families. Women are constrained in these roles by lack of inheritance and property rights, unemployment, inadequate access to and control over resources, and poor health, including malnutrition. ICT-based projects have focused on providing information on health and nutrition and on ways to care for people living with AIDS and become economically and socially empowered.

- *A community-based informal learning centres in Kenya organized a community radio network and provided training in the use of audio and video recording equipment, photography, drama and traditional storytelling to enable women to exchange information on health, nutrition, caring and income generation, and to raise public awareness about HIV/AIDS.*

Experiences from all regions illustrate the development of creative approaches to using ICT as a tool for promoting women's **participation and empowerment** at local, regional and national levels.

- *The Multimedia Caravan project in Senegal provided rural women with the opportunity to develop their own ideas on how ICT can be used to further their development needs and goals.*
- *In Uganda, the Uganda Media Women's Association established a radio programme – Mama FM – where women can actively participate and learn about development issues such as human rights, children, governance, nutrition, health, among others.*
- *In Poland, the Network of East-West Women disseminated information to enhance women's participation in the European Union accession process in European Union candidate countries.*

In most countries, women are seriously under-represented in ICT **decision-making** structures including policy and regulatory institutions and ministries responsible for ICT. Women are underrepresented on the boards and senior management of IT companies, policy and regulatory organizations, technical standard-setting organizations, industry and professional organizations and within government bodies working in this area. This presents a serious constraint to influencing policies, programmes and resource allocation and thus hinders effective action by national machineries to identify and address the gender digital divides in their countries.

In all areas, training is needed to build the capacity of women to access and use new ICT, including through training for ICT-related jobs, as well as training for women in using ICT in their professions. That women have an interest in this type of training can be illustrated by the fact that women have outnumbered men in ICT-based training for teachers via distance learning in many countries. Training is also needed on ICT policies and regulations to allow women to participate more actively in national-level decision making on ICT. Many creative initiatives have been undertaken to increase women's access to training on ICT.

- *In Afghanistan, for example, the Ministry for Women's Affairs, in collaboration with United Nations Development Programme (UNDP), established a computer training centre for women.*
- *An InfoDev project, implemented by Cisco Systems and the United Nations Economic Commission for Africa (ECA) awards scholarships for young African women for training in Internet networking. The programme includes training on gender equality.*

In 2003, the Commission on the Status of Women recommended strengthening the capacity of **national machineries** for the advancement of women to effectively utilize ICT and become involved in national, regional and international processes related to ICT, through the allocation of resources and the provision of technical expertise.

National machineries play an important role in advocating for, supporting and monitoring implementation of MDG3 and for the mainstreaming of gender perspectives into all other MDGs. However, they continue to face many constraints to implementing their work effectively, including in relation to mandates, power and resources. These constraints are reflected in access to, utilization of, and benefits from ICT, particularly in Africa.

The Division for the Advancement of Women, carried out a technical assistance project to develop the capacity of national machineries to take full advantage of new information and communications technologies to enhance their effectiveness in national policy-making and planning processes for gender equality, including in relation to implementation of the MDGs. This involved using ICT to strengthen networking, information sharing, and knowledge management. The project resulted in the establishment of a regional e-network for national machineries in Africa in December 2006, which includes a portal with information on all national machineries and opportunities for exchange of information and experiences through a general discussion list and through regular moderated substantive discussions on different themes.

The project, however, identified a number of critical constraints faced by national machineries in Africa, including: insufficient and adequate equipment and facilities, including lack of electricity/power supply and limited or no internet connection; insufficient training and human resources; a lack of financial resources for training and equipment purchase, particularly in the start up period; and the high cost of internet connection. Sustainability was also a major concern because of uncertain funding and high staff turnover. It is critical to address these constraints to ensure that the national machineries can play the intended key role in the achievement of MDG3, and in identifying and addressing the gender digital divide in their countries.

Recognizing the disadvantage and inequality faced by women and girls in relation to ICT, and finding creative ways to overcome the barriers to their full participation and benefit, is essential for ensuring that the MDGs can be achieved. An essential starting point is to ensure that in all efforts to use ICT to support achievement of the MDGs, the gender perspectives – the needs, priorities and contributions of women as well as men – are identified and explicitly

addressing them in research, data collection and analysis, and development of policies, strategies and programmes as well as in resource allocations and in monitoring and evaluation activities.