

## A GESCI policy for

### Gender mainstreaming in ICT

February 2013

#### Gender mainstreaming in ICT

In order to utilize ICTs as a tool for change, it is essential to examine dominant gender issues in ICTs so that approaches can be developed to mitigate women's disempowerment. Taking gender into account in program planning, monitoring and evaluation yields improved understanding on how men and women use ICTs similarly and dissimilarly. When looking at gender roles in ICT, we need to be particularly responsive to the ways in which men and women access and use ICT and how needs, conditions of access, policies, applications and regulatory frameworks impact on power relations. GESCI can devise top-down and bottom-up strategies to support the mainstreaming of Gender in ICT.

#### GESCI and Gender mainstreaming in ICT

Since its inception GESCI has pursued the goals of broadening access to education and improving the quality of education, believing both to be fundamental requirements for the development of inclusive knowledge societies. GESCI adopts a holistic approach to its capacity development interventions, seeing the entire education system as the ultimate benefactor of its assistance. Borne out of the World Summit on the Information Society, GESCI is intent on assisting girls and women to secure the benefits of the information age. We are cognizant of the fact that gender issues, if not considered at the policy level, will not be incorporated during implementation, and there is still a tendency in

technological fields for the needs and aspirations of women to be ignored. GESCI is in a position to influence policy development and strategic planning processes within the education and training, and science, technology and innovation sectors in developing countries. From our vantage point we can also develop the capacity of future architects of policy, and the implementers of those policies, to take gender into account in the planning, implementation and evaluation of any large-scale initiatives and reforms in education and training, and science, technology and innovation.

#### Gender and ICT in Education and STI

*ICTs offer immense possibilities for reducing poverty, overcoming women's isolation, giving women a voice, improving governance and advancing gender equality. This potential will only be realized if all factors which contribute to the current 'gender digital divide' are recognized and addressed in the WSIS process and in all ICT policy-making spaces.*<sup>i</sup>

#### Gender, ICT and Education

Data is showing that fewer and fewer women are entering computer studies/science courses, and research also reveals disparities in earnings between men and women in technology<sup>ii</sup>. Leading proponents of Gender mainstreaming in ICT suggest that the number of women working in computing and technology must increase in order for these inequalities to be addressed.<sup>iii</sup>

#### Gender and STI

Gender has also infiltrated the field of science and technology. The field itself is generally considered to be quite difficult and therefore

### **A definition of Gender**

*Gender is a concept that refers to the social and cultural constructs that each society assigns to behaviors, characteristics and values attributed to men and women, reinforced by symbols, laws and regulations, institutions, and perceptions. The basis of these constructs lies behind the idea that they are natural or intrinsic, and therefore, unalterable. On the contrary, gender constructs are shaped by ideological, historical, religious, ethnic, economic and cultural determinants. These are then translated into social, economic and political inequities; where men's activities and their gender attributes are perceived as essentially superior to women's.*

**Gender Evaluation Methodology for Internet and ICTs, A Learning Tool for Change and Empowerment (APC) 2005**

more suited to men. There is a common perception that men perform better in STI than women. However, gender stereotypes in educational resources, teaching approaches, subject availability and the lack of sufficient positive role models in the teaching profession contribute to a gender gap in STI take up by girls.

*Unchallenged gender role stereotypes are built into these resources and methods, which in turn continue to maintain these stereotypes. Consequently, men are assumed to be better equipped to pursue science and technology compared to women, creating greater obstacles for women from entering the field.*<sup>iv</sup>

### **Gender Analysis in ICT**

*Gender analysis involves a systematic assessment of the different impacts of project activities on women and men. Used from an ICT context, gender analysis asserts that power relations in class, race, ethnicity, age, and geographic location interact with gender producing complex and hidden inequalities that affect social change. A gender analysis framework also looks into how ICTs, in particular, are used to maintain or bring about social change. Thus, a gendered approach in evaluating ICT projects and initiatives will, for example, disaggregate data by sex, analyze the sexual division of labor, and understand the gender disparities of access to and control over resources.*

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### **Organizational Goals – Gender**

**GESCI will apply a *top-down* Gender sensitization policy in its work with government partners in the role of advisor, advocate, and implementer of ICT in Education and STI programs.**

1. GESCI will encourage government partners to develop ICT in Education, and Training, and Science, Technology and Innovation policies and strategies from a gender conscious perspective by making them aware of the gender concerns that can arise in ICT programs and projects.
2. GESCI will assist government partners in the development of policies and strategies that will encourage all members of society and with explicit reference to girls and women to have equitable access to ICTs and the benefits they can offer.

### **GESCI will apply a bottom-up Gender sensitization policy when working directly with women.**

3. GESCI will implement bottom-up strategies aimed directly at women to encourage female participation in its human capacity development programs because GESCI recognizes that the more women are empowered to use ICT in leadership positions the more influence they will have over decision making processes.
4. GESCI will promote gender in ICT policy-making bodies and forums.
5. GESCI will initiate and implement research activities in the field of gender and ICTs to contribute to the body of knowledge on gender and ICT.

### **Gender and ICT Program Design**

GESCI will adopt the Gender Evaluation Methodology (GEM) in its program and project design to guide the integration of gender analysis and perspectives into its projects and programs from a top-down and bottom-up perspective. The GEM methodology which comprises several frameworks for gender mainstreaming in program and project design will provide GESCI with a lens through which it can identify gender issues in its work.

*GEM is an evaluation methodology that integrates a gender analysis in its evaluations of initiatives that use information and communication technologies (ICTs) for social change. It provides a means for determining whether ICTs are improving women's lives and gender relations or not, and whether they are promoting positive change at the individual, institutional, community and broader social levels.*<sup>v</sup>

Quantitative data, where available, such as numbers of women participating in GESCI's programs, can provide an obvious unit of measurement to analyze the effectiveness of GESCI's interventions in empowering women through ICT. However, qualitative data is usually more telling, providing more substantive feedback on the impact of ICT related projects and programs on women.

*An important qualitative change from a gender perspective, for example, is a woman's sense of personal empowerment, greater self-confidence or a higher sense of self-esteem derived from or was a result of using ICTs. Another example would be manifestations of changes in relationships in an organizational or household set-up brought about by using ICTs. These qualitative changes can be gathered using methodologies like interviews or story-telling<sup>vi</sup>.*

Taking its guidance from the leading organization in the field of Gender and ICT, the Association for Progressive Communications, GESCI will utilize the GEM methodology to address and mitigate the following concerns as they arise in the course of its work and its partners' work:

- Education, Training and Development of Skills
- Industry and Labor
- Content and Language
- Power and Decision-making
- Privacy and Security

For full descriptions of each gender concern please see the Gender Evaluation Methodology for Internet and ICTs, A Learning Tool for Change and Empowerment pp. 55 -67. Cited in endnotes and available from

<http://www.apc.org/en/projects/gender-evaluation-methodology-internet-and-icts-ge>

## **Gender and Program Implementation**

### **As facilitators of policy development**

GESCI recognizes that policy makers and implementers need to be aware of the opportunities that ICTs offer for the advancement of women, they must also be aware of how certain biases in policy development, infrastructure deployment, content development, and implementation can limit women's access to ICT. Many policy makers are not accustomed to considering gender perspectives when developing policies with a major ICT component. Through a process of top-down gender sensitization, GESCI will encourage policy makers and planners to engender the policy process (GESCI will be helping to address gender bias in education and training, and STI).

### **As human capacity developers**

GESCI enhances the capacity of policy makers and implementers to holistically integrate ICT into national education and training, and STI systems, to advance inclusive knowledge society goals through leadership training for the knowledge society. In this position GESCI is in a position to raise the awareness of its partners, from a leadership perspective, to become sensitive to gender biases in existing education and training, and STI systems, and advise them on how policies, plans and leadership decision making can redress these inequalities.

In addition to sensitizing partners to gender and ICT issues through direct content (such as ALICT modular content) and as a neutral facilitator of policy and planning processes, GESCI will directly address gender bias in science,

technology and innovation in developing countries by setting targets for the participation of women in its human capacity development programs. In this way GESCI will address some major concerns around the need to remove obstacles to women accessing careers in technology.

### **As content developers**

GESCI is a leading developer of content for leadership development for inclusive knowledge societies. When designing modular content for GESCI's flagship course African Leadership in ICT (and any other content intensive programs and projects) we will draw attention to issues of gender and ICT from a policy perspective by looking at how gender and ICT should be integrated into policy:

**Vertically** - incorporated into education, STI,

**ICT Horizontally** - broader aspects of society such as privacy, tariffs, online security.

**Infrastructural** - telecoms infrastructure, where it's deployed, costs, access.

### **As Advisors**

In GESCI's capacity as strategic advisor and neutral facilitator of policy and planning development processes, GESCI can sensitize its partners to gender issues in relation to ICT (education, finance, access and attitudes) so that stakeholders are aware of the need to acknowledge and redress biases in plans and policies. In addition, GESCI can encourage its partners to ensure adequate representation of women in the policy development and strategic planning processes so that policies and plans more equally represent the vision, needs and objectives of both men and women.

## **Summary of Gender Evaluation Methodology Framework for Gender Mainstreaming in GESCI's ICT Programs**

GEM is made up of seven Steps grouped into three Phases. Each Step suggests reading materials and gives examples, activities, and worksheets that lead to the expected outputs.

Each expected output in turn introduces the next Step.

### **Phase 1. Integrating Gender Analysis**

#### **Step 1 Define Intended Use and Intended Users**

Activity 1.1 Identify Evaluation's Intended Users

Activity 1.2 Defining Evaluation's Intended Use

Worksheet 1 Synthesizing Intended Users and Intended Use

#### **Step 2 Identify Gender and ICT Issues**

Activity 2.1 Understanding Gender Analysis and

Concepts of ICT, Social Change and Development

Activity 2.2 Reviewing Gender Issues in an ICT Project's Life Cycle

Worksheet 2 Project Profile

#### **Step 3 Finalizing Evaluation Questions**

Activity 3 Getting Familiar with Evaluation Questions

Worksheet 3 Generating Questions

#### **Step 4 Setting Gender and ICT Indicators**

Activity 4 Asking Questions

Worksheet 4 Creating Gender Indicators

### **Phase 2. Gathering Information Using Gender and ICT Indicators**

#### **Step 5 Selecting Data Gathering Methods/Tools**

Activity 5. Exploring Examples of Practitioners' Methodologies

Worksheet 5 Developing Your Data Gathering Strategy

#### **Step 6. Analyzing Data from a Gender Perspective**

### **Phase 3. Putting Evaluation Results to Work**

#### **Step 7. Incorporating Learning into the Work**

## **Conclusion**

Through a top-down and bottom-up Gender sensitization process, GESCI will contribute to the mainstreaming of gender in ICT initiatives cutting across, Education, Training/Skills Development and Science, Technology and Education. By becoming increasingly cognizant of gender concerns in the areas of *Education, Training and Development of Skills; Industry and Labor; Content and Language; Power and Decision-making, and Privacy and Security* GESCI can help to mitigate gender bias in and through its own work.

Through the Gender Evaluation Methodology GESCI will incorporate a gender perspective into its content, advisory and human capacity development initiatives. Using GEM as a guide GESCI will develop gender appropriate indicators to measure and evaluate how GESCI's

activities impact gender issues of education, access, attitudes and finances.

By mainstreaming gender into its projects and programs from project design through to implementation e.g. having identified indicators built into the next ALICT review and the Tanzania SME review, GESCI, as a leading advocate for the development of inclusive knowledge societies, can empower women through ICT.

## Annex 1

### A description of broad Gender and ICT Concerns

**Access** – most women in developing countries live in rural areas so projects and programs targeting only the urban poor marginalize women, who, due to the nature of their responsibilities find it more challenging to move to urban areas<sup>vii</sup>. Therefore, biases in connectivity make it more difficult for women to realize their universal right to communicate. In low-income countries women are excluded to a greater extent, but when access improves and becomes widespread, women use the internet as much as men do<sup>viii</sup>.

**Attitudes** - Sub-Saharan Africa's Science and Technology sectors are growing, but **with the exception of South Africa**, SSA is still suffering from a critically low level of scientific output compared to other regions of the world<sup>ix</sup>. Not only does SSA suffer from low numbers of scientists and researchers, it also struggles to attract young women to science and technology studies. The problem is worse in Africa than in any other region<sup>x</sup> as Science and Technology are still largely seen as the preserve of men.

**Education** - Women make up two-thirds of the world's illiterates<sup>xi</sup>; they are therefore also less likely than men to have computer skills and are less likely to know the international languages that make up the web. While ICTs that do not require literacy are being developed they are still not as yet, widespread. From a gender perspective proper education, training and skills development are central to any equitable and

well planned ICT intervention. Education, training and skills development initiatives should be extended to women and girls, and made gender-sensitive (ensure consistency, secure environment and convenient to account for family responsibilities, and affordable).

**Finances** - Women are less likely to have the financial means to access ICTs in terms of the actual devices and also the internet.

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<sup>i</sup> Nicol, C.,2003. ICT Policy: A Beginners Handbook. The Association for Progressive Communications. [online] Available at: [http://www.apc.org/en/system/files/policy\\_handbook\\_EN.pdf](http://www.apc.org/en/system/files/policy_handbook_EN.pdf) [Accessed February 25th 2013]

<sup>ii</sup> Henwood, F., 1993. Establishing Gender Perspectives on Information Technology: Problems, Issues and Opportunities. In: J. O. a. D. P. Eileen Green, ed. Gendered Design? Information Technology and Office Systems. London: Talylor & Francis, pp. 32 - 44.

<sup>iii</sup> WNSP), A. f. P. C. (. a. A. f. P. C. W. N. S. P. (., 2005. Gender Evaluation Methodology for Internet and ICTs, A Learning Tool for Change and Empowerment, Melville, South Africa: APC.

<sup>iv</sup> WNSP), A. f. P. C. (. a. A. f. P. C. W. N. S. P. (., 2005. Gender Evaluation Methodology for Internet and ICTs, A Learning Tool for Change and Empowerment, Melville, South Africa: APC.

<sup>v</sup> WNSP), A. f. P. C. (. a. A. f. P. C. W. N. S. P. (., 2005. Gender Evaluation Methodology for Internet and ICTs, A Learning Tool for Change and Empowerment, Melville, South Africa: APC.

<sup>vi</sup> WNSP), A. f. P. C. (. a. A. f. P. C. W. N. S. P. (., 2005. Gender Evaluation Methodology for Internet and ICTs, A Learning Tool for Change and Empowerment, Melville, South Africa: APC.

<sup>vii</sup> UNIFEM and United Nations University Institute for New Technologies (UNU/TECH).

2000. Gender and Telecommunications: An Agenda for Policy. [online] Available at: [http://www.unifem.undp.org/pap\\_itu.htm](http://www.unifem.undp.org/pap_itu.htm) [Accessed 25th February 2013]

<sup>viii</sup> Nicol, C.,2003. ICT Policy: A Beginners Handbook. The Association for Progressive Communications. [online] Available at: [http://www.apc.org/en/system/files/policy\\_handbook\\_EN.pdf](http://www.apc.org/en/system/files/policy_handbook_EN.pdf) [Accessed February 25th 2013]

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<sup>ix</sup> Irikefe V. ,Vaidyanathan G. , Nordling L. , Twahirwa A., Nakkazi E., & Monastersky R., 2011. Science in Africa: the view from the front line. Nature.[online] Available at:

<http://www.nature.com/news/2011/110629/full/474556a.html> [Accessed 28th February 2013]

<sup>x</sup> Marcelle, G. M., 2000. Gender, Justice and Information and Communication Technologies (ICT). New York, 44th Session of the Commission on the Status of Women. [online] Available at: <  
<http://www.un.org/womenwatch/daw/csw/marcelle.htm>> [Accessed 26th February 2013 ]

<sup>xi</sup> DFID, 2008. DFID Fact Sheet on Gender Equality, London: DFID.