Gender and ICT issues in Africa
Big growth in Internet, HUGE growth in mobile (cellular subscribers)

- Overall growth rate in both twice that of rest of the world
- Africa still lowest rate of penetration of both in the world
- Most Internet access still dial up
- Little fixed broadband but mobile broadband in almost all countries
- In mobile
  - Highest growth rate in Ethiopia and Nigeria
  - Highest penetration rate: Seychelles, Gabon, South Africa
  - Lowest penetration rate: Eritrea, Ethiopia, Central African Republic
  - Other high use/high penetration countries: Kenya, Tanzania, Ghana, Cote d'Ivoire
  - Penetration levels NOT directly linked to income level
  - Degree of competition a factor

**ICT use**

<table>
<thead>
<tr>
<th>ICT use</th>
<th>2000</th>
<th>2008</th>
<th>increase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet users</td>
<td>3 M.</td>
<td>32M</td>
<td>10 times</td>
</tr>
<tr>
<td>Cellular subscribers</td>
<td>11 M.</td>
<td>246M</td>
<td>21 times</td>
</tr>
</tbody>
</table>
Mobile

- Half of Africa’s population had mobile signal by 2008
- Mobile broadband growing faster than fixed
  - In all countries by 2008 except Madagascar, Cape Verde, Rwanda, Seychelles
- Willingness of poor to spend large % of income on communication
- Men tend to have more access/ownership of phones than women
- Advent of low-end, low-cost phones, navigation and browsing by voice may increase women’s ownership and use of mobiles
- Gendered preferences: women prefer mobiles
- Many women who use computers use them as phones (VOIP)
Internet/connectivity

- Internet highest penetration in Seychelles and Mauritius (over 30/100)

- Lowest in DRC, Ethiopia, CAR, Sierra Leone (under 0.5/100)

- Main source of Internet connectivity Africa: cyber/Internet cafes
  - Gender implications!

- Few countries with 10% of households with computers
  - 10% in Seychelles, Mauritius, South Africa, Swaziland, Madagascar, Cape Verde, Namibia
  - Fewest in Mali, Nigeria, Tanzania, Uganda, Burkina Faso, Cote d’Ivoire, Zambia, Benin (1-1.9%)

- Connectivity
  - Fixed broadband penetration very low in Africa
  - Lowest bandwidth biggest impediment to Africa’s use of ICT for economic and social growth
Topics in Gender and ICT

- Workforce issues
  - Women in the information and knowledge economy
    - Cinderella vs Cyberella
  - Number and level of women in ICT jobs
  - Why women avoid ICT field (Microserfs)
  - Women as ICT entrepreneurs (e.g. M-Pesa, phone shops, Grameen Villagephone in Uganda)
  - Outsourcing, teleworking

- Women in S&T in Africa- underrepresented and undermeasured
  - Women studying science and technology, skills acquisition
  - generally less than 30% of researchers (29% overall)
### Women researchers, % per country

<table>
<thead>
<tr>
<th>country</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lesotho</td>
<td>76</td>
</tr>
<tr>
<td>Cape Verde</td>
<td>52</td>
</tr>
<tr>
<td>Uganda</td>
<td>37</td>
</tr>
<tr>
<td>South Africa</td>
<td>35</td>
</tr>
<tr>
<td>Gabon</td>
<td>31</td>
</tr>
<tr>
<td>Sudan</td>
<td>30</td>
</tr>
<tr>
<td>Morocco</td>
<td>27</td>
</tr>
<tr>
<td>Mauritius</td>
<td>20</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>19</td>
</tr>
<tr>
<td>Zambia</td>
<td>14</td>
</tr>
<tr>
<td>DRC</td>
<td>13</td>
</tr>
<tr>
<td>Guinea</td>
<td>6</td>
</tr>
</tbody>
</table>
More gender issues in ICT

- Gender and ICT4D
  - ICTs for illiterate and neo-literate women
  - Women and community information centers, telecenters
  - Content for grassroots women

- Socio-economic-political axis
  - Relationship between ICTs and gender equality, women’s empowerment, economic growth

- Social issues
  - ICTs and violence against women
  - Trafficking, pornography
  - Domestic violence

- Access issues (at all levels and across technologies)

- Utilization issues (for what and how long/girls/boys, men/women)

- ICTs and women’s voice (agency, empowerment, advocacy)
Gender issues in ICT and Education

- Relationship between ICTs and women’s education
  - ICT has positive impact on learning generally

- Relation with science and technology education
  - Low representation of women in science and technology correlates with women in ICT education
  - Leaky pipeline phenomenon of women dropping out from science and technology after primary levels

- Gender differences in learning ICTs
  - Men perceived benefit: new skills; women- self-confidence, self esteem, ability to do technical things
  - Girls’ attitudes, learning styles, preferences
  - Teachers’ attitudes: treat girls differently?
  - Women-only classes?/Male only schools generally better equipped
  - Girls perceived difficulties with math/science
Why a concern for gender equality in ICT?

ICT as development enabler:
ICT offer flexibility of time and space, end isolation, access to knowledge and productive resources.

Women suffer most from limited time availability, social isolation, and lack of access to knowledge and productive resources.

- Connection between ICTs and poverty alleviation
- Use of ICTs to empower women and promote gender equality
- In education, because ICT is fuel, catalyst of individual and national development
Not to mention . . .

- ICT as gateway to knowledge

- Relationship between ICTs and gender equality, women’s economic empowerment, economic growth
Overall aims of gender and ICTs

- Ensure that women as well as men, at all social levels and in all countries, can access and use emerging information technologies
- Full inclusion of women in all aspects of ICT
- Possibility of more women globally to be technological innovators
Gender and ICTs: what do we know

- Women’s participation generally lags behind that of men
- Gender divide more pronounced in developing countries
- Few reliable statistics available from developing countries (e.g. no ITU stats on India)
- Even countries with high infostates have gender inequalities in use
- The gender divide and the overall digital divide do NOT move in tandem
- Disputes argument that you don’t have to take care of gender; it will take care of itself.
- Specific attention must be paid to gender to achieve gender-positive results.
What are the obstacles to gender equality in ICT?

- Women are less likely than men to have requisite education and knowledge
  - Literacy
  - Language
    - Need for multilingual tools and databases, interfaces for non-Latin alphabets
  - Computer skills
  - Information literacy
  - Less science and math education
  - Gendered socialization on technology
  - Technophobia
Access

- Physical access related to gender: more women live where infrastructure is weak
- Less disposable income to access facilities
- Difficulties posed by culture, gendered division of labor in accessing public access facilities
- Difficulties in mobility
- Women’s hours and skills levels need to be addressed in providing access
- Losing out, even in the classroom
Policy-level constraints

- Absence of women from IT policy
- Belief that IT (and all technology) is gender neutral
- Policy makers lack of knowledge of gender aspects of technical issues
- Gender advocates unawareness of IT issues
Content

- Little content available to meet women’s information needs in developing countries
- Available content may not be in usable form
- Language/literacy barriers
- Numerous projects tackling obstacles to women accessing needed content- e.g. Village Knowledge Centres
Gender Lessons from ICT projects

In virtually all ICT activities in which women were involved, the women emerged with greater knowledge and enhanced self-esteem.

• The tremendous importance of the socio-cultural context of technology.

• There are gender issues in all aspects of technology.

• “If you don’t ask for gender, you don’t get gender.”
More lessons

Specific attention must be paid to gender in order to achieve gender-positive results.

• Gender considerations need to enter from the beginning of project design and not be added in hindsight or as mid-term correction.

• Projects in technical fields (including meetings and technical training), need to be pro-active to ensure the participation of women as well as men, because the pool of eligible women may be small.

• All-women projects do not equal gender awareness nor do they necessarily bring gender equity.

• The societal context is of overriding importance in ensuring the participation of and the distribution of benefits to both men and women.
Finally . . .

- **While technology empowers, it also affects and alters gender relations.**
- Diffusion of technology needs to be seen in the context of gender relations.