



## **Gender Issues and Tools for SME and ICT**

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Women, Small/Medium Scale Industries and ICT  
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## **Regional divergence**

The ICT context in the Asia-Pacific region is one characterized by divergence and a deep divide. Examples of the most connected and least connected economies of the world can be found all at once in this region. According to the 2005/2006 Digital Review of Asia Pacific<sup>1</sup>, the more advanced economies of the region such as Japan, South Korea and Singapore are prime examples of highly networked societies while countries like Afghanistan and Timor-Leste are painstakingly rebuilding their ICT infrastructure that were almost totally devastated due to recent conflicts in these countries. At the same time, we also have India and Malaysia, which have invested heavily in positioning their countries as information and knowledge centers in the region and also globally.

This diversity among countries, which is largely a function of their economic level, in Asia-Pacific is a key determinant in shaping the interconnection between small and medium term enterprises (SME) and ICTs.

Women's participation is affected by differences and gaps in ICT access, affordability, capacity and services that characterize this diversity. At the same time, gender-related factors also play a critical role in the way women are able and not able to take advantage of ICTs in the SME sector.

My presentation will focus on examining the interplay of these factors by presenting a gender analytical framework developed through a research of SME and ICTs and some illustrations through several examples in the region.

## **Interconnection between SME, livelihood and ICT**

SME's are usually defined as enterprises that employ no more than 250 employees. However, the technical definition varies from country to country. In the Asia-Pacific region, SMEs are defined based on employment, assets or a combination of the two. This criteria results in a range SME definitions peg the number of employees from less than 50 (Thailand) to less than 300 in South Korea. The most common range in many countries are from 50-200 employees.<sup>2</sup> SMEs are seen as a critical component in the economic growth of developing countries SMEs because they are a major source of income, a breeding ground for entrepreneurs and a provider of employment. For this reason, there is much attention paid to positioning SMEs to capture emerging business opportunities that have been created by the emergence of knowledge based societies.

This development can lead to either inclusion or exclusion of women due to both old and new gender-related gaps and barriers in this changing economic scenario.

An old gender gap has to do with women's current exclusion in the existing SME sector, especially in developing countries. Countless studies have shown that there is a large gender gap favoring men in terms of ownership of and participation in SMEs. This has been the basis for refocusing women's economic empowerment on a more holistic and inclusive definition that captures women's economic activities, especially poor women in developing countries. A more inclusive concept that reflects women's conditions in all its complexity is that of livelihood. Livelihood comprises people, their capabilities and their means of living, including food, income and assets. Tangible assets are resources and stores, and intangible assets are claims and access (Chambers and Conway, 1992). Therefore, it is absolutely critical to consider

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1 Digital Review of Asia Pacific 2005/2006, Pan Asia Networking Programme, International research Development Centre, p xiii, 3.

2 Vadim Kotelnikov, Small and Medium Term Enterprises and ICT, UNDP – Asia Pacific Development Information Programme and Asian and Pacific Training Centre for Information and Communication Technology for Development (APCICT), 2007 p 2.

livelihoods in examining women's participation in SMEs and within that, what role ICTs play.

A new gender gap that emerges with the introduction of ICTs in either SMEs or livelihoods have to do with differential access, knowledge and capacity between women and men. Similarly, many studies have amassed evidence that women are disadvantaged compared to men in terms of access knowledge and training in technology. Moreover this disadvantage is compounded by overall gender disparities in mobility, access to income and resources, safety and security, roles in decision-making, discrimination, violence against women, religion and other socio-cultural factors that affect women both across the board and in their specific local contexts. Much of these gender related gaps and barriers have not made it in the overall discourse of how SMEs can successfully adopt ICT, following earlier practice in many ICT for development projects that have largely been gender neutral or gender blind.

There are however, a few initiatives that have focused on promoting women's inclusion and gender equality in SMEs and ICT. I would like to focus on two of these in the next section.

### **Building women's inclusion and gender equality in SMEs and ICT**

The first initiative is a **capacity building program** in the the region that aims to promote Internet-based commercial opportunities for women entrepreneurs in the APEC region. This program known as APEC Women's E-Biz, has been ongoing since 2005 and includes research, training, community building and policy advocacy. According to its organizers,<sup>3</sup> the program "has been helping women entrepreneurs and policy makers to build knowledge, skills and capacity in planning, building, managing and protecting e-business through knowledge transfer and skills sessions, to create new business opportunities through on/offline networking and ultimately expand women's participation in digital economy in Asia Pacific Region. From a gender analysis point of view, this program's focus on women's participation can potentially lead to narrowing the gender gap between women and men in the SME sector through a strategy that a combines technology and business management training, network and community building and the creation of an enabling policy environment .

The second initiative is series of handbooks on **women's ICT based enterprises** that has been developed since 2001 from data collected in a research project on women's ICT-based enterprises, in developing countries in Asia (India) and Africa. The first two handbooks were published in 2001 and are designed for support agencies for enterprises (donors, NGOs, government) and for entrepreneurs respectively. The third handbook was published in 2005 and is designed to help anyone working to support women's ICT-based enterprises; specifically micro- and small-scale enterprises (MSEs) in developing countries.<sup>4</sup>

The usefulness of these handbooks comes from the holistic analysis of gender and poverty that draws on a framework of sustainable livelihood. They present a planning and evaluative methodology which provide analytical and practical tools that help readers understand what women's ICT-based enterprises are and give real-world examples of these enterprises and the women who work in them. It also provides the rationale about why women's ICT-based enterprises are worth supporting by explaining the benefits they are delivering to poor women in developing countries, though balanced by an understanding of risks posed as well as good practice guidance on the business side and finally it draws out the gender aspects of women's ICT-based enterprises.

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<sup>3</sup> This program is collaboratively organized by the APEC Women's e-Biz Center and Asian Pacific Women's Information Network Center (APWINC) of Sookmyung Women's University of Korea, United Nations Asian and Pacific Training Centre for Information and Communication Technology (UN APCICT)

<sup>4</sup> These handbooks are published by the Institute for Development Policy and Management of the University of Manchester in the United Kingdom and authored by Richard Duncombe and Richard Heeks. Sharon Morgan and Shoba Arun were co-authors of the third handbook.

I have chosen to spend more time presenting this initiative because I believe that developing both theory and practice that integrates gender analysis in the adoption of ICTs is a much needed contribution in this field. Our work in my organisation mirrors this through our own development of a gender evaluation tool for the internet and ICTs. Since 2001, we have evaluated 32 ICT projects spread over 25 countries in Africa, Asia, Central and Eastern Europe and Latin America. These evaluations have provided valuable evidence of the use of ICT to address gender inequalities and its contribution to women's empowerment. In this experience, we identified two main reasons for the lack of integration of a gender perspective in ICT for development: there is lack of skills and practice in evaluation and evaluative thinking and; there is little understanding and experience in gender analysis. While some organisations had a conceptual understanding and commitment to gender equality, they were not always capable of translating this knowledge into operational and measurable terms within their projects. This lack of capacity is common in the ICT for development sector and is expressed in weak focus on gender in project design, implementation and policy formulation. One of the main challenges therefore is developing effective planning and evaluative thinking about gender and ICT for development which can bring about more solid gender practices in the ICT sector.

### **Women's ICT-Based Enterprise for Development project**

Heeks and his co-authors focuses on women ICT-based enterprises and define them in the following way:

1) A simple definition asks the question, "Would this enterprise exist without ICTs?". If the answer is "no", then that is an "ICT-based enterprise".

2) It is a "women's ICT-based enterprise" if it is majority-owned or majority-managed by women.

Examples of such enterprises include a women's cooperative that assembles personal computers, an individual woman running her own cybercafé or telecentre, a female entrepreneur plus staff managing a shop selling computer supplies, a woman graduate designing Web sites for local businesses and two women providing IT training classes and word processing services.

More academically, categories fall under three main types of ICT-based enterprise:

- *Those producing ICTs as an enterprise output:* enterprises that produce hardware, software and telecommunications products.
- *Those using ICTs as a primary, processing technology:* enterprises that provide data entry services, ICT-based business services, software customisation, ICT-based distance learning, etc.
- *Those providing other ICT-related support activities:* enterprises that provide computer training, consultancy and other services.

The analytical framework that the authors used in their study and in producing these handbooks is based on the Sustainable Livelihoods (SL) framework, an emerging tool that draws on the notion of multi-dimensionality to improve our understanding of livelihoods, particularly the livelihoods of the poor (DFID 1999, Ellis 2000). The multi-dimensionality of poverty has come into focus in development discourse in response to the limitation of income as the determinant of poverty. "Sen (2001) identifies four dimensions of poverty such as opportunity (access to markets and employment); capability (access to health and education); security (vulnerability to economic risks and to all forms of violence); and empowerment (power within and beyond the household)."

The SL framework presents the main factors that affect people's livelihoods and typical relationships between these and is used in both planning new development activities and assessing the contribution to livelihood sustainability made by existing activities. Heeks and

his co-authors adapted the SL framework to enterprise development; specifically to enterprises where information and communication technologies (ICTs) are used promote sustainable livelihoods. The particular focus is on female-led enterprise given the growing and compelling body of evidence suggesting that persistent gender inequalities give rise to slow development, economic growth and poverty reduction (World Bank 2001).

The authors' belief is that "a livelihoods approach to ICT-based enterprise should provide insights of particular relevance to issues such as vulnerability, sustainability and impact; especially in relation to those ICT-based enterprises that touch upon the lives of the poor." The focus shifts from needs-based, resource-centred solutions to a focus on people and their capacity to initiate and sustain positive change. This framework has been widely adapted in various contexts ranging from natural resource management to urban poverty reduction. In its application to ICT-based enterprises for women, the incorporation of gender and technology are essential elements.

Gender is particularly significant in influencing livelihood outcomes defined through gender differences in distribution and access to assets – such as credit or technology – which are in turn crucial for ownership and management of sustainable enterprises. The articulation of gender at the level of macro-economic goals also has to be done. This consists of a compilation of gender-based data on macroeconomic and household issues, gender equitable capacity building as well as data in the household level to capture complex power relations, activities analysis, resources analysis and relationship analysis.

The methodological tool is explained in more detail. However rather than going through all of it, it will be more useful to talk about some examples of enterprises and their use of ICT that illustrate the diversity of ICT application and use and the gender aspect that demonstrate some if not all of the multi-dimensionality of women's livelihoods.

### **Some examples in Asia**

Presented below are abstracts of these examples which I will discuss more in depth during the presentation.

#### **Rural women weavers in Bhutan**

A case study written by Minori Terada on how traditional rural women weavers in Bhutan went passed middlemen by developing weaving information and communication strategies for e-commerce in tourism. With the help of Japan Women in Development Fund (JWIDF), the women developed business plans to manage supply and use the Internet to facilitate the export of their products. On a larger scale, the women's weaving project addressed gender-based inequities in the local and international markets.<sup>5</sup>

#### **Technoworld, India**

A brief account of a data entry micro-enterprise that was set up in 1999 as part of the Kudumbashree initiative. Members of various self-help groups with basic skills were selected to form the first ever women's group enterprise in data entry in Kerala State, aided with a series of training programs in data entry, software integration, marketing and accounting. The initiative had a budget of US\$6445 raised through a bank loan, members' contributions and a small subsidy. The initial client was the Employee Provident Fund Department for the digitisation of personnel records. For the first 18 months of operation, the unit functioned in the corporation office before moving to a rented building. It was able to pay all its initial loans after three years of operation.

#### **Divine Computers, India**

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5 Gender and ICTs for development: A Global Sourcebook by Royal Tropical Institute. 2006  
<http://www.eldis.org/go/topics/resource-guides/ict-for-development/ict-and-gender&id=20759&type=Document>

A team of women sourced a group loan of US\$4,444 from the State Bank of Travancore under a Federal Government poverty alleviation scheme in Calicut, India, in 2002. The group members contributed US\$222 while the rest was paid through a subsidy. The micro-enterprise is engaged in training high school students under the IT@School Programme as well as give some short-term computer lessons to the general public during school break. The school collects monthly fees from the students (US\$0.50 per student), out of which US\$560 is directly paid to the bank account against the loan per month. The rest is given to the women in Divine Computers.

### **InfroShree Systems and Peripherals, India**

Following an initiative by the local council to set up a hardware assembly enterprise to meet growing demand for PCs, Kudumbashree – the local poverty alleviation agency—organised a group of women from low-income families to form this enterprise in Kasargod, India, in 2003. Financial support came from a bank loan while the basic infrastructure and initial purchase of equipment was subsidized by a local council. IT training and marketing were provided by a local centre and a company. The initiative engages in hardware assembly, installation, service and sales for local councils, schools, banks, shops, DTP centres as well as occasional data entry or computer training work.<sup>6</sup>

### **Informal workers network in the Philippines**

Pambansang Kalipunan ng Mga Manggagawang Impormal sa Pilipinas (PATAMABA), founded in 1990, is a national network of informal workers in the Philippines. It was established primarily to ensure that the laws, though very limited, for the benefit of workers in the informal sector are implemented. Since 1999, the organisation has been training women homeworkers to begin home-based livelihood enterprises. Projects have involved computer literacy, good business practices, and relationship-building. Some members have joined together to form a coalition of small producers in order to compete in the export market. It also seeks support for participation in international trade fairs, where members gain exposure to market realities.

One of the women's business ventures—production of a popular, vegetable-based bread, used funds from the Department of Labor and Employment (DOLE) to start a successful bakery business. It also set up a website with the help of Isis International-Manila to for e-commerce, business and trade.

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In **concluding**, I would like to emphasise the need for continuous and more in-depth learning about how ICT are truly contributing to addressing gender inequality in all its dimension. Despite the proliferation of ICT for development projects and programs on the ground, there is still skepticism about their impact on development. As far ICTs creating new economic opportunities that lead to changing women's status and roles, all evidence still points to the fact that much of this potential remains to be harnessed.

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<sup>6</sup> Supporting Women's ICT-Based Enterprises: A Handbook for Agencies in Development by Richard Duncombe, Richard Heeks & Sharon Morgan and Shoba Arun. 2005.

<http://www.eldis.org/go/topics/resource-guides/ict-for-development/ict-and-gender&id=22477&type=Document>

<sup>7</sup> "How Grassroots Women View Communication Tools and Empowerment in the Philippines". *People's Communication for Development*. edited by Tesa Casal de Vela and Myra Alexis Ofreneo. 2007. pp. 207-217