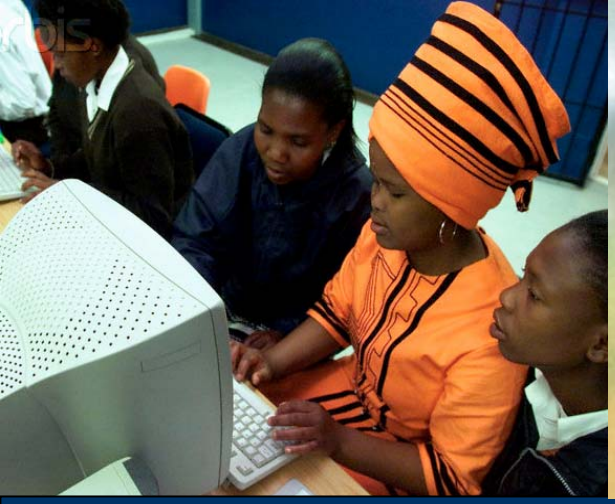


IFC International Finance Corporation World Bank Group

THE WORLD BANK

ICTs as a tool for Gender socio-economic empowerment

Big Picture Symposium, NICTA

University of Melbourne, Australia

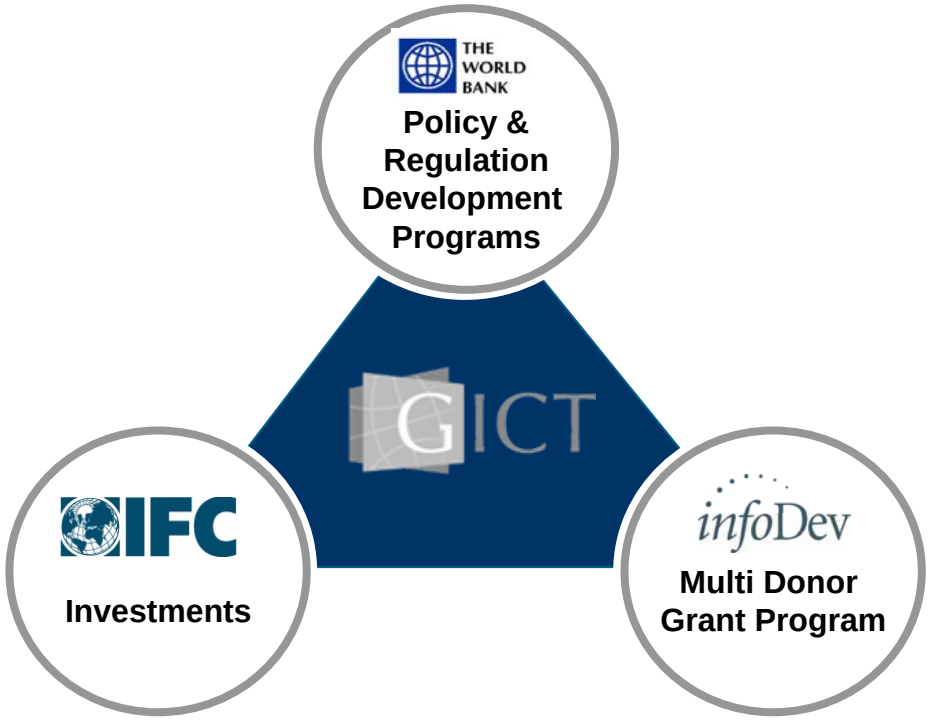
July 3, 2008

World Bank Presentation, GICT Department

GICT

Who Are We? What do we do?

A Comprehensive Global Practice



… offering a full range of services

Our Vision

“To unleash the power of human capital and give opportunities to the poor through easy access to information for all”

World Bank Group ICT Strategy

Focus on 3 strategic themes…

1. ACCESS

Information Infrastructure: Telecoms, Voice, Data networks, Broadband infrastructure and Backbones.

2. MAINSTREAMING

Delivery of public / private services, using of ICTs to increase efficiency, and usefulness of services for the various sectors utilizing ICTs in Public Administration: Finance, Education, Health, Agriculture, Environment, Interior, Transport, Women affairs, ie Social and Human-development based content and services.

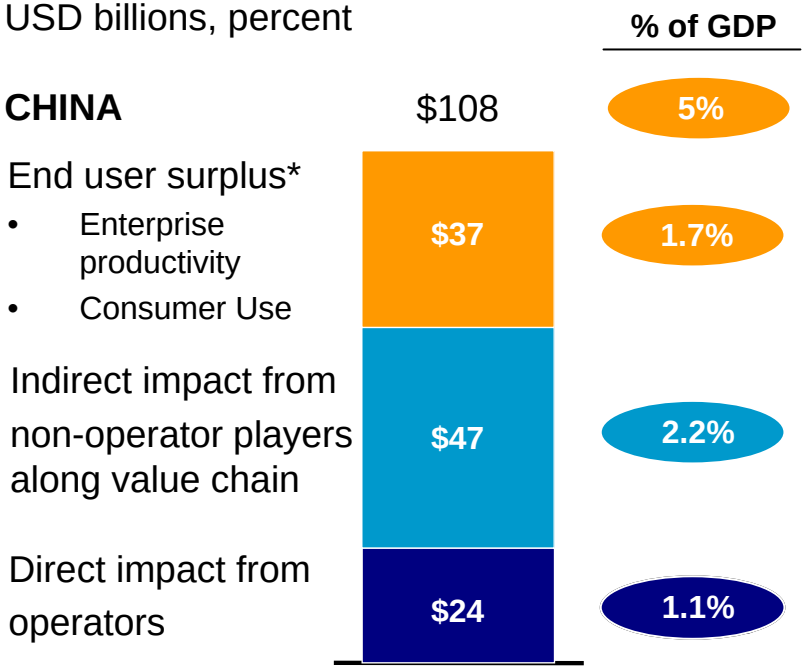
3. INNOVATION

ICT Enabled Industry / Entrepreneurship; Empowerment and Using ICTs to increase competitiveness, trade, growth and create a labor force with knowledge economy skills. Financing of a network of 70 Incubators.

Impact of the Sector

ICT's contribution to economic growth

Wireless economic impact, 2005
USD billions, percent



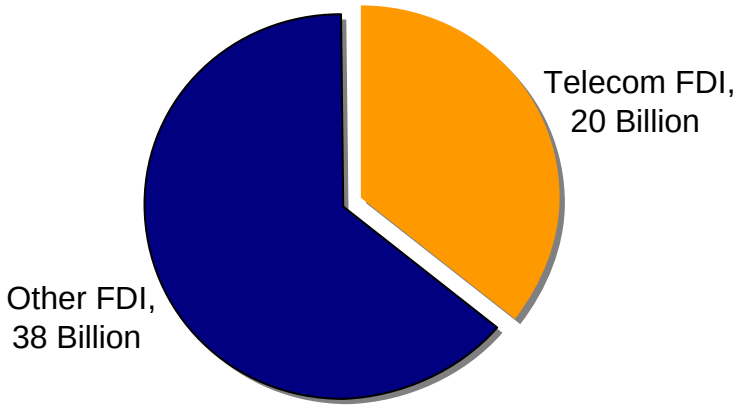
Source: McKinsey & Co.

10% increase in teledensity contributes to 0.6% of GDP growth

A 1% increase in Internet users increases exports by 4.3%.

...and on investments

Telecom FDI versus Total FDI in SSA (2000-2004)



Source: World Bank WDI (2007)

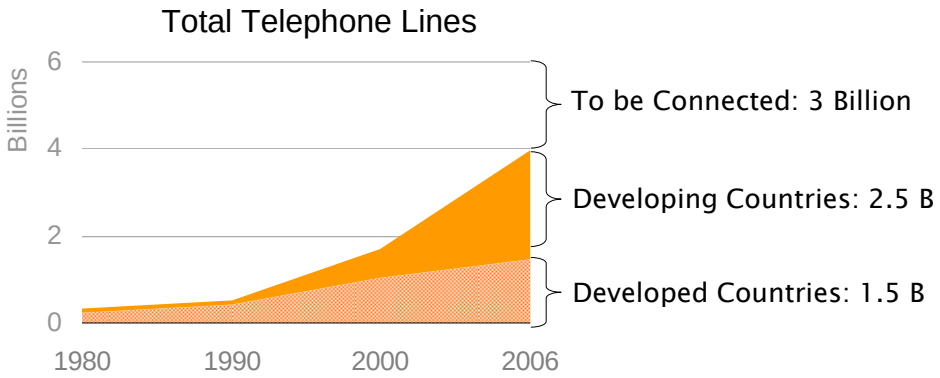
35% of total FDI in SSA was from telecom

E-government Projects Portfolio
$8 Billions + Portfolio in ICT4D investments.

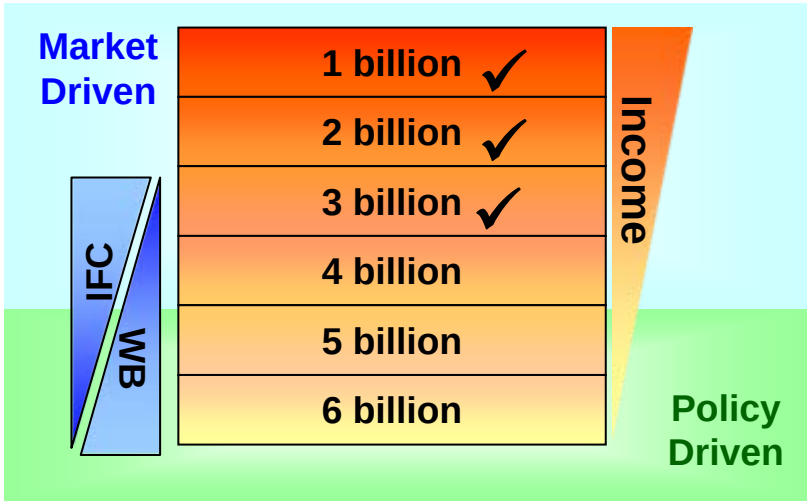
Projects under Implementation: Tunisia, Sri-Lanka, Ghana, Vietnam, Ethiopia, Rwanda, Kenya, Mongolia, Cambodia (Describe their DO and Components)	
Country	**Projects Under Preparation**
OECS	Horizontal and vertical activities including legal and regulatory framework, standards, interoperability, security, financial management etc.
Pakistan	Establishing policy framework, developing innovative PPP models for piloting new applications, extending information infratructure to rural areas.
Mexico	PPPs in e-Government, including study on outsourcing and development of pilot projects
India	Capacity building, program management, e-Bharat Fund for implementation of State level e-government applications
Projects under identification	
Advanced	China, Nepal, Rwanda, Malawi, Morocco, Cameroon, Cape Verde
Initial stage	Armenia, Mozambique, Tanzania, DRC, Lesotho, Eritrea

Access: The Unfinished Agenda

A lot of progress…



… and the WBG has a major role to play



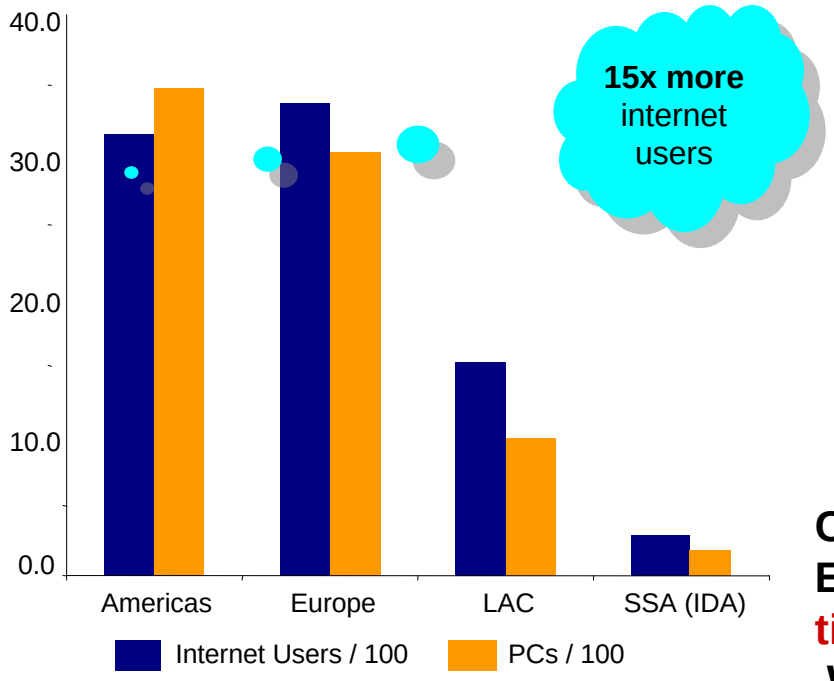
…but huge gaps remain

1. **Coverage and Bandwidth availab**
2. **Service & Costs**
3. **Local Content**
4. **Leadership and Organisation**
5. **Private Sector skills and workforce**
6. **Capacity Building**
7. **Teamwork & Ethics**
8. **Innovation, R&D and National strategies for Broadband, ICTs and SciencesTechnology**
9. **Gender equal access**

Access: Gap in Services

CHALLENGE

Despite impressive growth in access to voice, access to the internet remains a challenge



INDIA: 225 million mobile phones vs 15 million computers

What are we doing?

For Gender in these projects?

Consultations on project design and sustainability

On Specific needs related to ICTs and skill sets : Access, information, content, training, usage etc.

Cost, affordability and availability of services

Cost of 2 Mbps/month Bandwidth service:
Eastern African Countries:$7,500 GDP<$750 (10 times average GDP for a month of usage)
World Average/month: $ 200,
US: $50, $50K GDP (1/1000th GDP)
Difference: Factor of 10,000 (ar same PPP)

WBG's Gender Action Plan

- Gender Equality as smart Economics, GAP, was approved September 2006, focusing on scaling up women's economic empowerment approaches (improving access to and competitiveness in product, financial, labor and land markets) in economic sectors, especially Sustainable Development Network (SDN). (MDG3)
- Conceptual Framework on Gender and Infrastructure
- Impact of Integrating Gender into Infrastructure Projects
- Women's Economic Empowerment through Infrastructure Project looking at three dimensions:

- Human Development: infrastructure/technology access results time saved, leading to education, skills, competency, improvements in health condition etc.

- Social empowerment: confidence building, empowerment in the household, and empowerment in the community.

- Economic empowerment: women's access to labor markets created by infrastructure programs, and income earned from these activities

Why is Infrastructure so critical for the success of the GAP?

- In developing countries most of the household shores due to lack of access to infrastructure are done by women and young girls
- Improved roads ➔ mobility, facilitate access to product market, time saved on transport, provides jobs and other economic opportunity
  ➔ facilitate access to schools, health centers
- ICT/Telephone ➔ gives access to market information: income increase, saves time and money
- Potable water ➔ save time/energy, reduces morbidity
- Improved energy ➔ reduces morbidity (ARI) and mortality
- Improved sanitation ➔ reduces morbidity, improves DIGNITY
- Inter-sectoral linkages: Roads, Agricultural Services, seeds and fertilizers, Produce Market, energy and ICTs ➔ Impact on rural livelihoods.

Examples: Impact of Integrating Gender into Infrastructure Projects

- **Yemen Rural Access Program:** consultations with women by women influenced road design, safety, affordable transport, street lights, intersection facilities.
- **India Uttar Pradesh Rural Water Supply and Environmental Sanitation Project:** consultations and identification of constraints and needs; capacity building of women and mechanism for ensuring full participation in decision-making as managers of services and receiving project benefits.
- **Uganda Energy for Rural Transformation Project:** Better access of women to electricity and ICT services, especially at rural clinics for improved RHS; awareness on infectious diseases, HIV/AIDS, safe delivery, VAW, SRHR through TV and radio campaigns.
- **E-Ghana ICT** : women's empowerment is a key outcome; incentives to encourage equal participation of women; training and equal employment opportunities; and results framework includes 50% of job for women
- **Bangladesh Women's Electrification Project:** skill development, seed capital and SME formation. Providing Battery charged lamps (solar) to thousands of HH.
- **Peru Second Rural Roads:** women's skill development and SME formation for road maintenance, leading to sustainable income generation
- Microfinance for the Village Phone operation in Nigeria, Rwanda and Uganda (IFC)

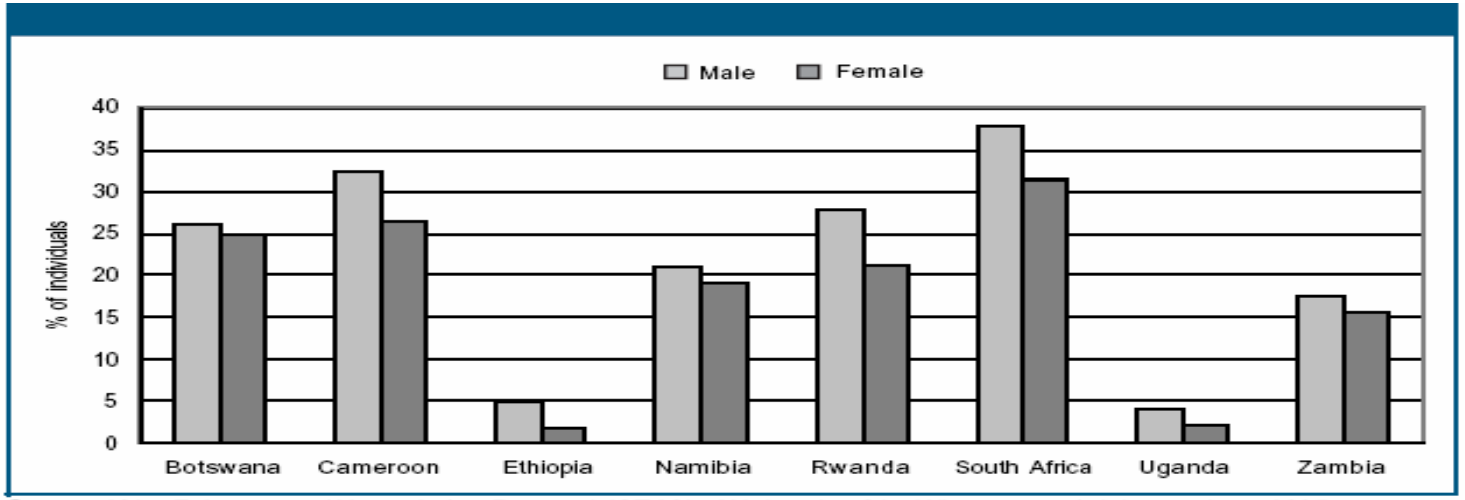
Magnitude of the gender digital divide – low infostate countries

Exposure to mass media by sex, Ethiopia, 2000

	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	All three media	No mass media
Male	6.0	7.5	23.8	2.3	72.6
Female	1.7	4.4	11.2	0.5	86.4

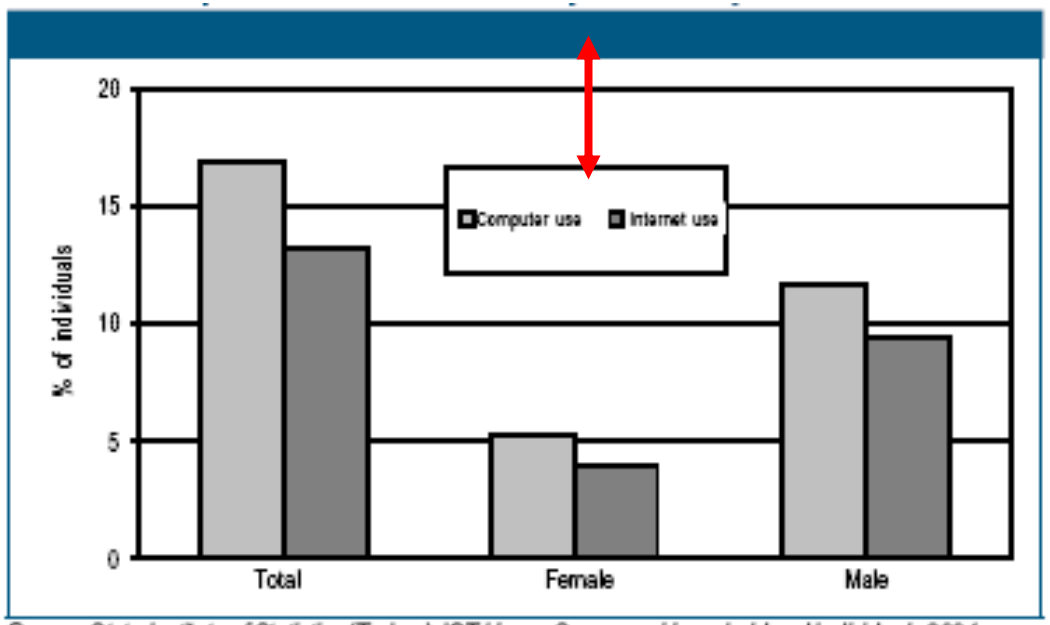
Source: *Central Statistical Authority of Ethiopia, Addis Ababa, Ethiopia Demographic and Health Survey 2000, May 2001*

Mobile penetration by sex, selected African countries, 2004



Source: *Africa E-Access and Usage Index, Research ICT Africa! University of the Witwatersrand, Johannesburg, 2005*
Note: *unweighted data*

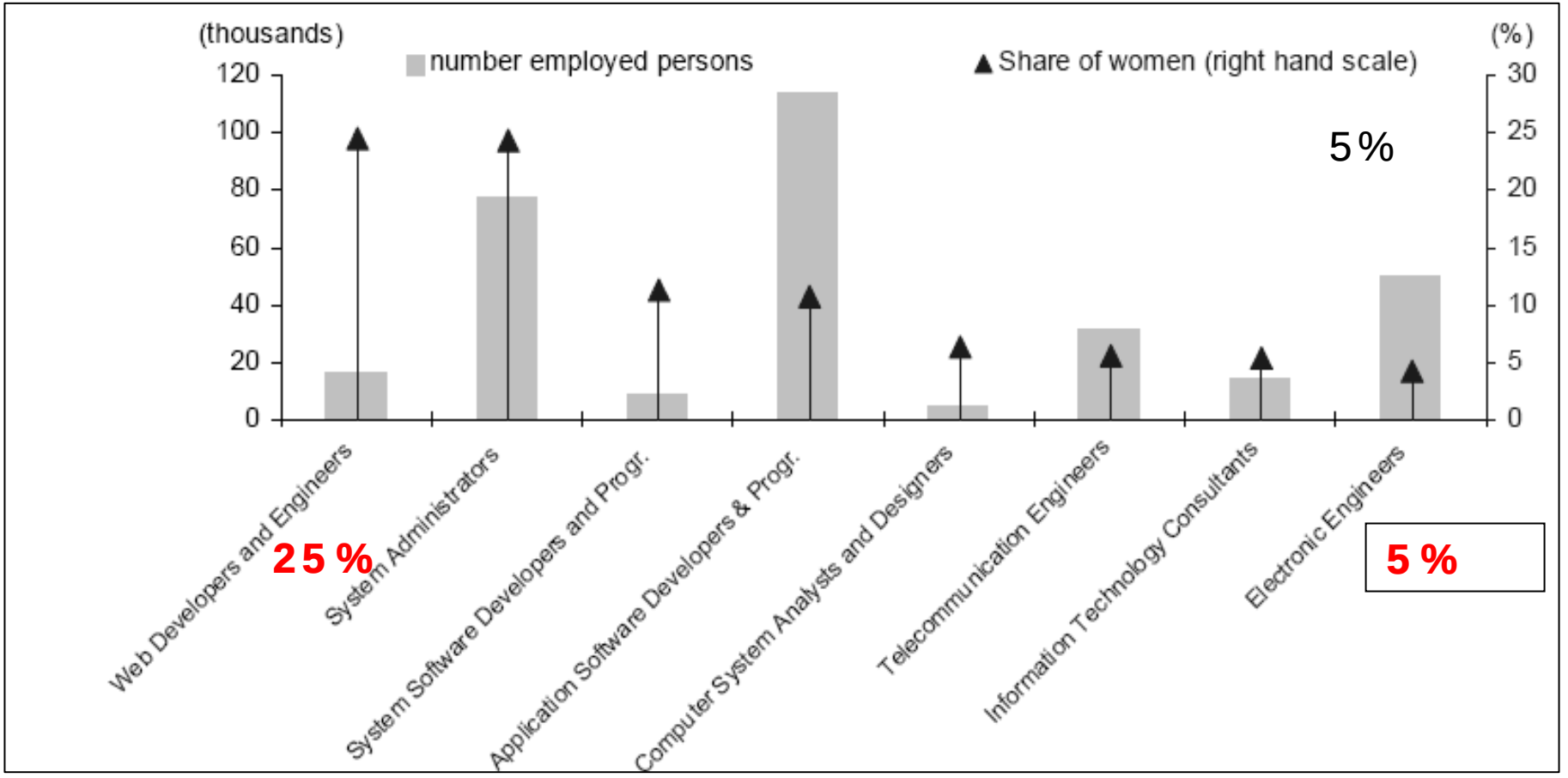
Computer and Internet users by sex, Turkey, 2004



Source: *State Institute of Statistics (Turkey), ICT Usage Survey on Household and Individuals 2004*
Note: *Survey reference period is April-June, 2004*

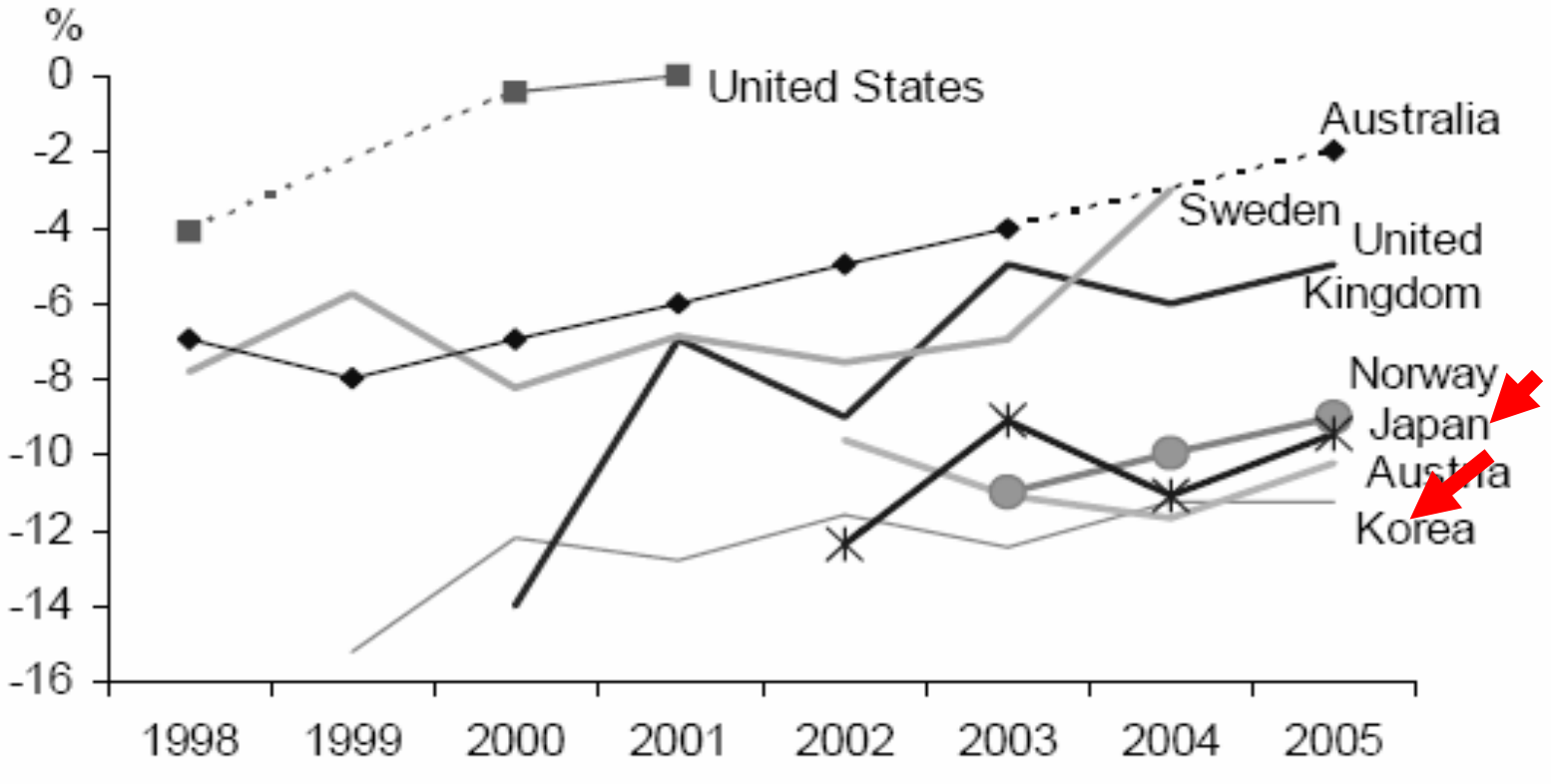
KOREA: Share of women in selected ICT occupations, 2003

In most ICT specialist type of occupations, women' share is less than 20%
The lowest share of women is for the category "electronic engineers."



1. Selected ICT occupations within the narrow definition. The selected occupations account for about 70% of the total CT occupations, narrow definition.
Source: OECD, based on data from the Korean Work Information Center, Human Resource Development Service.

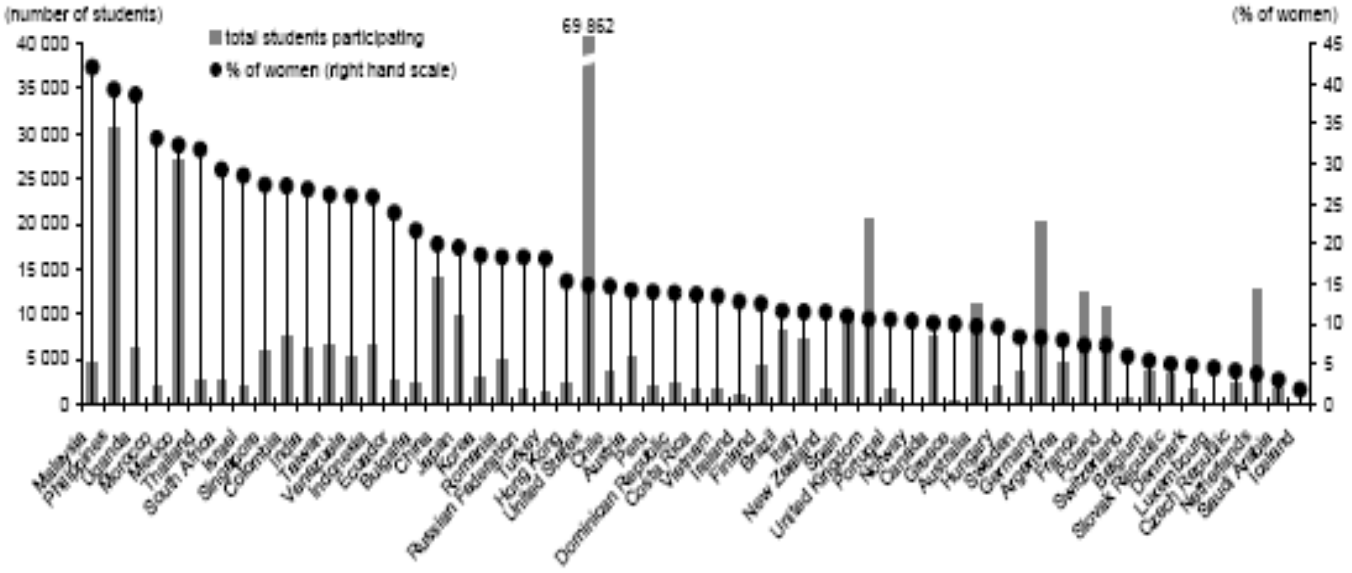
Selected Countries' Internet Usage evolution



Differences in percentage points between women and men Internet use/access; individual home access in Sweden, Internet use from any location in the other countries.
Source: OECD, from national statistical offices, the Korean Network Information Center, and the Ministry of Internal Affairs and Communications of Japan.

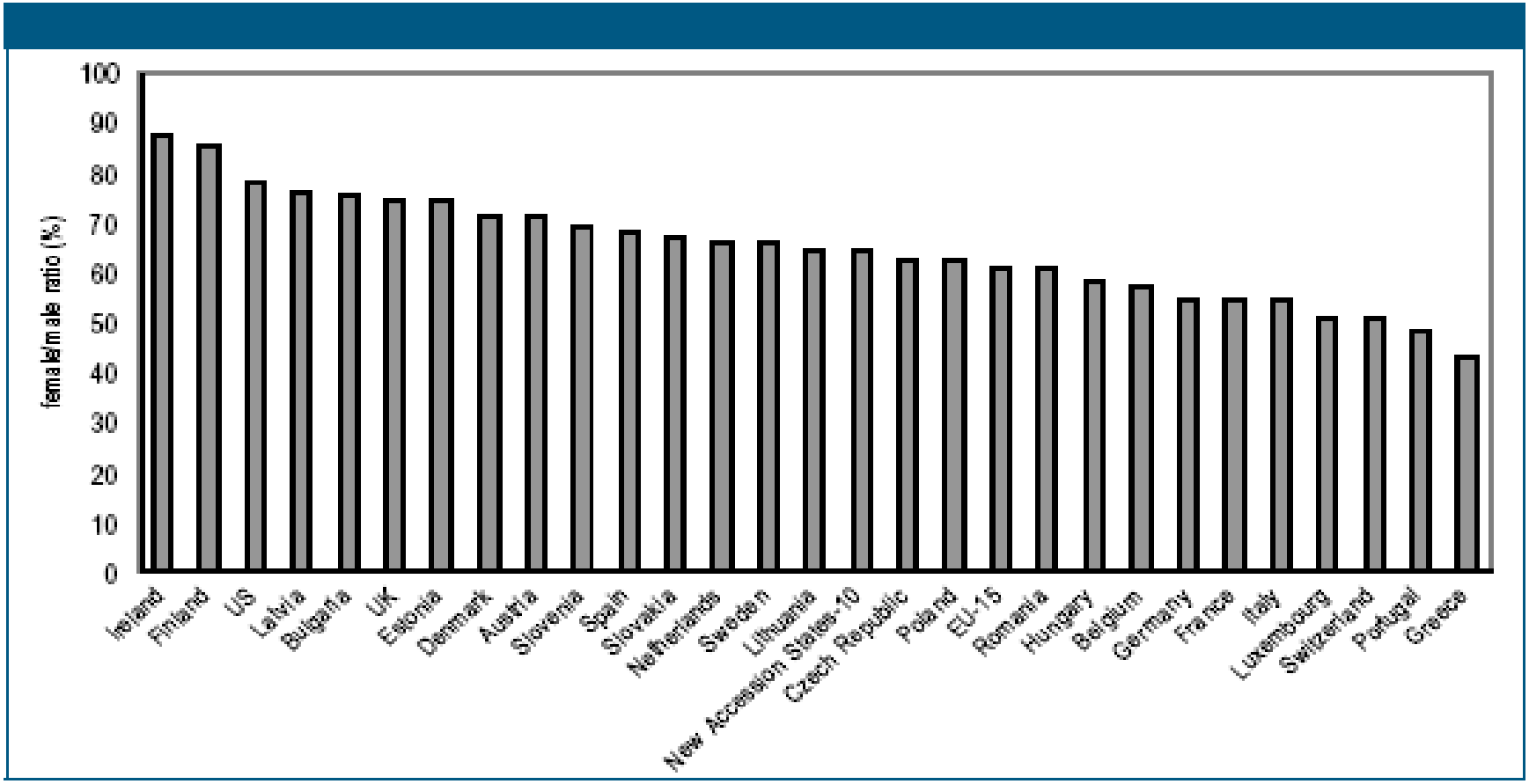
Private Sector: Data on Training

Acquiring computer skills through formalized course set up by ICT vendors 2006. Women accounting for less than 45% in all countries. Turkey 18%; Korea and Japan 20%; China 23%; India 30%; Singapore 28%; Malaysia 43%,



1. Based on data provided by a private sector firm, as of July 2006. Countries where the number of students is below1 000 are not shown.
Source: OECD, based on data provided by a private sector firm.

Women score lower than men in digital literacy score, 2003



Source: *SIBIS Pocket Book 2002/03, GPS 2002 survey and GPS-NAS 2003 survey*, http://www.sibis-eu.org

- **Digital literacy: communicating by e-mail or other onlinemethods; obtaining or downloading and installing software on a computer; questioning the source of information on the Internet; and, searching for required information using search engines**

Home workers by sex and type of business, Japan, 2001

Type of business	Male	Female
	%	
Text entry	6.4	30.4
Engineering, Drafting, Design	38.2	15.6
Writer, Translation	14.5	11.0
Data entry	0.9	14.8
Systems design, Programming	20.9	6.5
Desk Top Publishing (editing), Computer typesetting	6.4	6.8
Website creation	3.6	3.0
Audio-typing	1.8	1.9
Research, Consulting	0.0	2.7
Computing, Information search service	0.9	1.1
Business document preparation, Document organization	0.0	0.4
Other	5.5	5.3

Source: *Statistics Bureau of Japan, Ministry of Internal Affairs & Communications, IT Statistics for Japan 2003*

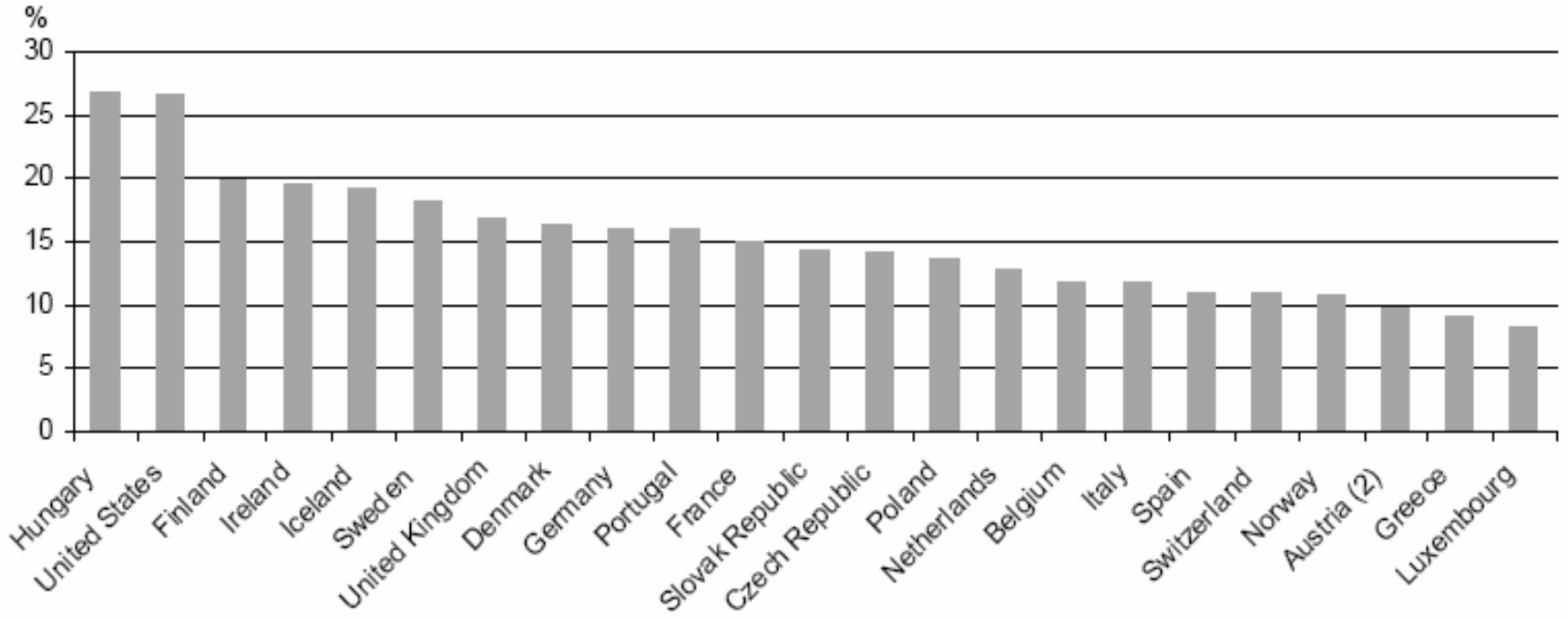
Use of computers and the Internet by sex and labor force status, Turkey, 2004

Labour force status	Computer use			Internet use		
	Total	Female	Male	Total	Female	Male
	%					
Regular employee	33.6	9.4	24.3	26.6	7.5	19.1
Self employed	11.2	0.9	10.2	8.5	0.9	7.7
Unpaid family worker	6.6	1.5	5.2	5.1	0.9	4.2
Housewife	2.6	2.6	-	1.2	1.2	-
Unemployed	22.5	6.9	15.6	20.7	5.9	14.8
Retired	4.3	2.0	2.3	2.7	1.3	1.4
Student	64.4	21.7	42.7	53.5	17.0	36.5
Other	3.3	-	3.3	2.7	-	2.7

Source: *State Institute of Statistics (Turkey), ICT Usage Survey on Household and Individuals 2004*

Note: *Survey reference period is April-June, 2004*

Share of women in ICT specialist occupations, selected OECD countries, 2004



1. Narrow definition based on methodology described in OECD (2004a, Chapter 6), van Welsum and Vickery (2005) and van Welsum and Reif (2006).
2. 2002.

Source: OECD, based on EULFS and US Current Population Survey.

Gender and ICT

ICT has much to offer for gender development in terms of:

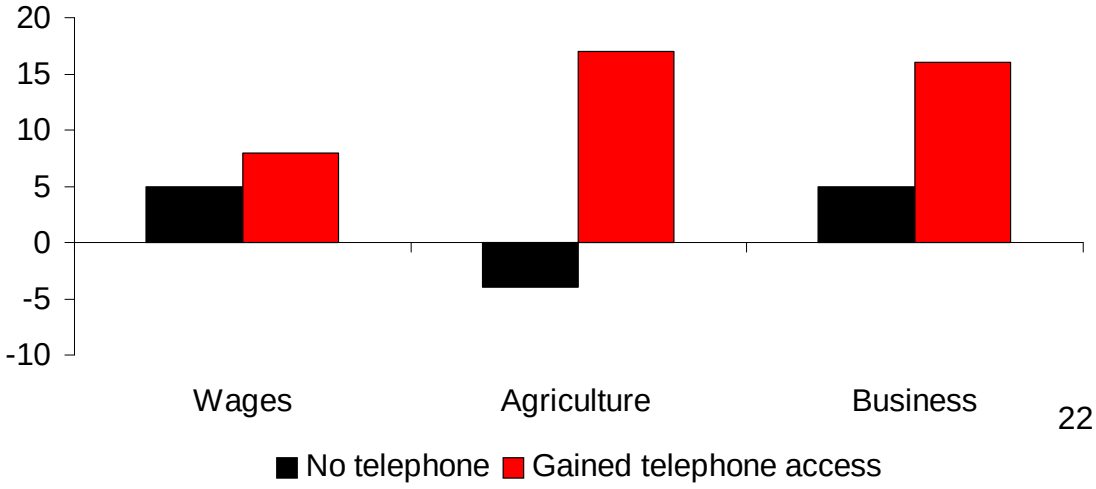
- Access to information and services which could save lives (nutrition, health, HIV/AIDS, remote education, etc.)
- Opportunity to secure new jobs in the knowledge economy BPO, ITES and other (media, web, programming, data entry, sales, etc.)
- Women-friendly working models (can work from home, telecommuting) in cultures which do not allow women to circulate freely and mix with men in the office (Saudi Arabia, Pakistan)
- Access to education at all levels and at all times through elearning - beyond what is offered in the face to face traditional schooling system.
- Access to wealth of information and global village through Internet.
- Access to Sciences, Technology and Innovation networks; Academia, etc.
- Access to micro-credit, possibility to make financial transfers (remittances, 250 Billions / year for migrant workers)
- Provides a voice (through email, creation of web sites, chat rooms, distribution lists etc.) for women in ways that never existed before.
- Helping women assert themselves as individuals, beyond the cultural stereotypes and sense of collective belonging.
- Provides them with an idea of their human rights, legal rights and entitlements.

ICT-Driven Poverty Reduction

Bangladesh: Grameen Telecom extends telecom coverage to rural areas: average profits for village operators (mostly women) are $700 per year--more than twice the country's income per capita

Nigeria. Rwanda and Uganda: Replication of the Village phone experience in partnership with mobile operators and microfinance institutes. Mobile Money transfers and SMS-based information services is also a big incentive to provide the service.

Agricultural Information Systems: average income change in villages that gained a telephone 2000-07 compared to change in villages that remained without a phone/internet. (McKinsey, eChoupal study, CKP BoP, MIT).



WBG and Gender in ICTs

- Engendering ICT Study (2005) on Good practices to incorporate gender into ICT projects. Funded by Gov of Japan
- Grameen Phone Project Financing (InfoDev)
- Grameen Phone Replication Manual for Uganda and Nigeria (IFC)
- INF gender indicators to be mainstreamed throughout INF sectors
- DEC surveys to include collection of gender-related indicators
- Microfinance and loans to women-run SMEs
- ITES and BPO sectors (Ghana)
- Actionable Plan for policies and programs to improve the contribution of girls and women in Knowledge Economies as users and producers of content and ICTs, in both developed and developing countries,
- Education (primary, high school, technical, university, life-long learning)
- Workforce environment
- SME and Business environment

ITES &BPO - key to employment

Assist Gov of Ghana to generate growth and employment by leveraging ICT and PPP to:

i) **develop ITES industry, and**

ii) **contribute to improved efficiency and transparency in selected government functions through e-govt applications such as Customs.**

Call Centers and Data Entry Operations **Medical ranscription Claim processing)** in Ghana already providing employment for some 2,200 people – **Attractive sector for women.**

Special emphasis on women – reflected in project implementation and grant manuals

1. TRAINING AND CAPACITY BUILDING

•Training grants for trainers and professionals in key segments of BPO

2. INVESTMENT PROMOTION

• Support to identify markets

3. DIRECT SUPPORT TO ITES INDUSTRY

•Matching Grants for Business Incubation

Projections

- Projected 5 year job growth – Approx. 6, 000
  - **For every 1 direct job, 4 indirect created** Increase in ITES contribution to GDP

  (*National Estimates indicate approx. $750m Revenue potential over 5 year period)*
- **Target: At least 50% of new jobs created to be held by women**

  - **<u>Arrangements for Results Monitoring</u>: 50% annual increase over baseline of no. of new jobs held by women**

- **SPECIFIC EMPHASIS ON WOMEN IN MANAGEMENT**

  - **<u>Arrangements for Results Monitoring</u>: % Growth in women in ICT/ITES in i) managerial and ii) non-managerial positions**

Access and Content

Policies to Improve Factors affecting Access and Content

- Access at home- high costs, gendered access
- Public access the normal mode- gendered, cost barriers
- Education
- Language
- Geographical location
- Disposable time
- Limited mobility
- Lack of appropriate content
- Technophobia, Gender socialization about technology
- Parental Influence and Opinion
- Teachers and Role Models

Education: Basic and Beyond

- Tertiary level
- (includes research/tertiary education and skills/vocational training)
  - Horizontal and vertical segregation
  - More women in bio-sciences, health sciences
  - Very few in physics, engineering, technology US and OECD: 10-30%
  - Incentives to adopt careers such as: Electronic engineers, Web developers and Engineers, System Administrators, System Software Developers, Programmers, Application software, Computer Systems analysis, Designers, Telecommunications Engineers, IT consultants, End-user support/help desk, Hardware maintenance
  - Barriers: Socio-cultural, Qualificational, Institutional
    - Location (rural vs urban), Social class, language
    - Ethnicity (indigenous and minority races), handicapped,
    - HIV-AIDS
    - Parent and cultural choices (or lack of thereof!)
    - Pregnancy and early marriage
    - Social and religious attitudes about what is appropriate for females -> lower levels of comfort with technologies

Institutional and Cultural

- Barriers : Institutional
  - Lack of female teachers and role models
  - Inflexible admission, selection, entry requirements
  - Lack of flexibility in course attendance and deadlines
  - Attitudes of teachers and fellow students as to “appropriate” or “characteristic” personalities and work habits
  - Sexual or social harassment
- Very few girls and women worldwide are keeping pace with evolution of ICT sector. This affects their knowledge, employability, skills and outlook in the brave new world of information economies
- Issues of access, funding, education and opportunity, but also of culture and self-esteem.
- Role for International organization to embed some solutions in their gender programs.

Actions Required from WBG and Donors

- Create a strategic communications campaign to reach policy makers, trade unions, scientific and technical associations to link the value of existing programs and strategies to their work. EU working on a soap with studios.
- Design and global dissemination of a programs for “high school” level girls on innovative technology all over the world.
- Involve stakeholders in curriculum innovation and quality assurance
- Focus on teaching and learning for girls in communities under siege (extreme poverty, isolation, etc.)
- Create a set of indicators to show women’s participation and leadership in ICTs; visibility success stories for women and ICTs using non-traditional; an accreditation process as a way of helping companies understand their own internal gaps and strengths and as a way of signaling to the potential workforce that the organization is gender sensitive (or some appropriate word).
- Continuously coordinate and partner on the issue of gender mainstreaming
- Work with the Global alliances and multinationals (ITFWICTs, UNGAID, UNESCO, OECD, ILO, ITU etc.) as well as private sector and foundations (Google, Gates).
- Enroll Financiers and VCs to fund women entrepreneurs, Finance Ministers of women affairs, Showcase Success stories focusing on economic improvements.

“ICT…Opportunity for All”

Thank you !

Samia Melhem, Sr. Operations Officer

Chair, e-Development Thematic Group

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