Annnotated Bibliography- ICTs and Gender Development
In Asia.

General references to gender within ICT4D policies:


This article by Fontaine attempts to assess whether women are included in ICT4D projects globally and whether, although research shows that women are becoming more included, these examples are few and far between or the situation of women in the digital divide is in fact improving. Fontaine focuses on the example of telecentres in developing countries, arguing that the possibility of individual ownership of computers in many developing societies is just not feasible. It is suggested that telecenters, or community based, public internet centers, have been touted as an effective solution to the access problem, and a variety of models have sprung up as pilots or prototypes around the world. Moreover, many telecenter projects have carefully and creatively crafted outreach efforts to attract women to the centers. This statement is however contradicted by the argument that telecentres in developing countries, are not particularly effective in helping women gain access to better economic, educational and other opportunities. Far fewer women use telecentres than men, and when they do use them, it is usually for non-Internet related purposes. Fontaine finally offers the opinion of Dr. Rathgeber who suggests that like other technological innovations before them, telecenters often are designed without adequate attention to the needs, capacities, and preferences of local communities in general and of women in particular. This article finishes by emphasising the importance of knowledge in a society relying upon ICTs for development. An extremely useful article offering arguments both for and against ICTs with specific references to gender as an issue in the digital divide.


This short article by GEM focuses specifically upon the livelihoods of women in rural areas and how these livelihoods are affected by ICT4D. The paper questions whether access to ICTs empowers or further disempowers women becomes a critical factor if gender inequality is not to be further exacerbated and if the gender digital divide is to be effectively narrowed down. There are a number of suggestions produced by GEM in cooperation with a number of rural ICT4D projects which need to be taken into consideration when producing ICT4D strategies as to how women will actually benefit and how likely they are to participate in such policies.
This article discusses the role of ICT in development and how a combination of both old technologies such as radio should be combined with newer technologies such as mobile phones and the internet in order to make ICT4D a success. Importantly mentioned here is the lack of gender inclusion in ICT4D policies with particular emphasis upon discussing who actually benefits from ICT policies, some of which are not gender neutral. Bridge argues that ICTs are characterised by ‘powerful corporate monopolies’, and women have relatively little ownership and decision-making within the ICT arena. The publication goes on the emphasis the importance of divisions across countries both socially and geographically with even less access is given to women in rural areas of developing countries. In this report BRIDGE gives an overview of how ICTs have been used as tools for the social transformation of gender equality and this article is of particular use when attempting the analyse the success of bridging the gap between theory, policy and practice giving useful and diverse gender information online.


This paper discusses those companies which fund many ICT projects and have done over the last 5 years. Often it is asserted throughout this article that ICT projects in particular are required to assess the actual needs of the women in the society in order to successful introduce ICT4D projects and to make them gender-neutral and equally sustainable. It is also recognised that men tend to benefit more from ICT4D innovations mainly because of the lack of knowledge possessed by the women in the area, mainly because of the social marginalisation of women in many developing countries. It is concluded that ICT4D policies need to be gender-specific in their aims and incorporate separate strategies in order to ensure that women and included and able to participate.


This article by Hafkin discusses the issues surrounding ICT for development policies and their application to societies with social divides, in particularly concerned with gender divides. The article uses a quote used by the engendering ICT policy guidelines for action in 1999 which claimed that ‘Until the ICT policy arena is itself engendered, it will be difficult to improve access for women and girls to the revolutionary tools of information and communication technology.’ Engendering ICT Policy: Guidelines for Action (1999). Additional points covered here include Information and communication technologies and their impact on and use as an instrument for the advancement and empowerment of women, along with
Emily Warr.

a gender analysis of national ICT4D policies. It is argued that ‘there are gender issues in virtually every aspect of ICT policy, whether the policy is dealing with infrastructure, applications or relations with society.’ The paper goes on to criticise ICT policies in both Mozambique and South Africa, claiming that although both attempted to consider the roles of women in society this was unsuccessful and that women remained marginalised.


This article by Kelly was commissioned by ‘infodev’ where it was recognised that no current information had been produced in order to assess the role ICT4E (ICT for education) in Asia. Kelly emphasises the importance of four main themes identified in all results for all the countries surveyed, including the importance of ICTs for training teachers, the provision of accessible infrastructure to internet in schools, several countries have very strong Open and Distance Learning initiatives that seek to provide mass education and overcome geographic or financial barriers and that educational institutions can be just as powerful in non-formal education settings, creating the opportunity for life-long learning. This article is helpful as it goes through all of the countries surveyed offering an insight into up-to-date knowledge about the ICT4E policies in each.


This paper by Nath offers again both positive and negative aspects of ICT4D and its effects on gender divisions. The claim is that expectations are high when it comes to ICT opportunities for women in developing countries, including new forms of learning, education, health services, livelihood options and governance mechanisms. A note of caution is used though as Nath argues that technologies cannot entirely relieve the issues faced by women in development. Positively though it does bring new information resources and can open new communication channels for the marginalized communities. It offers new approaches for bridging the information gap. The benefits include increased efficiency in allocation of resources for development work, less duplication of activities, reduced communication costs and global access to information and human resources. This article attempts to explain both the positive and negative aspects of ICT4D and notes that many mothers in developing countries are expecting their children to learn about computers in order to provide themselves with a better quality of life.


It was once quoted that ‘development is freedom’. The millennium development goals are a set of objectives often referred to in the production of development policies and the strategies to use to achieve these. Goal 3 is particularly relevant in this case as it aims to promote ‘gender equality and the empowerment of women.’ This highlights the importance recognised on a global scale of the inclusion of women in innovations towards development and the introduction of ICTs for development is no different. Goal 8 sets out to ‘develop a global partnership for
development'. ICTs are crucial in the development of countries with the growing interconnectedness of countries both developed and developing, it is essential that women are included in this process on both a local and global scale.

*United Nations (1997-2007)*

This website is of particular use when considering the attempts to improve already established policies in order to include measures to incorporate gender divisions in general policy proposals. The website itself explains how ICT's can in fact be used in order to raise awareness and promote gender equality and incorporates 'women's watch', a programme using information and resources in order to encourage the empowerment of women. An important milestone in the issue of women and their access to ICT's was discussed in collaboration with the United Nations development goals at the second phase of the World Summit on the Information Society held in Tunis in 2005. What came out of the summit was that the attention to gender perspectives in the development of ICT has significantly increased. The website also gives many links that support the increased attention given to empowerment of women through ICTs.


Here, Unwin talks about the role that ICTs can have in improving health care in developing countries and specifically how this particularly relevant to women as often the main health information seekers in the community. Unwin argues that in order for women to fulfil their role and have successful access to e-health it is vitally important that they have access to specialised health sites and services which are relevant to the societies needs, interests and concerns. Unwin concludes here by claiming that this is all the more relevant because of the social divides often in place which mean that women do not always have substantial access to telecentres of other public sources of ICTs.


WIGSAT is a consulting group which attempts to promotes innovation, science and technology strategies that enable women, especially those living in developing countries, to actively participate in technology and innovation for development. The website is extremely useful, offering examples of projects undertaken by WIGSAT, many of which aim to assess the most effective ways in which to encourage women to partake in and have access to ICT4D policies.

Willis talks in her book about the role of technology as a way in which to improve efficiency and productivity in developing countries. Particular emphasis is also placed here upon the role of technology in assisting people to deal with hazards such as natural obstacles such as disasters however Willis argues that technology can lead to many issues within society. Firstly, Willis refers to the possibilities of ICT4D in terms of assisting healthcare and education as promising, accessing the 2001 Human Development Report and the DFID 2000 White Paper which argues that the internet can help overcome some of the spatial inequalities that hinder improvements in standards of living. An example is given here with China, with reference to globalisation as a result of ICTs in education have meant that learning materials and audio cassettes have been used in order to improve teacher training. It is suggested here though, that certain types of advanced technology can lead to environmental problems but that the ‘introduction of new technologies can also exacerbate existing social divisions...as only some people are able to use these technologies.’ Willis then goes on to mention specifically economic inequalities but also the power distributions and norms such that certain groups for example women are not allowed to use certain forms of technology. Reference here is given in particular when discussing the internet as a new technology assessing that the social divides are greater than with older technologies such as Radio, an argument backed up with the statistic that 86 per cent of the Internet users in Ethiopia are male (2005).


This book places particular emphasis on the role of women within society and how women are often unable to access ICTs in order to develop because of the social unrest because of where they live. The title ‘Cinderella r Cyberella’ refers to the emphasis of Youngs upon the question which resides within many developing countries that has ICTs actually enabled the empowerment of women, allowing them to become a part of the information age along with the men within society, or have the social norms and values within their countries meant that they are resigned to remaining marginalised by the social unrest. Youngs argues that knowledge is key to women being able to access the information age and without this knowledge the empowerment and development of women with the use of ICTs remains somewhat limited.
References to ICT4D policies and gender within Asia:

**Butt, D et al (2009), 'Issues for the region ICT4D in Asia Pacific: An overview of emerging issues' Orbicom, p1-11.**

This article by Butt et al. In 2007, it cannot be denied that information and communication technologies (ICTs) have had a transformative impact on the entire Asia Pacific region. Even in the least developed areas of the region, where ICTs have yet to make a significant mark on everyday life, the processes of lawmaking and the flow of economic goods are in some way influenced by globalisation and networked markets enabled by ICTs. As ICTs become central to the economic structure of countries all over the world, the approach to their role in social and economic development has become more sophisticated. In contrast to earlier policy agendas which sought to increase the use of ICTs as a pathway to achieving development, there is an increasing recognition that ICTs cannot be seen as completely good or bad, as their effects are dependent upon the particular context of use. The article is particularly useful in assessing the role of ICT4D in Asia and how these policies have become more successful in recent years as recognition of ICT as a useful tool for development but should be exercised with caution.


This article by Colle and Roman stresses the importance of cultural barriers in the marginalisation of women by many ICT4D policies. Namely, literacy, education, language, cost, locality, the perceived role of women, and technophobia. It is assessed though that these barriers are not uniquely experienced by females. But they are barriers that exist widely and more severely for women particularly in Africa and some parts of Asia. Some of these obstacles are as resilient to change as they are deeply embedded in cultural practices such as denying school opportunities for girls, a second process which influences the unavailability of ICTs as schools are where the computers are most likely to be and where they will learn to read. This article contains a number of large sweeping statements however is successful in identifying the cultural barriers faced by many women in ICT4D policies.

**Ekaputri, G ‘The Importance of Information and Communication Technology (ICT) for Development to Indonesia’s Future’, Unpublished, p1-3.**

This reasonably short paper focuses on Indonesia in discussing the role of ICT for development. Ekaputri discusses mainly on the advantages of ICT in development and how not only Indonesia but there has been a global shift towards a digital and knowledge based societies. It is suggested that in order to improve ICT4D in Indonesia there is the requirement to provide a better information infrastructure to make ICT available to all social divides, such as economic, political and gender.

This chapter in the book 'the companion to development studies' discusses mostly the power of women within society and how this has been greatly affected by the introduction of new technologies. The importance of women is stressed by the statistic used in the first paragraph which argues that the majority of the world’s poor are women, a total of 70% in 1995. Scott and Foster argue that women are at the forefront of many societies and with particular reference to Asia, are essential to a harmonious society both in relation to socially producing a family but additionally in providing food and water along with heating and crops with 70-80% of all food crops in South Asia being produced by women. Scott and Foster proceed to argue that ‘outsiders’ must recognise that the poor are not ‘one harmonious group’ and that poverty has a hugely complex nature. This article is particularly useful in focusing on issues with gender and ICT policies at the source. It is suggested here using the example of a study by Gill in 1985 that male extension workers thought that women were unprogressive when considering technological innovations. Scott and Foster argue here that often women are invisible and that often the policy designers, as males themselves frequently overlook women’s crucial role in society and that women are rarely involved in research or technological development, leading to a scarcity of ICTs available to women.


GKP is the Global Knowledge Partnership is a Network creates development impact through Knowledge and ICT-related initiatives around the world. This website is extremely useful, showing a map of where the ICT4D projects produced by the GKP are and how many projects are in place in each country. Asia is included in this with 30 ICT4D projects in Bangladesh, 33 in India, 13 in Nepal and 5 in Bhutan to name a few.


This article by Green argues that One of the strongest messages that emerges from research on the effective use of ICTs in the education of women is the need to use appropriate technology. The examples below look at the newer ICTs, computers and related services such as e-mail and the web, and also include the use of broadcast technologies, such as radio and television, as well as audio and videotapes. Along with an endorsement for the more traditional ICTs, there is an equally strong message that women and girls must not be left behind in the digital revolution. The digital divide includes a gender divide, especially for rural and marginalised women, and the newer ICTs have the capacity to allow us to benefit from the full contribution of women. Green uses a number of examples within Asia such as the Mothers4Mothers project in Malaysia and the Information Village Project in Pondicherry, both successful examples of ICT4D in with particular focus upon education. There is also undoubted stress upon the importance of gender-sensitive policies and relevance within the community. Greens article is very useful in assessing the ICT4D strategies at present in Asia, showing success stories and failures and explaining why this may have taken place.
Information For Development (2008), ‘Enabling Women In Knowledge Societies’ P6-11.

This weekly magazine produced by Information to Development focuses on case studies in The Philippines and Thailand and discusses the role of women in knowledge society. It is assessed that the Philippines are relatively ahead in terms of ICT4D closely followed by Thailand in terms of internet access. It is also argued that often the inequalities with women in society, often working longer hours and for lower wages than men making the high level of knowledge society-related activity comes at a high price for women. This article is highly interesting and as it was produced in 2008 has reasonably up-to-date information giving clear examples of ICT4D success stories in knowledge societies.


Although not directly connected to ICTs, this book is particularly useful in describing the social divides, specifically those within genders in Asia. An important point recognised by this book is that these divides vary greatly across Asia because of the variety of countries at different stages of development within the continent and attempts to convey the ways in which women live in societies which are often dominated by men. This is directly linked to a number of the references included in this bibliography which argue that ICT for development policies are often affected by the existing social divides within communities, commonly those associated with gender.


There are two points of interest in particular in this book by Potter et al. ThThe first is found on pages 137 to 142 where globalisation is discussed alongside the information society. The focus here is mainly on discussing opinions for and against the reliance on technology for development. The example of the Department of International Development in used in support of ICT4D who claim that new ways of processing information can provide poorer nations new opportunities. The digital divide is however mentioned a lot here, placing emphasis upon the current global and social divides within technological access and also in relation to globalisation, points out a popular note of caution in the risk of ‘westernising’ the Global South in a process of ‘e-imperialising’ rather than the preferred ‘e-democracy’. Finally, Potter et al discuss the role of internet and how much of the internet use across the world is still confined within Westernised countries. The assumption is that as there are more internet users globally, that this is a direct result of improving access, in fact, Potter et al argue that the truth lies in the reliance upon internet in the workplace.

The second point of interest is found on pages 216 to 219. This chapter places a large amount of emphasis upon the inequalities found specifically with gender in education. Potter et al argue that the first priority of all countries should be to offer
all children at least the opportunity to attend suitable primary education and in this statement, offers the example of the 1990 World Conference on Education which produced five objectives relating to education which they believe should be achieved in order to offer acceptable education to all.


This journal places particular emphasis upon Asia when referring to a ‘digital divide’. As with many of the previous articles, Quibira et al assess that access to ICTs is greatly unequally distributed both globally and socially within communities. The report attempts to understand the determinants within Asian societies which cause such divides, with particular emphasis being placed upon the role of income, education and infrastructure in shaping the community and its ability to accept and develop along with ICTs for development. Progressively this paper attempts to offer solutions to such a digital divide, offering five different policies which claim to promote ICTs. These include investment in education and infrastructure, along with the creating of favourable institutions, fostering institutional innovations and finally the importance of international cooperation. This article is particularly useful in specific reference to Asia and unlike many articles criticises the current ICT4D policies whilst also attempting to offer ways in which to improve the efficiency of those policies already in place.

*Rao, M.K (2005), ‘Empowerment of Women In India’ New Dehli, P234-240.*

This book by Rao puts particular emphasis upon the importance of an encouraging and inviting environment to allow ICTs to successful economically empower women. Rao gives a list of 10 measures which should be carried out by developing countries to produce an actively encouraging environment for ICT4D including in integration of gender perspectives in the development and implementation of national policies, programmes and strategies, successful allocation of resources to strengthen those policies which offer participation specifically to women and provide opportunities for empowerment of women and develop gender-responsive programmes which promote universal access and affordability particularly for rural communities. This book is extremely useful as it is clear and offers solutions to the current issues surrounding ICT4D and gender and insists upon the empowerment of women. Rao talks specifically about India and uses this as a basis on which to base the suggested improvements and proposals for ICT4D policies in the future.


This book, directly in relation to emerging Asia assesses the effectiveness in ICT4D policies. Samarajiva et al argue using a five country study engage the widespread claim that technology by itself i.e. the assumption that independent of policy and regulatory reform can improve access to ICTs. In this process, the conclusion
produced is that while complex 'workarounds' are possible, they are significantly less effective than the appropriate policy and regulatory reforms.


This paper places specific emphasis upon open ICT4D, a policy which described as is the use of new ICTs to engage in 'open' processes to achieve development gains. Shaheen speaks specifically about Pakistan Open ICT is a very powerful tool for development and has assisted tremendously in achieving efficiency in key areas such as health, education, and women empowerment. In Pakistan, communication sector has become one of major sectors attracting foreign direct investment, during the past five years. Despite the increased number of mobile phone users and computer applications, the rural areas remain underserved. Furthermore, access and usage of ICTs demand affordability, accessibility, and literacy and these factors are usually gender insensitive, the very definition of gender digital divide. The paper additionally discusses the positive aspects of ICT4D and its role in addressing gender divides. Access to employment and income is one aspect thereof. Open ICT applications have translated into an improved access to financial information for female users. Besides, the employment creation and business promotion, ICTs have provided innovative ways for women and girls to obtain access to education and skills and facilitate women and girls' access to health-related information and facilities. Distance learning, as another example, gives flexibility of access and study times. This may be of special importance for females in rural areas or those facing social barriers that limit their access to schools. Health educators have used radio to communicate information related to women’s sexual and reproductive health. Besides, information tools like CD, databases and mobile ICT devices can enhance public health delivery. This paper is particularly interesting when considering specific examples of gender and ICT4D in Asia.


This news article in the Daily Star news paper discusses the collapse of the Bangladeshi governmental websites available to the population in May 2010. Experts say that government websites, launched 10 years ago as part of the e-governance initiative, were intended to make it easier for citizens to interact with public agencies. It meant no longer wait in queues in government offices to make complaints, pay bills or apply for special programmes. Although not necessarily a reliable source, the Daily Star offers useful facts about the collapse of the websites. It is argued that whilst the government predict a 'Digital Bangladesh' by 2021, most of the 250 official websites sampled in the weeks before the crash contained outdated information, dead links and "web page under construction" signs. The issue itself here is that whilst Bangladesh has been painted as a success story for introducing a set of websites, it seems too much too soon as they collapse due to unstable internet, and as asserted by the government themselves 'They blame the lack of techno-savvy people to look after the websites, which require at least half an hour a day to update and maintain.'

This website produced by UNDP gives users five examples of gender sensitive ICT4D policies in Asia. The descriptions of these policies include the amounts they cost, the target beneficiaries and the research results and outcomes. A useful base which offers many examples of different policies which pay particular attention to gender in developing societies and how successful ICT4D policies here were. Importantly, the role of women within society is assessed in each case shaping the policies around the social divides in the community.


This article asserts that traditionally, gender differences and disparities have been ignored in policies and programmes dealing with the development and dissemination of improved technologies. As a result, women have benefitted less from, and been disadvantaged more by, technological advances. Women therefore need to be actively involved in the definition, design and development of new technologies; otherwise, the information revolution might bypass women or affect their lives adversely. The paper mentions the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) commissioned a study to review the national, regional and global initiatives for equal ICT access from a gender perspective and to assess how these initiatives had been translated into gender-sensitive policies in the Asian and Pacific region. This paper is extremely useful in addressing ICT4D and gender issues with specific relevance to Asian countries and gives good examples of how gender is now being taken into consideration when both national and local ICT4D policies are being produced. The final point conclusion points assert that The legitimization of the gender and ICT agenda in the international policy arena opens many opportunities for greater collaboration among state actors, nongovernmental organizations and the private sector towards developing a common minimum agenda. Many of the national and local ICT projects geared towards closing the digital divide which are being implemented by government and non-government agencies are in fact being supported, if not entirely initiated by international organizations and agencies. It is argued that the next part of the process involves getting national ICT policy frameworks and strategies to respond to the specific dimension of the gender digital divide and to address the specific ICT needs of women who comprise not only half of the global population, but an overwhelming majority of the region’s poor.


In this book, Unwin discusses ICT for development in particular reference to Asia. The UNDP’s Asia Pacific Development Information Programme established in 1997 which lead to the introduction of Asian Forum on ICT policies and E-strategies in 2003 which is mentioned here as a national ICT4D policy which took into consideration a number of social and political divides, such as governance, access...
and gender. Unwin goes on here to reference Lallana 2004 who unlike many discussed the vast spatial differences in access across Asia, with many rich countries such as Japan and Singapore in comparison to poorer ones such as India and Nepal. An important point brought to light in this article is the need for ICT policies to be flexible in order to adjust in correlation to political, social and economic change within the countries they are aiding. This chapter is particularly useful in addressing the ever present issues faced by ICT4D policies across Asia, finishing by arguing that there is no one model for ICT4D policy but that a number of aspects need to be taken into consideration when designing a strategy. Prioritising objectives, patience and ensuring that governments encourage initiatives to name a few are important in ensuring that effective, efficient and sustainable ICT4D policies are produced across the developing world.