

# The Task Force on Gender Issues – A Catalyst for the Sustainable Development of Information and Communication Technologies (ICTs)

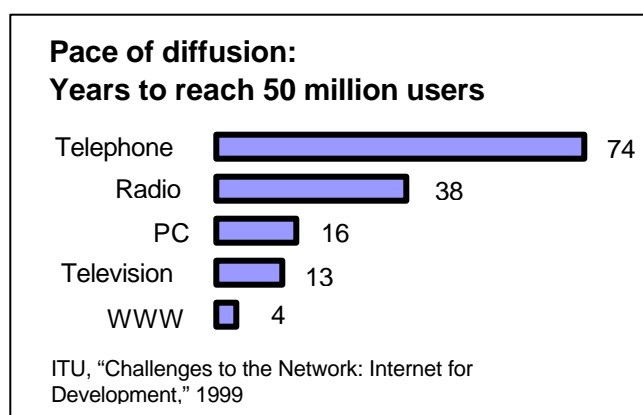
## 1. The Challenge: ICTs for all people

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### 1.1 The Great Potential of ICTs

Today, information can travel around the world instantaneously through networks comprising technologies as diverse as telephones, radio broadcasting, and the Internet. It is difficult to ignore the possibilities for future economic, social, and political structures as this network grows at an unprecedented pace. It took 74 years for the telephone to reach 50 million users, while the Internet took a mere 4 years to reach just as many.<sup>1</sup> Globally the information technology sector is expanding at twice the rate of the world economy.<sup>2</sup>

We are now at a critical moment to ensure that these technologies will improve our quality of life. Many declare the benefits for economic development – employment growth in new sectors and access to markets previously unavailable. However, we must not ignore the benefits of ICTs for human development. ICTs have the potential – and have already been used – to improve education, advance the delivery of medicine, enhance political empowerment, assist in environmental monitoring and maintenance, and help protect human rights. Regardless of the application, ICTs offer great promise by allowing people to learn from each other through the sharing of best practices and lessons learned.



### 1.2 The Gender Gap

However, not everyone has access to these potential benefits. High-income countries contain 90 percent of the world's Internet hosts, but only 16 percent of the world's population.<sup>3</sup> New York City has more Internet hosts than all of Africa.<sup>4</sup>

This digital divide that threatens to increase the inequalities between the rich and poor, educated and uneducated, also threatens to increase the divide between the sexes.<sup>5</sup> Although women have just broken the 50 percent mark as users of the Internet in the U.S.,<sup>6</sup> in virtually all other countries women use ICTs less extensively than men, accounting for 19 percent of users in South Africa, 13 percent in the Netherlands, and 8 percent in China.<sup>7</sup> Women are even more limited as producers of ICTs. A small percentage of women receive technical education and training, a smaller proportion of women work in technology related jobs, and even fewer hold high-level positions within the technology sector. Not only must women participate in the information revolution at an equal level with men, but strategies must be pursued to ensure ICTs are not used to exacerbate gender inequalities, and instead used to overcome them.<sup>8</sup>

### 1.3 Everyone Benefits from Closing the Gender Gap

Increasing women's participation in the ICT sector benefits not only women, but society as a whole. In her address to the High Level Panel of ECOSOC, Noeleen Heyzer, director of UNIFEM, stated, "We've discovered that when development programmes include women through micro-credit, education and health, children, communities and countries benefit."<sup>9</sup> The World Bank has discovered another advantage of greater gender equality. Decreasing disparities between the sexes results in faster economic growth.<sup>10</sup>

Programmes excluding half the population deprive the ICT sector of crucial resources, guaranteeing an ineffective, unsustainable, and inefficient result.

### 1.4 Purpose of the Report

The ITU Task Force on Gender Issues was created with the mandate to ensure "that the benefits of telecommunication and the emerging information society are made available to all women and men in developing countries on a fair and equitable basis."<sup>11</sup> With representatives from the public and private sector and experts representing both international and local interests, the TFGI can serve as a catalyst for expanding opportunities to women previously left out of this rapidly expanding sector.

The purpose of this report is to compile the most recent information by ICT specialists in the area of gender and development. TFGI members can use this summary of current activities, strategies, and recommendations as a resource for their work in ICTs and development in their own countries and organizations.

#### Gender Issues Can Undermine ICT Development

Lethen is a rural village of 2,000 people in Southern Guyana. Until two years ago the village had no phones. Then, the indigenous women revived the ancient art of hand-weaving large hammocks. Through the installation of \$12,000 in computer equipment, including two telephone lines, Internet access, desktop computer, and scanner, and the training of a local woman as an Internet specialist, the Weavers Society sold 17 hammocks last year at a price of \$1000 piece. When male community leaders discovered their success, they took control of the weavers' organization. As a result, the Internet specialist quit and the organization has been struggling ever since. A weaver, Violet Eusebio, commented, "we women do most of the work, and the men get rewarded."

Simon Romero, "Weavers Go Dot-Com, and Elders Move In," New York Times, March 28, 2000/From Noeleen Heyzer's presentation to the High level segment of ECOSOC, New York 7 July 2000

## 2. Effective Strategies and Challenges

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The three C's – *connectivity, content, and capacity* – encompass the major initiatives surrounding ICT development.<sup>12</sup> *Connectivity* deals with issues surrounding universal access to ICTs. *Content* examines the information that is available from these media networks. *Capacity* involves creating strategies for the most productive and effective use of ICTs. Each of these areas poses specific challenges to women. The following section will examine each area for concerns of gender equality in the ICT sector, strategies for improvement, and particular challenges in which solutions are yet to be found.

### 2.1 Connectivity

Every new user of ICTs increases the value of ICTs for everyone already connected. Each new user offers information and experience – someone with whom to communicate. As the network grows, we must ensure that women are not left out. Illiteracy, limited resources, isolated location, and time constraints can all limit access to technology that appears gender neutral. These barriers must be overcome with new techniques, new technology, or women's overcoming these barriers to achieve universal access for both men and women.

#### 2.1.1 Literacy

Illiteracy limits women's access to text-based computer applications, because women make up "nearly two thirds of the world's 876 million illiterates"<sup>13</sup> Achieving universal access requires strategies to make ICTs easier to use by people who cannot read.

Strategies

- **Increase availability of "scribes" for dictation at telecenters** - In some telecenters, assistants type email messages while the user dictates – facilitating the use of text-based applications such as email.
- **Develop human computer interfaces that are non-text based** - The development of new technologies, such as iconographic software or voice-recognition,<sup>14</sup> will facilitate illiterate users to access the Internet independently, possibly "without touching a keyboard or using a mouse."<sup>15</sup>
- **Use ICTs to help improve literacy** – ICTs usually require a sufficient level of literacy before they can be used. However, properly designed technology could be developed to support literacy education, which could also teach computer skills simultaneously.

#### 2.1.2 Cost

Women often have access to fewer resources than men. Three-fifths of the world's one billion poor are women, and the recent Beijing Plus Five Conference emphasized and documented the significant gender inequalities of resource access.<sup>16</sup> As a result, women's access to ICTs is more dependent on the cost of the services, requiring a coordinated public response and appropriate private pricing schemes that ensure women are not systematically excluded. The Report of the High Level Panel of Experts in April 2000 calls for reducing the cost of access by a factor of five from the beginning of 2000 to the end of 2001.<sup>17</sup>

Strategies

- **Use public resources and regulation to ensure affordable access to ICTs** – The public sector can assist those with limited resources to obtain access. Increasing the efficiency of the public sector could be used to help justify any significant public investment.<sup>18</sup>
- **Public access for collective use** – ICT facilities can become accessible and commercially viable if used on a collective basis.<sup>19</sup>

- **Link ICTs with more widely available forms of media**<sup>20</sup> - Traditional media, such as the radio, is still the primary source of information for millions of people.<sup>21</sup> Initiatives linking traditional media to new technologies can take advantage of existing media networks to meet the needs of communities where new ICTs are not yet available.<sup>22</sup>

#### Connecting to the Internet Using Traditional Media

In Sri Lanka and Mongolia, local populations have gained access to information on the Internet through community radio networks. The radio station uses facilitators to search the Internet for information sought by local communities, and broadcasts the information in their language.

UNU/INTECH and UNIFEM, "Gender and Telecommunications: An Agenda for Policy"

### 2.1.3 The Rural/Urban Divide

Rural areas often lack the resources and infrastructure for ICTs in which women comprise 60% of the population.<sup>23</sup> Without an improvement in rural access, women may be at a greater disadvantage than men to connect to ICTs. ICTs can improve the quality of life in rural areas through increased inclusion to the national economy, greater access to government services online, and an enhanced sense of belonging that could discourage excessive migration to urban centres.<sup>24</sup>

#### Strategy

- **Target resources for rural development** - Many initiatives are implemented in urban areas because these areas have a more developed infrastructure. Resources should be provided for the development of programmes in rural locations, as well as for the development of new technologies that function outside of the traditional infrastructure. For example, "the non-availability of energy grids in many developing countries calls for solar- or dynamo- driven computers and hardware. Likewise equipment must be able to withstand the impact of sand, humidity, and other external influences."<sup>25</sup>

#### Design of Telecenters for Rural Development

Tel@Bureau uses wireless, satellite, and solar power technologies as a solution to create access in rural areas without the traditional telecommunications infrastructure. The mobile units are designed to be portable and durable for overland transport.

In February 2000, the ITU/BDT and WorldSpace introduced the first WorldSpace mobile telekiosk in Mali, using as Société des télécommunications du Mali (SOTELMA) as the telecommunications partner. The mobile telekiosk provides basic telecommunications and Worldspace broadcasting services to populations in rural areas. Surveys of the market and the needs of the population will determine requirements for four fixed telekiosks now under construction in designated villages.

Both projects focus on women as owners of the telecommunications services to improve women's advancement in telecommunications and society.

[www.telabureau.com](http://www.telabureau.com) and ITU News 8/99

### 2.1.4 Challenges to Connectivity

In order to gauge the progress of efforts to achieve universal access, methods should be developed for monitoring women's progress in the ICT sector, including a system to collect data and calculate development indicators disaggregated by sex.

## 2.2 Content

As the proportion of people with access to ICT continues to grow, greater attention needs to be given to the type of information made available through these networks. Strategies that assist women's capacity to generate content available over ICT networks can support a positive cycle of development. Women's participation depends on the availability of content that reflects women's interests – and content available on the web depends on the contribution of women. Content on the web must reflect the diversity of the world's population.

### 2.2.1 Promoting Human Development

The design, production, and use of ICTs should extend to meet the needs of human development. Human development applications represent only a small fraction of total spending on ICT research and development.<sup>26</sup>

#### Strategies

- **Target research and development to ICT applications that serve social and development objectives**<sup>27</sup> Initiatives applying ICT technology to human development result in significant benefits to both women and men.
- **Use human development applications as entry points for the diffusion of ICTs** - Early support for ICT initiatives can be gained through applications such as education, health, and public administration.<sup>28</sup>

### 2.2.2 Limiting Negative Portrayals of Women

ICTs have been used to perpetuate negative and degrading images of women, often through pornography or heavily stereotyped presentations.<sup>29</sup>

#### Strategy

- **Use media networks to combat the negative portrayal of women** - The networks that perpetuate the negative portrayal of women can also be used to combat these same stereotypes. Networks have been used to anonymously identify criminals involved in sex trafficking and to develop campaigns to battle negative gender roles.

### 2.2.3 Challenges to Content

As the majority of users remain from privileged communities, the content of the web will likely reflect the knowledge and perspectives represented exclusively by these communities. Vigilant effort is required to monitor information flow, ensure that women's voices – especially rural women – are heard in the emerging global community, and legally protect the knowledge shared.

## 2.3 Capacity

The continuous growth of the ICT sector requires enormous amounts of human resources that can only be provided by the efforts of both men and women. John Morgridge, Chairman of the Board of Cisco Systems, states, "In this Information Age, network administrators are essential to the success of almost all businesses, yet most companies are shaking the bushes to find enough people with the right skills to address the demand."<sup>30</sup> Women and girls must be trained to meet the demand, however a limited number of women and girls plan for a career in new ICTs. "The International Association for the Evaluation of Educational Achievement (IEA) found that in every country men outnumbered women by about three to one among those planning a career in computer or information sciences."<sup>31</sup> Training, increased representation of women in high-level decision-making, and effective resource allocation will help to ensure women's contribution to the ICT sector.

### 2.3.1 Training

Despite the increase of women's enrolment in higher education in most parts of the world, some areas of study, particularly technical areas, are still dominated by men.<sup>32</sup> "Women are a minority among third-level mathematics and computer science students in all but 16 of the 97 countries for which data are available."<sup>33</sup> Women's participation in new technology-based telecommunications depends on removing social pressures that limit women and girls participation in these areas as well as discriminatory practices in education and training.<sup>34</sup>

#### Strategies

- **Provide ICT training for women and girls in a supportive educational environment** - Training should offer a wide range of technical skills along with complementary skills, such as literacy,

business management, or capacity training.<sup>35</sup> The learning environment should facilitate women's involvement by offering skills that are relevant and useful, by offering classes that offer childcare or the participation of children, and by providing women-only classes for those cultures where women are limited in their contact with men.<sup>36</sup> The High Level Panel of Experts for ECOSOC call for a "tenfold increase in national training and education budgets for ICTs by end of 2001 compared with the beginning of 2000" which must include specific targets and the allocation of resources by gender.

- **Train women and girls as ICT trainers** - The High Level Panel of Experts recommended to ECOSOC in April 2000 to "mobilize 30,000 new ICT trainers, primarily from developing countries for training programs". Women must be included as trainers to help define ICT training curriculum and provide leadership and visibility for aspiring ICT experts.
- **Use remote learning to include women** – Distance learning assists those who do not have the resources or the mobility to obtain education at distant institutions – both which primarily affect women.

### 2.3.2 Involvement in decision-making

Research indicates that women are under-represented in the upper level of the telecommunications employment pyramid.<sup>37</sup> In mass media, "women account for 33 percent of journalists", but "hold only 8 percent of higher decision making positions."<sup>38</sup> Women's participation at high levels in the new technology-based sectors is estimated to be even less. Without participation in decision making roles, women not only lose out on the benefits as users, but also the ability as producers to create those benefits. Studies have shown that the representation of women in high-level positions must reach at least 30% for the effects of women in these positions to have an impact.<sup>39</sup>

#### Strategies

- **Encourage policies that support gender-equal recruitment and retention in ICT companies**- Effective corporate and national policies, such as guidelines for hiring practices or sexual harassment policies, can help encourage equal recruitment and retention.
- **Place more women in high level decision making positions** – Participation of women in board of directors, executive positions in technology companies, in ministries of telecommunications<sup>40</sup>, as staff in telecenters<sup>41</sup>, and as representatives in international fora help ensure that women's issues are properly represented at higher levels in the ICT sector.
- **Develop work environments that better support women** - Telematics-related distance work offer new ways of working – offering flexibility in location and hours of work. Some research has indicated that "flexibility in work environments has lead to increased instability for women,"<sup>42</sup> so creativity will be required to develop these new ways of working to benefit women and improve employment conditions.<sup>43</sup> Through the support of women in challenging work environments, mentoring can serve as another strategy to improve the retention of women.

**The South African Department of Communications:  
A Role Model for the Development of Gender Policy**

The Department of Communications has committed to gender equality within the department through the development of a Gender Management System, setting of specific targets for the transformation of the department, and the designation of a gender specialist to lead the process. The Department of Communications has focused its efforts outward as well by developing a gender equity policy that applies to the ICT sector and the use of ICTs as a development tool for women. The Department has established telecentres that are owned and managed by women, made Internet facilities available for women based groups amongst others, and trained women's groups on the use of technologies and how they can enhance their businesses and or activities.

Human Resource Development Quarterly 78, January 2000 and d'Orville p3

### 2.3.3 Coordination

“Immense resources – both in cash and kind – are required to create a more level playing field.”<sup>44</sup> To magnify the effects of investment, strategies must reduce the fragmentation of resources and generate multiplier effects.<sup>45</sup>

Strategies

- **Build coalitions**<sup>46</sup> - Coalitions, particularly coalitions built among countries from the South, can develop more locally appropriate solutions for gender advancement in ICTs. The High Level Panel of Experts recommended to ECOSOC to enhance “direct connectivity among developing countries”, possibly under the UN Technical Cooperation among Developing Countries (TCDC) programme.<sup>47</sup> South–South dialogue can help develop more locally appropriate solutions to gender advancement in ICTs. High-level coordination among donor communities is required as well.
- **Combine public and private sector initiatives** - Partnerships between the public and private sector not only encourage creative solutions, but assist in meeting multiple objectives and more effective investment of resources.
- **Coordinate financing schemes** - Strategic investment must coordinate microcredit, long-term development finance, human capital, and social safety nets.<sup>48</sup> Alternative financing schemes could include financing per environmental performance<sup>49</sup> – or gender equality. Also, linking “ICT deployment with micro finance instruments” as pioneered by the Grameen bank<sup>50</sup>, will encourage development of the ICT sector. While financing must be coordinated, it must be flexible to adapt to local and regional needs.<sup>51</sup>

#### International Coalition of Women

WomenAction is coalition between women’s media networks in the Global South and Global North, with the majority coming from the Global South. It is estimated that the combined efforts of the 42 media groups that are part of WomenAction reach more than 3 million women worldwide, with publications, websites, email listserves and conferences, and radio coverage.

Walker, Anne in email dated 7 August 2000

#### Partnership Across Sectors

ASAFE, an NGO based in Cameroon, has coordinated investments by multiple sectors including the ITU, UNIFEM, Chell, and the Japanese government resulting in “e-commerce capabilities for 3,000 women entrepreneurs and artisans”, a cyber-boutique, and computer training center.

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Mbogo, Stephen 2000 and Paul, Lisa “ASAFE & Chell.com”2000

### 2.3.4 Challenges to Capacity

As the ICT sector quickly expands, policies must be constantly evaluated for their effects on women’s capacity to participate in the ICT sector. For instance, some research has indicated that market liberalization may not necessarily help women. More research is needed to define requirements for e-commerce programmes and policies to ensure positive effects. Another example of a policy that may negatively affect women includes a recommendation by the High Level Panel of Experts to ECOSOC to substitute “ICT for military service” which, depending on the national policy, may allocate more resources to men.

### 3. The Role of the TFGI

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The key strategic objectives of the Task Force on Gender Issues (TFGI) include:

- Equitable access of women to the benefits of telecom services and ensuring that they are not disadvantaged by sector reform and industry changes
- Design and provision of telecom technologies and services which take account of women's needs and requirements
- Increased participation of women in all levels of the telecommunications sector

The TFGI is uniquely positioned to serve as a catalyst for women's advancement in the ICT sector. The TFGI is a global network of decision makers in both the public and private sector, has access to the UN family network, and international agency can serve as a monitoring body of women's advancement.

#### 3.1 Networking

As a global network, the TFGI can facilitate the dissemination and sharing of information among its members, between the international community and across sectors.

It is important that the Task Force on Gender Issues be represented at international events; a visible partner with the other UN bodies to promote gender equality as an integral part of a sustainable development strategy.

TFGI members should be active in raising awareness of TFGI aims, activities and current projects. The mandate of the TFGI should be used to influence TFGI members' own decision-making bodies and national action plans for ICTs development. Every opportunity to advocate that ICTs can provide new opportunities to women in developing countries will be another step forward.

Members are urged to consult and use the resources available in this report, document their success stories, share best practices and lessons learned from their own experiences and to propose projects for TFGI consideration.

#### 3.2 Coordination

The TFGI can facilitate the coordination of projects and partnerships between:

- ITU Members and Private Sector
- UN Organizations and Specialized Agencies.
- Training institutions
- NGOs, ITU Members, UN Organizations, and other women's networks

#### 3.3 Monitor

The TFGI can act as a monitoring body by:

- Gender analysis of telecommunications policies, including up-to-date information on planning and preparation of strategies on gender equality and equity within the organizations involved in telecommunications
- ICT development indicators
- Reporting to its Members, the BDT, its advisory bodies and through the ITU structure.

## 4. Initiatives/Networks in Existence

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### 4.1 Global Networks on ICTs and Gender

**AMARC (World Association of Community Radio Broadcasters)** [www.amarc.org](http://www.amarc.org)

AMARC, an international NGO with 3000 members in 106 countries, supports the community radio movement. AMARC's Women's International Network (WIN) encourages women's participation in community radio and works for women's right to communicate. In English, French, and Spanish.

**APC (Association for Progressive Communication) Women's Programme**

[www.gn.apc.org/apcwomen](http://www.gn.apc.org/apcwomen) - Founded in 1993, the APC Women's Programme aims to respond to gender inequities in communications. In English.

**GAINS (Gender Awareness Information and Networking System)** [www.un-instraw-gains.org](http://www.un-instraw-gains.org)

Founded by INSTRAW in 2000, GAINS is a gender awareness site – one area being ICTs. GAINS intends to develop a network of ICT specialists and to develop a network of regional and national focal points for gender mainstreaming in ICT development projects. Plans for Arabic, Chinese, English, French, Russian, and Spanish, but currently available only in English.

**ISIS International** [www.isiswomen.org](http://www.isiswomen.org)

Formed in 1974, ISIS is a "feminist NGO dedicated to women's information and communication needs." In English.

**ITU (International Telecommunications Union) TFGI (Task Force on Gender Issues)** [www.itu.int/itu-d-gender](http://www.itu.int/itu-d-gender)

The TFGI website includes the history and background of the Task Force on Gender Issues, a calendar of events, list of members, full-text ITU documents, and links to organizations involved in ICTs and gender. In French and English.

**OFAN (Once and Future Action Network)** [www.wigsat.org/ofan/ofan.html](http://www.wigsat.org/ofan/ofan.html)

The Once and Future Action Network (OFAN) is an international consortium of gender, science and technology organisations which calls attention to women's contribution to people-centred and environmentally sustainable approaches to science and technology. In English.

**UNDP (United Nations Development Programme) INFO 21** [www.undp.org/info21](http://www.undp.org/info21)

The UNDP site on Information and Communications Technologies for Development includes information on UNDP projects and initiatives, resources for ICT and development, and a webpage on "gender." In English.

**WomenAction2000** [www.womenaction.org](http://www.womenaction.org)

The WomenAction website, a coalition of women's media networks on Beijing Plus Five activities and follow-up, has links to many global and regional websites. Plans for English, French, and Spanish, but currently available only in English.

**WhrNET (Women's Human Rights Net)** [www.whrnet.org](http://www.whrnet.org)

WhrNET is a collaborative Information & Communication Technology (ICT) project developed by an international coalition of women's organizations to strengthen advocacy for women's human rights through the effective utilization of information and communication technologies. The site includes "access to ICTs" as a human rights issue with information provided by AIS-GWG and ISIS. In English, French, and Spanish.

**Women, Ink** [www.womenink.org](http://www.womenink.org)

Women, Ink. website, with more than 300 women and development publications written by, for, and with women worldwide. Women, Ink has a selection of writing on Gender and Technology.

**WomenWatch** [www.un.org/womenwatch](http://www.un.org/womenwatch)

This website project includes a gateway to UN-system resources on gender. It also provides support to global and regional networks working on gender and IT-related issues, including WomenAction2000. In English.

## 4.2 Regional Resources

### 4.2.1 Africa

**AIS-GWG (African Information Society Gender Working Group)** [www.impactafrica.org](http://www.impactafrica.org)

Formed in 1999, AIS-GWG "aims to ensure that African women participate fully in the development of an Information Society and share equitably in the potential benefits...of information and communication technologies." In English.

**ASAFE (Association pour le Soutien et l'Appui à la Femme Entrepreneur)** [www.asafe.org](http://www.asafe.org)

ASAFE, an NGO based in Cameroon, has provided support to women entrepreneurs since 1989. ASAFE recently expanded its services to include initiatives in electronic commerce. In English and French.

**ENDA-SYNFEV (Environment and Development in the Third World - Synergy Gender and Development)** [www.enda.sn/synfev/synfev.htm](http://www.enda.sn/synfev/synfev.htm)

The "Communication for Women" programme of ENDA-SYNFEV aims to strengthen women's role and participation in cyberspace. Training workshops in electronic communication for African francophone Women. In English and French.

**Famafrique** [www.famafrique.org](http://www.famafrique.org)

Developed by ENDA-SYNFEV in 1999, Famafrique is a space of information and communication for the women of French-speaking Africa in the area of sustainable development. In French.

**Women'sNet** [womensnet.org.za](http://womensnet.org.za)

"Women'sNet is a vibrant and innovative networking support programme designed to enable South African Women to use the Internet to find the people, issues, resources and tools needed for women's social action." In English.

### 4.2.2 Asia

**Asian Pacific Women's Information Network Centre (APWINC)** [apwin.women.or.kr](http://apwin.women.or.kr)

Asian Pacific Women's Information Network Center (APWINC), established in Nov. 1996, aims at promoting women's information and women-related communication technologies in the Asia-Pacific region including South and North Korea.

**Asian Women's Resource Exchange (AWORC)** [www.jca.apc.org/aworc](http://www.jca.apc.org/aworc)

The Asian Women's Resource Exchange or AWORC is an Internet-based women's information service and network in Asia. AWORC has a search engine for Asian's women information in English, Korean, and Japanese. The website is in English.

**Asian Pacific Gender Equality Network (APGEN)** [www.apgen.apdip.net](http://www.apgen.apdip.net)

Part of UNDP's Regional Programme for the Asia-Pacific, APGEN has one of its four components on "science and technology for women's economic empowerment." In English.

**M.S. Swaminathan Research Foundation** [www.mssrf.org](http://www.mssrf.org)

The M.S. Swaminathan Research Foundation strives to use science and technology for sustainable human development. The organization encourages women's participation in development and technology. One of the five programme areas is "Education, Communication, Training, and Capacity Building". In English.

### 4.2.3 Latin America

**Mujeres of the Latin American Information Agency (ALAI)** [www.alainet.org/mujeres](http://www.alainet.org/mujeres)

Mujeres has one of its nine themes on "Communication and Gender". In English, French, Spanish, and Portuguese.

**ModemMujer** [www.laneta.apc.org/incita](http://www.laneta.apc.org/incita)

Part of The Once and Future Action Network (OFAN), the site has information on women in science. In Spanish.

**FUNREDES (Networks and Development Foundation)** [www.funredes.org](http://www.funredes.org)

NGO dedicated to the dissemination of Newer Information and Communication Technologies (NICT) in developing countries, especially in Latin America and the Caribbean. Seeks to promote and facilitate women's access to the NICT integrating the gender perspective in the dissemination strategies as a basic requirement for their advance in society and their equitable integration in the development process. In English, French, and Spanish.

### 4.2.4 Arab States

**Arab Women Connect (AWC):** [www.arabwomenconnect.org](http://www.arabwomenconnect.org) (as of November 2000)

AWC is a bilingual clearinghouse website which promotes the utilization of new information and communication technologies for Arab women's empowerment. The website contains full length resources on Arab women; comprehensive on-line databases of local women's organizations and of Arab gender experts; and interactive chats, e-mail and discussion lists on various topics of interest to Arab women.

**Shabaka** (Arab Network for NGOs): <http://www.shabaka.org.tn/>

"SHABAKA" is an Arab non-governmental, non-profit organization, a legal entity serving in the field of development. It seeks to promote and activate the role of the work of civil society by collaborating with its NGOs and with similar Arab, regional and international institutions contributing in the achievement of sustainable development in the Arab nation"

**Nisaa' Regional Website:** <http://www.nisaa.org/index.htm>

Nisaa is a regional project of the Arab Women's Forum, AISHA and the Women's Center for Legal Aid and Counseling (WCLAC)/ Jerusalem supported by Bunian. Nisaa offers women in the Arab World the opportunity to exchange experiences and information on gender specific topics in order to intensify the cooperation among them. Nisaa is also considered as a mean to enhance the dialog between women in the Arab world and women in other parts of the world. It offers a wide variety of topics of concern to women in the region such as: Violence against women, reproductive health rights, women and the media, solidarity, law and legislation, etc.

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- <sup>1</sup> ITU, "Challenges to the Network: Internet for Development," 1999
  - <sup>2</sup> Afifi 2000 and d'Orville 2000
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  - <sup>4</sup> High Level Panel 2000
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  - <sup>6</sup> Media Matrix and Jupiter Communications 2000
  - <sup>7</sup> UN, *The World's Women 2000*, 2000, p. 96
  - <sup>8</sup> AIS-GWG 2000
  - <sup>9</sup> Heyzer, "In Search of E-quality", 2000
  - <sup>10</sup> World Bank
  - <sup>11</sup> Resolution 7
  - <sup>12</sup> In her presentation to the High Level Panel at ECOSOC, Noeleen Heyzer, Director of UNIFEM, addressed the 3 C's – connectivity, capability, and content and their relevance to women. Gillian Marcelle, in her presentation "Widening Opportunities in the New Economy, " 28 June 2000, refers to capital, capacity, commitment, coordination, and courage and creativity. D'Orville refers to awareness, advocacy and policy formation, connectivity, capacity and institution building, content and cultural diversity, creativity, and resources.
  - <sup>13</sup> UN, *The World's Women 2000*, p87 which references UNESCO, *Statistical Yearbook 1999* - "Data refers to the population 15 years and over"
  - <sup>14</sup> High Level Panel 2000 and d'Orville 2000
  - <sup>15</sup> d'Orville 2000
  - <sup>16</sup> Walker 2000
  - <sup>17</sup> High Level Panel 2000
  - <sup>18</sup> High Level Panel 2000
  - <sup>19</sup> UNU/INTECH and UNIFEM and High Level Panel 2000
  - <sup>20</sup> High Level Panel 2000, p. 35
  - <sup>21</sup> Heyzer, "Gender Equality in Cyberspace," 2000
  - <sup>22</sup> UNU/INTECH and UNIFEM
  - <sup>23</sup> UNU/INTECH and UNIFEM
  - <sup>24</sup> High Level Panel 2000
  - <sup>25</sup> d'Orville 2000
  - <sup>26</sup> Marcelle, "Gender, Justice, and ICTs," 2000
  - <sup>27</sup> Marcelle, "Gender, Justice, and ICTs," 2000
  - <sup>28</sup> High Level Panel 2000, p. 9
  - <sup>29</sup> Marcelle, "Widening Opportunities in the New Economy," 2000
  - <sup>30</sup> CISCO Systems 1999
  - <sup>31</sup> UN, *The World's Women 2000*, p98
  - <sup>32</sup> UN, *The World's Women 2000*, p90, 92
  - <sup>33</sup> UN, *The World's Women 2000*, p98
  - <sup>34</sup> Walker 2000, p. 5
  - <sup>35</sup> See Brodman for more detailed description of the importance of complementary skills
  - <sup>36</sup> Brodman 2000
  - <sup>37</sup> UNU/INTECH and UNIFEM and UN *The World's Women 2000*
  - <sup>38</sup> UN, *The World's Women 2000*, p98
  - <sup>39</sup> Speech by Diana Rivington, CIDA
  - <sup>40</sup> Heyzer, "In Search of E-quality", 2000
  - <sup>41</sup> Brodman 2000
  - <sup>42</sup> Marcelle, "Gender , Justice, and ICTs," 2000
  - <sup>43</sup> Marcelle, "Widening Opportunities in the New Economy," 2000
  - <sup>44</sup> d'Orville 2000, p. 3-4
  - <sup>45</sup> Marcelle, "Widening Opportunities in the New Economy," 2000
  - <sup>46</sup> Marcelle, "Gender , Justice, and ICTs," 2000
  - <sup>47</sup> High Level Panel 2000
  - <sup>48</sup> Marcelle, "Widening Opportunities in the New Economy," 2000
  - <sup>49</sup> High Level Panel
  - <sup>50</sup> d'Orville 2000, p. 3-4
  - <sup>51</sup> Marcelle, "Widening Opportunities in the New Economy," 2000