

Enabled women in knowledge societies

Ensuring that women benefit equitably from efforts to develop human capacity is at the core of the knowledge society



Nancy Hafkin
Director, Knowledge Working,
Massachusetts, USA
nhafkin@comcast.net

From information society to knowledge society

Much of the attention to the information revolution has been on technology rather than on information and knowledge. In recent years emphasis has shifted from the information society to an emerging global knowledge society focused more on people using knowledge, rather than technology. Though there is no denying the fact that information technology remains a central element of knowledge society, combined with continuous learning particularly in science and technology, as well as innovation particularly through entrepreneurship. In knowledge society information technology is applied to the acquisition and use of knowledge towards the end of human development and economic growth.

The key elements of knowledge society are ICT use, highly educated and skilled people, progress in science and technology and innovation in the development of Small and Medium Sized Enterprises (SMEs). Scientific and technological knowledge not only engenders competitiveness in the global economy but can also improve the lives of the poor in many ways, such as through better nutrition and health, higher crop yields, cleaner water, and providing renewable energy sources. Innovation develops national capacities and leads to job creation and poverty reduction. Entrepreneurship, particularly in small and medium-sized enterprises in new areas, is usually regarded as a key indicator of a country's innovation. The growth of SMEs is important for their role in creating local employment and strengthening local economics.

Our concern here is the creation of socially inclusive knowledge societies, especially including women who have

been bypassed in many fields and in many countries. Knowledge is not only for economic growth but its foremost use should be to empower and develop all sectors of society to understand and use knowledge to increase the quality of people's lives and to promote social development. A socially inclusive knowledge society empowers all members of society to create, receive, share and use information and knowledge for their economic, social, cultural and political development.

Role of women in knowledge society

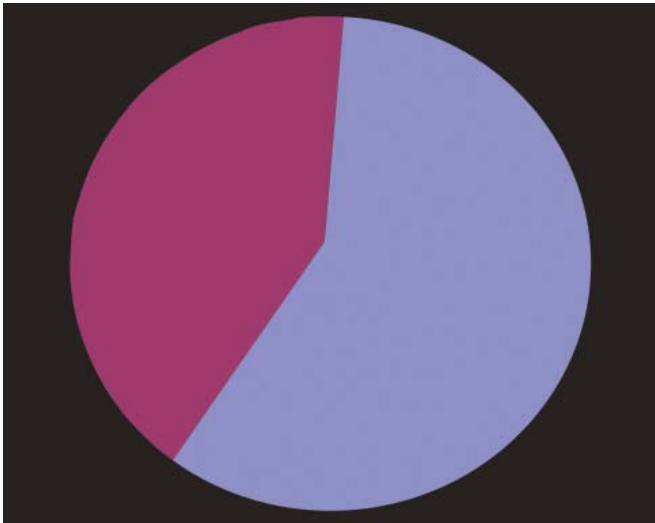
Amartya Sen makes the argument for the centrality of women in the knowledge society, placing emphasis on the agency and capabilities of women. He sees women's leadership as a crucial element in development and notes that the expansion of women's capabilities enhances not only women's own freedom and well being, but also has beneficial effects on society as a whole (Sen 1999)ⁱ.

This article takes stock of the progress of women in evolving knowledge society in two countries, identifying areas of success as well as constraints to greater progress. We look at the situation of women in two middle-income Asian countries, the Philippines and Thailand, where women are doing well on several of the success indicators for participation in the global knowledge society. We note that while women are making strides in progress in the key knowledge society areas of use of ICTs, entrepreneurship, higher education and technical skills, they are not doing so in a situation of full equality.

A case study: The Philippines

By a number of indicators, Philippines comes out as an early leader in terms of the

Figure 1: Percentage Internet users by sex, Philippines (2003)



Source: Digital Filipino (DF) Survey, The Filipino Internet User, part 2.

participation of women in the knowledge society, as seen by their use of the Internet, their involvement as entrepreneurs, their high rate of education especially in science and technology and their numbers among highly skilled researchers. However, as we will see, leadership and a high level of participation do not necessarily result in equality.

Women have become significantly more numerous as users of the Internet than men in Philippines. Please refer to Figure 1 for further details.

In fact, the Philippines leads the world in the percentage of Internet users who are women, exceeding the rich countries of the United States, New Zealand, Canada and Australia by at least 6 points. Only Thailand comes close to Philippines in the rate of women's Internet use among rapidly growing Asian countries. Please refer to Table 1.

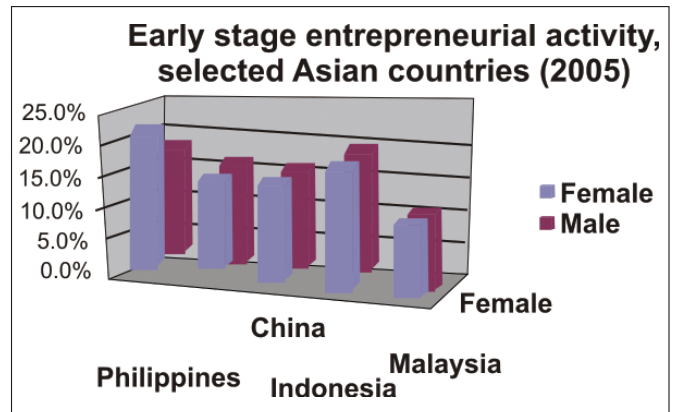
Table 1: Leading countries in women's use of the Internet

Country	% female Internet users (among all Internet users)
Philippines	58.0
Mongolia	56.0
Thailand (2003)	52.6
United States	52.0
New Zealand	51.5
Canada	51.0
Australia (2005-2006)	50.7
Hong Kong	50.0
Slovenia	50.0
Kiribati	50.0

Source: Sophia Huyer (2008), "Gender and the Core ICT Indicators," Presented to 2008 Global Event for Measuring the information Society, Geneva, 27-29 May. Unless otherwise indicated, data are from 2006.

Women are also leaders in entrepreneurship in the Philippines. The number of women engaged in early-stage entrepreneurial activity, regarded as an important measure of innovation and potential for knowledge society participation, exceeds that of men. In 2006, 22.5 percent of women were new entrepreneurs

Figure 2: Early stage entrepreneurial activity, selected Asian countries (2005)

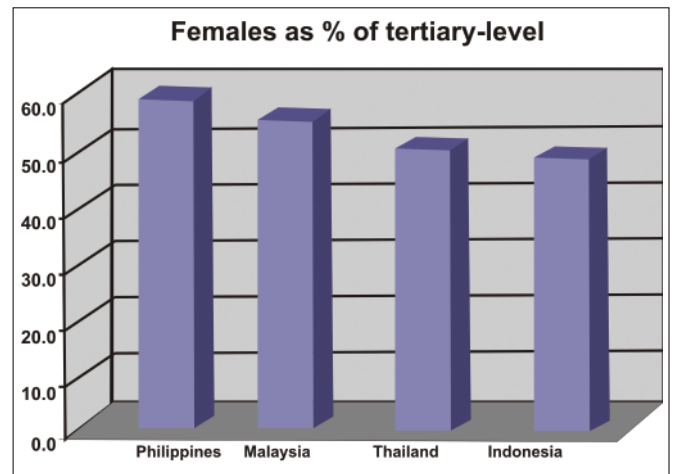


Source: Allen et al. (2007).

as compared to 18.4 percent of men. (Allen et al. 2007). The rate of female entrepreneurial activity in the Philippines is high not only compared to men in that country but also is the highest among either men or women in a series of Asian countries noted for entrepreneurial innovation.

The Philippines also ranks first among several Southeast Asian economic powerhouses in percentages of women in higher

Figure 3 : Females as a % of tertiary-level students



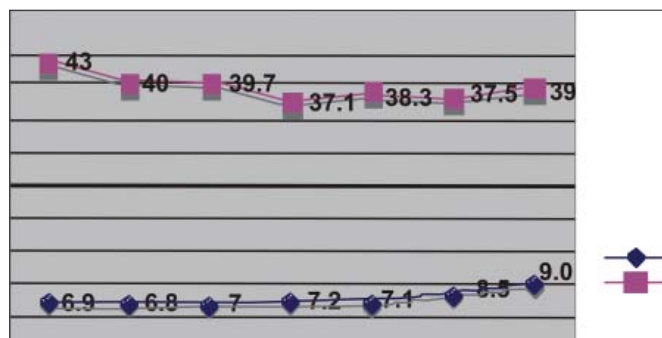
Source: UNESCO Institute of Statistics (2006a) Women in Higher Education.

education. Figure 3 depicts the percent of female students in tertiary level of education.

In the Philippines, the number of women engineers is low as an absolute percentage, but higher than in many other countries and increasing rapidly. While the rate for men graduating in engineering decreased by 10.8 percent between 1997 and 2004, that of women increased by 40.6 percent (Commission on Higher Education, Philippines, 2006).

The Philippines also distinguishes itself as being one of six countries in the world with more women researchers than men and among the top 10 countries in numbers of female science graduates. The World Economic Forum gender gap index put Philippines in the sixth place in 2006 and 2007 (see Table 2), the only Asian country in the top ten, notable for having closed the gender gap in education and health (again, the only Asian country

Figure 4: Percentage of graduates in engineering by sex, Philippines, (1997-2004)



Source: Commission on Higher Education, Philippines (2006)

to do so) (Hausmann et al. 2006, WEF 2007). Philippines has the highest percentage of women researchers of any country in the world with a sizeable research community (UNESCO Institute of Statistics, 2006b).

Table 2: Leading countries in bridging the gender gap, World Economic Forum Global Gender Gap Index, 2006-2007

Country	Rank 2006	Rank 2007
Sweden	1	1
Norway	2	2
Finland	3	3
Iceland	4	4
New Zealand	7	5
Philippines	6	6

Source: <http://www.weforum.org/en/initiatives/gcp/Gender%20Gap/index.htm>

This high level of knowledge society-related activity comes at a price for women in the Philippines. They work for longer hours and for lower wages than men. Women doing similar work to that of men earn only 73 percent of men's wages, while women's earnings overall are only 59 percent of men's — and women's workload averages 21 percent more than men. Women in Philippines have one of the world's highest workloads in comparison to men (Hausmann 2006; UNDP 2006). It is noteworthy to mention here that although the WEF gender index measures economic activity and its enablers such as health and education where women rank high in the Philippines, it does not look at measures of gender equality such as equal workload or equal wages.

Table 3: Internet users by sex (%), Thailand, 1999-2003

Sex	1999	2000	2001	2002	2003
Female	34.9	49.2	51.2	51.7	52.6
Male	65.1	50.8	48.8	48.3	47.4

Source: NECTEC, 2002, *Internet User Profile Survey and National Statistical Office, Philippines for 2002 and 2003*

A case study: Thailand

Women in Thailand are also making significant progress in knowledge society areas, as shown by several indicators. With regard to Internet usage, women overtook men as a majority of users in 2001, and their numbers have continued to increase since then (see Table 3).

Encouraging as well for women's participation in the knowledge society is that in the age group 20-29 in Thailand – likely

Table 4: Ratio of female/male enrolment in universities in math and computer studies, engineering, Thailand, 1995-2002

Country	Math and computer Related Studies	Engineering
1995	0.78	0.16
1996	0.74	0.17
1997	0.76	0.18
1998	0.76	0.17
1999	0.75	0.20
2000	0.73	0.16
2001	0.83	0.20
2002	0.89	0.19

Source: NECTEC, 2006

candidates to become knowledge society innovators — 53.2 percent of women use the Internet (NECTEC 2006).

Women have been the majority of students at secondary and tertiary levels in Thailand since 2006 (NECTEC 2006). In math and computer-related fields at university in Thailand, women are coming close to parity with men. While their representation is still low in engineering, it is higher than most other countries and on a generally upward slope (Table 4).

The surprising aspect of this encouraging picture of women using computers, in business, in higher education and in science and technology studies in Thailand is that it might not be expected

Table 5: Women's representation in political/governmental positions in Thailand. 2003-2006

Women's empowerment area	Share of women in total
Female ministers (2006)	5.7%
Female members of tambon (village) administrative organizations (2003)	6.7%
Female heads of the tambon (Kamnan) 2004	2.9%
Female heads of the village (Pooyaibaan) 2004	4.6%

Source: NECTEC, 2006

given one of the standard indicators of women's empowerment (women in political/governmental positions at national, district and local levels). Here women have a low level of representation, as seen in Table 5.

Conclusion

This brief picture of women in two countries makes the case for systematic study of gender issues in the evolving global knowledge society. In the cases of the Philippines and Thailand, women are forging ahead despite an explicit lack of full gender equality and empowerment, especially in areas of employment and political representation. If the constraints to women's equality and empowerment were removed, their contributions to building knowledge society would increase, to the benefit of the whole society and a socially inclusive knowledge society based on full gender equality would emerge.

In order to secure women's equitable place in global knowledge society, a comprehensive framework, accompanied by systemic data collection and analysis, is needed to measure all relevant aspects of women's potential and participation and plan policy accordingly². ■

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Footnotes and References:

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- ¹See Hafkin and Huyer, (2008) "Knowledge society needs all the women it can get!" for a fuller exposition of the arguments for the equitable inclusion of women in global knowledge society. <http://www.egomonitor.com/node/17358/print>
- ²A framework to measure women's participation in the knowledge society has been outlined in Huyer and Hafkin (2007). *Work is needed now to test and then populate the framework*.

Gender budgeting

Budgets and financial allocations for development made by governments often do not have specific allocations for gender issues. In a comprehensive paper review of "Gender Budgeting, the problems and perspectives", presented by John R. Bartle from the School of Public Administration, University of Nebraska, Omaha and Marilyn Marks Rubin, John Jay College, City University of New York, in 2002, several country analyses were provided. These have been an eye-opener on gender budgeting.

Learning from other country initiatives

The first gender budget exercise was undertaken in Australia in 1984. It resulted in a comprehensive analysis of federal expenditures (but not revenues). However this effort was shut down in 1996. One of the lessons of the Australian case is that gender sensitive budgeting exercises that are not 'owned' widely by civil society groups are vulnerable to ideological shifts within the state. In the Philippines, since 1994, agencies are required to allocate at least 5% of their budgets to "the development, implementation, monitoring, and evaluation of gender and development plans." A national commission has published an analysis of expenditures for 19 agencies. Issues that had to be addressed were: need for technical assistance, difficulty in monitoring agency performance, and resistance from budget officers. The process in South Africa began in 1997, with the participation of several agencies, including revenue collection as well as spending agencies. Measures to improve data collection were necessary. "The experience of South Africa indicates that engendering the national budget is a process which has to be developed over a period of time." However, it does appear to be having an impact, both in statements of the Director-General of Finance and in the gender-sensitive national budget address. The budget, especially relating to spending, are disaggregated by gender. "This aim is to focus attention increasingly to government

outputs and the impact of government expenditure."

In Spain, the government of the Basque Country has shown interest in introducing a gender sensitive budget approach. In 2000 there were two initiatives, which moved the process forward. The Basque Country's women's office, Emakunde, in partnership with the education information technology company, Infopolis, established a virtual library of materials on gender budgets. These materials are available on the web (www.infopolis.es/usuarios/bibliotec.htm). In Sri Lanka, five ministries were selected in 1998 to examine the gender impact of recurrent spending, as well as the gender distribution of public sector employment. One common finding was "that a proper mechanism is to be developed to collect data disaggregated by gender".

International agencies support initiatives

Various International agencies have been supporting partners to develop gender budgets in national programmes. The Commonwealth Secretariat (ComSec), United Nations Development Fund for Women (Unifem) and International Development Research Centre (IDRC) are the leaders in the field of gender budgeting which are intensely political processes. Over 40 countries around the world have responded to norms of preparing and presenting gender sensitive budgets. Looking at the impact and reach to women is the central goal of such gender sensitive budgets. Debbie Budlender, representing Community Agency for Social Enquiry, South Africa is an expert who has worked and supported gender budgeting programmes in at least ten countries, recently conducted a comprehensive review, case studies and analysis, entitled 'Review of Gender Budget Initiatives'. <http://www.internationalbudget.org/resources/library/GenderBudget.pdf>

Jayalaksbmi Chittoor, Programme Coordinator, CSDMS, India (jchittoor@csdms.in)