GEM

Gender Analysis
for ICT Localisation
Initiatives

Gender Analysis for ICT Localisation Initiatives

Gender Analysis for ICT Localisation Initiatives

Angela M. Kuga Thas
Chat Garcia Ramilo

GEM

APC	Association for Progressive Communications
APC WNSP	APC Women's Networking Support Programme
CLE	Center for Language Engineering (Pakistan)
CRULP	Centre for Research in Urdu Language Processing (Pakistan)
D.Net	Development Research Network (Bangladesh)
ENRD	E-Network Research and Development (Nepal)
FOSS	Free and Open Source Software
GEM	Gender Evaluation Methodology
ICT	Information and Communication Technology
ICTD	Information and Communication Technologies for Development
IDRC	International Development Research Centre (Canada)
KICS	Al-Khawarizmi Institute of Computer Sciences (Pakistan)
MUST	Mongolian University of Science and Technology
NAST	National Authority of Science & Technology (Lao PDR)
NiDA	National Information Communication Technology Department (Cambodia)
NUM	National University of Mongolia
NWNP	Nepal Wireless Networking Project
OM	Outcome Mapping
OMg	Gendered Outcome Mapping
PAN L10n	PAN Localization
PME	Planning, Monitoring and Evaluation
UET	University of Engineering and Technology (Pakistan)

Acknowledgements

This guide could not have been written without the gracious sharing of experiences and knowledge of the localisation initiatives under the PAN Localization project (PAN L10n). These include the participants of the GEM thematic adaptation workshop for localisation initiatives in Vientiane, Lao PDR, in January 2009. Our heartfelt thanks for all contributions go out to:

Founded in 1990, the Association for Progressive Communications (APC) is a non-profit organisation that aims to improve people's lives through easy, affordable and equal access to information and communication technologies (ICTs) like the internet, email and mobile phones.

We help people gain access to the internet where there is none or it is unaffordable, we help grassroots groups use technology to develop their communities and to further their rights, and we work to make certain that government policies related to information and communication serve the best interests of the general population, especially people living in developing countries.

APC is both a network and an organisation. APC members are groups working in their own countries to advance the same mission as APC. Eighty percent of our members are from developing countries. APC's value comes from the local perspectives and contact with grassroots organisations that we gain from our members and the fact that we operate as a truly virtual, international organisation. What makes APC unusual is that we work on two separate, yet interrelated levels: with governments in shaping policy and hands-on with the technology and the people who use it.

www.apc.org
info@apc.org

APC Women's Networking Support Programme

The Association for Progressive Communications Women's Networking Support Programme (APC WNSP) is both a programme within APC and a network of women throughout the world committed to using technology for women's empowerment and equality. Founded in 1993, more than 175 women from 35 countries—librarians, programmers, journalists, trainers, designers, academics, researchers, communicators—from around the world are part of our network.

The Gender Evaluation Methodology (GEM) was developed in APC within the APC's women's programme after we began investigating the impact of our work in 2000. We asked: What changes are empowering women? How are these changes being measured? What role do ICTs play in these changes? How do these changes shift gender relations between women and men?

At the time, there were no gender evaluation models or tools that looked specifically at the use of ICTs or technology. In 2001, we began developing GEM with ICT for development practitioners in 25 countries from Latin America, Asia, Africa and Central and Eastern Europe. The GEM manual was published in 2005. This new suite of publications for people who want to use GEM was published in 2011. Though GEM was initially developed for the internet and ICTs, experience demonstrates that GEM can also be used to improve gender relations by the development sector in general.

www.apcwomen.org
www.genderevaluation.net
info@apcwomen.org

Preface

In 2007, APC WNSP began to conduct an adaptation research project to make its *Gender Evaluation Methodology for Internet and ICTs* (GEM) more user-friendly for different sectors and communities. One particular sector that was considered extremely challenging because of its central focus on technology development and the accompanying misperception that technology is gender neutral, was localisation.

Some people who work in the ICT for development sector, be they policy makers or project owners and implementors, or technical experts, believe that technology has nothing to do with gender because for them, technology is gender neutral. There are also people who believe that technology is not for women, because women are not technically minded and not interested in technology. Some believe that, for as long as there are poor men, ICT for development (ICTD) opportunities should be given to them inasmuch as they are the main breadwinners of families (often without considering the realities of women-headed households). Finally, some believe that if men benefit from ICT initiatives, women would automatically benefit as well. However, the reality is that because of how women are socialised "to behave correctly as women", they often cannot enjoy the benefits of ICT-led development as they should. Without doing a situational analysis and adopting a gender perspective of the identified problem or problems, we often risk worsening the situation of women when compared to that of men. Without taking into consideration differing starting points for women and the effects of past and current discriminatory practices, there is a risk that we will increase the absolute and relative poverty of women.

"…It has often been assumed that women benefit automatically from development efforts and that progress towards equality of opportunity and treatment between men and women takes place naturally."

— Excerpted from the Guidelines for the Integration of Gender Issues into the Design, Monitoring and Evaluation of ILO Programmes and Projects, Evaluation Unit

The challenge in adapting GEM for localisation initiatives was that our collaboration with the PAN Localization (PAN L10n) project represented the very first time localisation initiatives in developing countries in Asia were being viewed with a gender lens.[1] PAN L10n's network consists of eleven countries: Afghanistan, Bangladesh, Bhutan, Cambodia, China, Indonesia, Lao PDR, Mongolia, Nepal, Pakistan and Sri Lanka. During the first phase of the PAN L10n project, the network partners managed to import software applications into local languages and were, by the

[1] Phase II of the PAN L10n project was implemented from 2007 to 2011. For more information on the PAN Localization Project, see: www.panl10n.net/.

time of the collaboration with APC WNSP in 2007, in the phase of deployment, localised content creation and training rural communities on the localised software technology.

At the beginning of the collaboration with APC, the PAN Localization network acknowledged that though it had been encouraging partners to look at gender aspects—such as maintaining a gender balance within their technical development teams[2]—it did not adopt any kind of systematic approach or tool to explicitly address gender within the overall project framework during its first phase. However, by the time of the collaboration, the regional secretariat of the network was convinced of the need to integrate gender, to ensure that such initiatives address the differential needs and realities of both women and men. This was largely because the project was rolling out the localised software and products to be tested and used by various identified communities such as Buddhist monks in Bhutan, groups of mothers and telecentre operators in Nepal, infomediaries in Bangladesh, rural schoolteachers and students in Pakistan, government officials in Cambodia, etc. The initial perception was that the development phase of the localised technology is free from gender implications, but development of relevant local language content and training delivery would have influence over how differently women and men benefit from the localised technology because of the existing gender-power and social relations. This meant that efforts needed to be made to integrate a gender perspective and to develop capacity in gender analysis within the localisation initiatives that were being executed by partner projects under the PAN L10n in order to help them realise the importance and relevance of gender in their work.

Fruits of this research collaboration are expected to benefit both localisation projects and gender and ICT advocates. Localisation projects would gain a deeper understanding of the real and potential impact of their work and would be able to ensure that their efforts are equally beneficial to women and men. Gender advocates would gain a deeper appreciation of the interconnections of technology and gender, which would enhance their advocacy in the ICT arena. "Gender Analysis for ICT Localisation Initiatives" will hopefully make a contribution towards these goals.

Chat Garcia Ramilo
Manager
APC WNSP

---

[2] This was achieved to some extent with the Bhutan, Cambodia, Lao PDR and Pakistan project teams which had reasonably gender-balanced teams. The Afghanistan team had no women and the Nepal, Sri Lanka and Bangladesh teams had women in non-technical roles. PAN L10n faced the same difficulty in hiring women in technical roles during the second phase of the project, although the outreach programmes had both male and female researchers.

Table Of Contents

Although the potential of information and communication technologies (ICTs) to promote positive social change is increasingly recognised all over the world, including in countries where infrastructure is still very poor, the understanding of gender equality concerns in ICT for development (ICTD) needs strengthening. While many ICTD practitioners and policy makers are committed to addressing gender issues and concerns which manifest within their projects and programmes, most do not know how to do so. Meanwhile, some ICTD practitioners and policy makers need to be convinced of the need to address gender and ICT issues, and others still believe that ICTs are gender neutral. It was within this context that the Association for Progressive Communications (APC) developed the *Gender Evaluation Methodology for Internet and ICTs* (GEM).

GEM was developed by APC within the Women's Networking Support Programme (APC WNSP) after APC WNSP itself began investigating the impact of its work in 2000. At that time, there was a strong and mutual need among members to build a collective understanding of the real impact of almost ten years of women's networking and advocacy on gender and ICT issues, and APC WNSP and its members had the following questions:

- What changes are empowering women?
- How are these changes being measured?
- What role do ICTs play in these changes?
- How do these changes shift gender relations between women and men?

At the time, there were no gender evaluation models nor gender tools for project/programme planning and evaluation that had a strong component in relation to the use of ICTs or technology in general, so there was a gap in the information and communication sector. In 2001, APC WNSP began developing GEM with ICTD practitioners in 25 countries from Latin America, Asia, Africa and Central and Eastern Europe. The GEM manual was published in 2005 and is the result of the collection, evaluation and deeper analyses of experiences from 32 projects by ICTD practitioners.

GEM provides a systematic method to evaluate whether ICTs are improving women's lives and gender-power relations. Since GEM's development, APC has organised over 30 GEM workshops with over 300 participants, and GEM has been presented at over 20 events held around the world[3]. Since GEM's development, ICTD practitioners have begun to realise that the introduction of ICTs

---

[3] Visit www.genderevaluation.net for more information.

alone is insufficient to bring about positive social change. While there is no doubt that ICTs have the potential to support change, including women's empowerment, this has to be consciously planned for by integrating a critical reflection process in the programming and evaluation for these changes to happen.

GEM is one way for ICTD practitioners and policy makers to make certain that a development intervention remains adaptive and responsive to dynamic situational contexts that are constantly influenced by political, economic, social and technological factors, as well as natural calamities. GEM users appreciate that there is no recipe for effective development, but only a system of mechanisms that will allow for periodic feedback, reflection and action. GEM raises the consciousness of its users by challenging them to look beyond static data collection models that force the community they are supposed to serve to fit into a prescriptive model. GEM users know that they should always be ready to go back to their intervention model and to redesign, implement and continuously monitor their undertakings to effect the change they want to bring about in their communities.

This guide can be both a standalone guide and a complementary guide to be used with other planning, monitoring and evaluation (PME) methodologies. Ideally, this guide will be used with the Association for Progressive Communications' *Gender Evaluation Methodology for the Internet and ICTs* (GEM) as a reference to the principles and frameworks adopted within GEM. The guide therefore adopts an evaluative perspective in the presentation of the content. The guide also uses references to the planning, monitoring and evaluation methodology called Outcome Mapping.[4] This is because the PAN L10n adopted Outcome Mapping as its overall PME tool, and GEM was used to integrate a gender perspective within this PME framework. As a result, PAN L10n developed the genderedOM or OMg tool to help others who apply Outcome Mapping to be just as able to integrate a gender perspective in their planning and monitoring.[5]

The content of the guide is divided into five sections:
- Introduction
- How to integrate a gender perspective
- Gender and ICT issues and intervention strategies
- Localisation initiatives for social change
- Next step.

Section 1 presents basic information on the motivation and need for the development of this guide. It explains what is meant by localisation, what typical localisation initiatives are, and why having a gender perspective in the design, implementation and evaluation of a localisation initiative is important.

Section 2 is a thorough walk-through of how to integrate a gender perspective into localisation initiatives, from the need to wear the gender lens and how to wear it, to how to do a gender analysis using the conceptual frameworks of GEM (Levels of Severity of Gender Problems and Longwe's Women's Empowerment Framework). The section also talks about the conscious need to ensure no "fade away" effect on the agenda to address gender issues.

Section 3 explores gender and ICT issues in localisation initiatives, especially those that were identified by PAN L10n and its project partners. It continues to integrate a gender analysis in the presentation of the examples and in the discussion of possible and workable intervention strategies, some of which

---

[4] Sarah Earl, Fred Carden and Terry Smutylo *Outcome Mapping: Building Learning and Reflection into Development Programs* (Ottawa, Canada: Internatinal Development Research Centre, 2001).
Developed by Earl, Carden and Smutylo in 2001, Outcome Mapping offers a methodology that can be used to create planning, monitoring and evaluation mechanisms to enable organisations to document, learn from and report on their achievements. Outcome Mapping focuses on a specific type of result—outcomes as behavioural change. For more information on Outcome Mapping visit the Outcome Mapping Learning Community website (www.outcomemapping.ca), developed in close collaboration with users of Outcome Mapping from across the world. To download the guide, see: http://www.idrc.ca/openebooks/959-3/.
[5] See www.genderedom.net for more information.

were actually deployed by PAN L10n's project partners. This part discusses the process using illustrative examples and shares the reflections of the localisation initiatives which had integrated GEM into their planning, monitoring and evaluation.

Section 4 presents the key issue areas for social change and the corresponding gender and ICT issues that the localisation initiative could address, and how these issues in turn correspond with a core framework of GEM, the Longwe's Women's Empowerment Framework.[6]

Section 5 briefly advises the reader on what considerations they need to make in order to effectively bring about social change through the localisation of ICTs.

The guide also contains some advice for practitioners who would like to undertake a gender evaluation. This complementary section describes the five key considerations that one has to examine if one wishes to conduct a gender evaluation or an evaluation with a gender lens. These five key considerations are:
• Organisational values
• Stakeholdership
• Capacities of personnel
• Understanding of gender
• Budgetary implications.

The conduct of an evaluation with a gender perspective means that one should be ready to take the necessary steps and commit the required resources to address gender inequality issues that will be made visible by the evaluation findings. Understanding the scope of these five key considerations and further examining them within the proper context can help one decide whether a project or organisation is ready to apply and integrate GEM within its planning, monitoring and evaluation framework. A lack of readiness may imply a need for some preliminary work with practitioners, project teams and/or organisational staff, and other stakeholders like funders and board members. For example: there may be the need for gender sensitisation workshops, or sessions to explain why there is a need to conduct an evaluation with a gender perspective. There may also be a need to establish a set of baseline data or to deploy dedicated resources over a period in order to conduct an effective gender evaluation. These are all important considerations that will influence the effectiveness and scope of the evaluation.

This guide is primarily meant to complement the GEM manual. While there are seven GEM steps which are organised into three

---

[6] See pages 33–38 of the GEM manual.

phases of the methodology, only Steps 2 and 6 are discussed in detail in relation to the experiences of the localisation initiatives in this guide, while some references are made to Steps 1, 3 and 4.[7] For reference, the seven steps of GEM are shown below. Note that Steps 2 and 6 are directly related to integrating a gender perspective and in conducting a gender analysis, hence, the added emphasis on how to do this within this guide.

The Gender Evaluation Methodology

Phase 1: Integrating gender analysis
Step 1 : Defining intended use and intended users
Step 2 : Identifying gender and ICT issues
Step 3 : Finalising evaluation questions
Step 4 : Setting gender and ICT indicators
           Note: This phase lays down the groundwork for planning and implementing a gender evaluation of an ICT-based initiative by arriving at an understanding of basic concepts of gender and ICTs. It sets the scope, purpose and limits of the evaluation.

Phase 2: Gathering information using gender and ICT indicators
Step 5 : Selecting data gathering methods/tools
Step 6 : Analysing data from a gender perspective
           Note: This phase focuses on various data-gathering methods and on analysing data from a gender perspective.

Phase 3: Putting evaluation results to work
Step 7 : Incorporating learning into the work
           Note: This phase focuses on how the lessons learned from the evaluation process can influence change within your organisation, your community and the wider gender and ICT movement.

You will find more information on each step within the GEM manual.

---

[7] A more detailed discussion of these steps and phases begins in the GEM manual on page 68.

SECTION 1:
INTRODUCTION
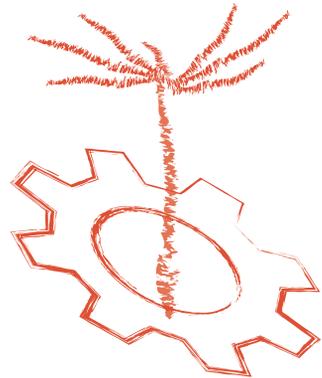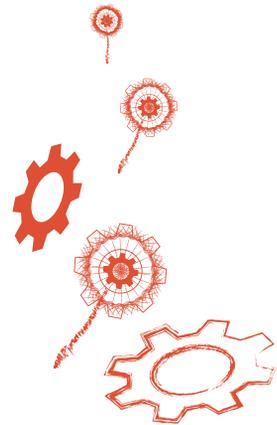
SECTION 1:
INTRODUCTION

1.1 Localisation, development and the digital divide

The adaptation of information communication technologies to local needs is called localisation. Localisation can be defined as "the process of developing, tailoring and/ or enhancing the capability of hardware and software to input, process and output information in the language, norms and metaphors used by a community."[8] The localisation process must also capture the variances in the use of a language, from spelling to scripts used to enabling ICT for oral and unwritten languages.[9] In practice, the term "localisation" includes but is not limited to the following activities:

- Adapting and customising software so that a specific local community can use it
- Making ICTs linguistically and culturally appropriate to the target locale

- Examining the rules and structure of the language concerned in order to determine keyboard layout, currency, dates, number format, and the interface.

Because the language barrier remains a big obstacle in countries where English is not the primary language, the general goal is to ensure that local communities are able to use ICTs, and specifically computers, through localised software. By using ICTs, these communities can constructively move towards a more developed status and localised software can contribute to reducing the intensity of "technophobia" among women, and particularly among rural women where literacy levels are often lower. Teams leading localisation initiatives are beginning to become more sensitised to the challenge posed by the fact that women are sometimes more afraid than men to try out new technologies like

---

[8] Sarmad Hussain and Ram Mohan "Localization in Asia Pacific" in Digital Review of Asia Pacific 2007/2008 ed. Felix Librero (New Delhi: Sage Publications India Ltd., 2008), 43-58.
books.google.com/books?id=wSlOkuwWKo4C&pg=PA43&lpg=PA43&dq=localisation+%2B+Sarmad&source=bl&ots=0vLizGfrec&sig=KnIkB-B7kyl3SI-gvMxn7886nD4&hl=en&ei=GEAoTle3Moe2rAeQvaz6BA&sa=X&oi=book_result&ct=result&resnum=6&ved=0CCQQ6AEwBQ#v=onepage&q&f=false.

[9] Enabling ICT for oral and unwritten languages would be completely dependent on a localised speech interface.

computers and new mobile digital devices. They appreciate that localisation initiatives can help reduce the socio-cultural barriers that deter women from ICT. Because women will be able to use the local language instead of English, they can use a computer even if they may have had no formal education on computers and technology allowing them to become part of a "networked world." Once women have acquired the necessary skills, they will be able to generate content in the local language.

Below are a few excerpts of interviews taken from the field visit reports prepared by ENRD, the Nepal component of PAN Localization project which were submitted to the regional secretariat's evaluation team. They express the advantages of using localised technology.

4-year-old child. I have obtained an SLC. My husband is working in Dubai. I know the basics of using computer, email and internet. I communicate with my friends and relatives via email but I am unable to do the same with my husband because he is ignorant about this technology. Had he also learnt the technology, the distance that prevails between us could be highly minimised. When he comes back, the very first thing I will do is teach him how to use this technology." - Harimaya Pun, Shikha, Myadi

What exactly is the digital divide? Govindan Parayil of the National University of Singapore described the digital divide as "not an accessibility issue but an equity issue... Under informational or digital capitalism,

"My name is Sarmila (name changed). I am 35 years old. I am married and have obtained an SLC [School Leaving Certificate]. I am working as a primary school teacher in this community. Before the establishment of the telecentre in our village in March 2007, the computer was something that we were not familiar with at all. But then, gradually, we discovered that it's not an extraordinary object and hence there was nothing to fear about at all."–Sarmila Nepal, Dandagaun, Rasuwa

"I am a 26-year-old housewife. I have a

increasing returns are not an anomaly. But they create an instability. They have been marked by the most unequal distribution of income and wealth in human history…development theories of the industrial age are inadequate to explain the ground realities of the information age."[10]

Because the digital divide is not an accessibility issue but an equity issue, localisation initiatives must consider the impact of the digital divide on information "have-nots" and to contextualise this impact within the reality that women make up the

---

[10] Key points from a paper exploring whether ICTs could be India's growth engine, which was presented at the Indo-US workshop organised by the department of management studies of the Indian Institute of Science, Bangalore. See: www.rediff.com/money/2003/mar/12guest.htm. Quoted in Angela M. Kuga Thas, Chat Garcia Ramilo and Cheekay Cinco. Gender and ICT 2007 (Bangkok, Thailand: United Nations Development Programme–Asia-Pacific Development Information Programme, 2007), www.apdip.net/publications/iespprimers/eprimer-gender.pdf.

majority of the poor.[11] The constraints on women's access, usage and capacity vis-à-vis ICT are similar in many respects regardless of geography. These constraints — poverty, illiteracy, lack of education and skills, language limitations and capacity, time constraints, cultural restrictions on public mobility and psychological barriers (probably due to the misperception that technology is a male domain)—often result in women's ambivalence and fear towards ICTs.

Localisation initiatives often work in three main areas.[12] These are localisation of technology, development of localised content (which is the instructional content and menu of the software application), and providing training on localised applications. Not all localisation initiatives are able to work in all three areas unless they are conducted by sizeable organisations with multi-disciplinary technical competence and with sufficient resources. Localisation of technology, for example: is often housed in national universities in Asia, which can allocate and deploy the necessary resources. This does not mean that localisation initiatives do not get undertaken by other types of organisations. Some localisation initiatives are initiatives led by the broader free and open source software (FOSS) community and can include a variety of organisations. For example: PAN L10n's network members range from NGOs, to academic institutions to governmental departments and private entities. With FOSS, one can freely use, change and distribute software without paying for the license. It is therefore not surprising that localisation initiatives focus on FOSS or have begun to take shape within the broader FOSS community. This is because if one wants to translate a specific software and share it, one cannot do that with proprietary software — it is technically impossible because the source

code is not available. The financial cost is also prohibitive if the software is proprietary. FOSS gives people the freedom to do what they wish and to make their own contributions that will benefit society at large. Although commercial initiatives are localising, this is frequently profit-driven and there is an absence of strong initiatives to localise where there is not a large enough market for the software. In addition to the focus on using FOSS, localisation initiatives also tend to use cross-platform software, and many groups working in the area of localisation are choosing software that can run on different operating systems.

The localisation of software is seen as a key element in bridging the digital divide. Translating and localising software allows users who do not speak nor understand the dominant languages in ICTs (English, Spanish, French, Chinese, Russian) to be able to use and benefit from ICTs, and to create their own digital content. In Asia, localisation is particularly challenging. For one, there is an amazing diversity of languages and dialects within the region.[13] Most of these languages do not use Latin script, which requires more advanced technical solutions, which can include rendering complex scripts or multi-level sorting.[14] A second issue about language is that some languages systemically adopt gender norms and value propositions. This usually means that one would know if it is a woman/girl or a man/boy "speaking", and such norms can exacerbate privacy and security issues for women and girls, especially over the internet and through the use of other ICTs such as the Short Message Service through mobile phones. In these languages, sometimes the pronouns used even in the "I" tell whether it is a male or female; and in other cases, it is the adjectives that signify whether it is a male or female communicating. These

---

[11] Daniel Pimienta suggests that there are 11 steps of evolution in this chain, starting from access, through use, eventually leading to innovation. See: Daniel Pimienta "Digital divide, social divide, paradigmatic divide" in International Journal of Information Communication Technologies and Human Development 1,1 (2009). Older version accessible at:
funredes.org/mistica/english/cyberlibrary/thematic/Paradigmatic_Divide.pdf.

[12] These are not the only three areas that localisation initiatives could focus on. There are other areas such as standardisation, etc.

[13] For more information on diversity of languages and dialects, please visit www.ethnologue.com.

[14] There are other computationally very complex issues in relation to scripts like Urdu and Khmer. For a deeper discussion, please read Sarmad Hussain and Nadir Durrani A Study on Collation of Languages from Developing Asia (Lahore, Pakistan: Center for Research in Urdu Language Processing, National University of Computer and Emerging Science, 2008), idl-bnc.idrc.ca/dspace/bitstream/10625/42566/1/129903.pdf.

challenges are further compounded by the fact that many developing Asian countries are on the "have-not" end of the digital divide spectrum. There is a lack of ICT skills and expertise in the area of localisation, and especially among women, because women are generally not encouraged to enter the science and technology fields.[15] If women do enter the science and technology fields, they often do not remain economically competitive due to lack of suitable employment growth opportunities and the need for them to balance the roles and responsibilities expected of them by their husbands, families and society in general.[16]

1.2 Why develop this guide?

…in no region do women enjoy equal legal, social and economic rights. Women have fewer resources than men, and more limited economic opportunities and political participation. Women and girls bear the most direct cost of these inequalities—but the harm ultimately extends to everyone. . . Gender inequalities persist because they are supported by social norms and legal institutions, by the choices and behaviours of households, and by regulations and incentives that affect the way economies function. A strategy to reduce gender inequalities must address these factors. Foremost among the costs of gender inequality is its toll on the quality of human lives. Evidence suggests that societies with large and persistent gender inequalities pay the price of more poverty, illness, malnutrition, and other deprivations, even death. This makes a compelling case for public and private action to eliminate inequality. Public action is particularly important, since many social, legal and

economic institutions that perpetuate gender inequalities are extremely difficult for individuals to change.

— The World Bank, 2001[17]
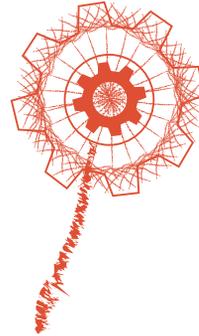
Why develop a guide on Gender Analysis for ICT Localisation Initiatives? Why did we choose to focus our research on adapting GEM for these very specific initiatives?

Most software is geared toward English-speaking people. However, most people in the world do not speak English. The majority of the world's population live in Asia. Of 3.8 billion people there, only 10% communicate in non-Asian languages. Because of all of these factors, localisation is an important strategy for advancing people's access to ICT. Localisation should therefore be needs-driven, focusing on the end user, and the end goal of localisation is to enable people to access technology. However, localisation initiatives do not exist in a vacuum. From design and development to testing and scaling up, they are not free from the influence of social norms.

It is important to interrogate how women and men participate in and benefit from localisation initiatives and products. Without

---

[15] See digital story "Stepping Stone" by Huda Safraz at http://www.genderevaluation.net/mygem/video/stepping_stone_huda_sarfraz.

[16] A number of reports have explored women's progress in the science and technology fields. See UNESCO "Women in science: Under-represented and under-measured" *UIS Bulletin on Science and Technology Statistics* 3, 11 (Paris, France: UNESCO, 2006), www.uis.unesco.org/template/pdf/S&T/BulletinNo3EN.pdf; *and* Commission on the Status of Women, 2009 *Equal Participation of Women and Men in Decision Making Processes at All Levels: Moderator's Summary* Commission on the Status of Women, 53rd Session, 2–13 March 2009.

[17] World Bank *World Development Indicators 2001* (Washington: World Bank, 2001) 35–36. Quoted in Kuga Thas et al. *Gender and ICT* 5 www.apdip.net/publications/iespprimers/eprimer-gender.pdf.

a gender analysis which takes into account the gender considerations in the development and deployment of technological infrastructure and localised software, localisation initiatives may very well end up widening the digital gap between women and men.

This guide was developed to help those who are involved in designing, implementing and evaluating localisation initiatives to understand that gender issues are very significant in their work, and to help them conduct a gender analysis within their initiatives. This guide draws on the experiences of localisation initiatives in Asia, which used GEM, a utilisation-focused evaluation methodology, to strengthen their gender perspective in their planning, monitoring and evaluation. This rich collection of experiences was made possible by the close collaboration and partnership between APC WNSP's Gender Evaluation Methodology (GEM) Project (Phase II) and the IDRC-funded PAN Localization Project (PAN L10n) which was also in its second phase of implementation. GEM's value-added to PAN L10n was to show "how to see gender" in the work of the network members.

> "GEM transformed our entire concept of when and where gender should be taken into consideration. Localisation efforts sometimes get labelled as 'gender neutral' because they focus on software — translating software to local languages and contexts. Originally, when looking at the intersection of gender and localisation, people had end-users in mind. Using GEM has helped me look at gender breakdown throughout all the phases of localisation, in setting up software development teams, in the language used for translation, in community uptake…"
>
> – Sana Shams, PAN L10n, Pakistan

This guide reflects the collective lessons of these localisation initiatives and specifically focuses on identifying and analysing gender and ICT issues, so that readers are better able to identify and analyse these when working on similar initiatives. This guide does not delve into a detailed discussion on how to use GEM with localisation initiatives, but focuses on how GEM can be applied to strengthen the gender perspective and analysis by drawing on lessons learnt in the conduct of GEM workshops and mentoring with the selected partners of PAN L10n and the application and integration of GEM's conceptual framework.[18]

This guide also serves as a complementary guide to both the GEM manual and the *Facilitators Guide for GEM Workshops*. The former elaborates on the seven steps of GEM as an evaluation methodology while the latter shares the experiences of GEM facilitators in the conduct of GEM workshops in much more detail with very useful "from the ground-up" experiences and examples.

To ensure continued learning and self-improvement in applying GEM, GEM practitioners as well as those who are keen to do and share their experiences of the conduct of gender evaluations, are invited to participate in an online space, the GEM Practitioners Network (www.genderevaluation.net/mygem), where they will find more resources and have more opportunities to learn and share experiences in the use of GEM with people from different projects and regions of the world.

---

[18] There are three frameworks that make up GEM's conceptual framework. The first, GEM's evaluation framework, is principled on "learning for change", and hence, why GEM is a utilisation-focused evaluation methodology. It aims for evaluation with a purpose and resulting action or combination of decisions and actions to effectively learn and bring about the necessary changes. The second framework is the gender analytical and women's empowerment framework, which draws on Sara Longwe's work on how to wear a "gender lens" to address gender inequality issues. The third framework is "ICTs and social change," which identifies the emerging gender issues surrounding the application, design and development and value-linked representation of ICTs. This is why GEM emphasises the importance of identifying and adopting gender-transformative strategies within the design and implementation of ICT initiatives. All three frameworks identify elements that are dynamic in nature and the severity or prominence of these elements are often contextualised and very dependent on how gender equality has evolved within a locality and community.

Box 1: *A story of change… with the help of GEM*

When 29-year-old Huda Sarfraz and her team started to teach Punjabi girls how to create websites and use online chat, she feared they might be run out of town. However, the girls clamoured to learn as much as the boys did, overturning societal taboos. The girls over-subscribed for the extra-curricular classes and ended up producing prize-winning websites. As a result of exposure to APC's Gender Evaluation Methodology (GEM) and guidance provided by IDRC staff, Sarfraz's team focused specifically on getting girls and women teachers involved.

Internet, schoolchildren and rural Pakistan: Getting community buy-in, including for girls

It was by coincidence that 29-year-old software developer Huda Sarfraz got involved as the team leader in the Dareecha (meaning "window") project. It was the first time the Centre for Research in Urdu Language Processing (CRULP) had directly taken on the social perspective of a project by taking technology to the people and the Lahore resident was excited about the new challenge. Sarfraz set about training school children and teachers from the rural Punjab to use the internet so that they could eventually create their own content.

And create content they did—with their new skills, students and teachers in rural villages created 57 new, locally-relevant school and community websites, which they presented in a competition held by Dareecha from June to August 2009. The judging panel, comprising government officials, academics and ICT experts could not help but notice the strong presence of women and girls among the winners. This was a sign that the Gender Evaluation Methodology (GEM), an evaluation methodology the Dareecha team had used to complement other planning methods for the project such as outcome mapping, had helped them get through to a segment of the population that other more traditional planning methods may not have reached: women and girls.[19]

In fact, the way the Dareecha team dealt with the different needs of both sexes meant that girls too could learn about computers—and the young girls were not letting this opportunity go. "Women teachers were quite insistent in getting the girls involved," recounts Sarfraz. "And there was more than one incident where girls were in tears because they wanted to join sessions that were already full."

The quotas were the same for boys and girls which meant that there were about fourteen students per session working two to a computer. Because the girls were so persistent, a second, afternoon session was set up for a total of 30 girls.

"We didn't know what to expect but the girls were very insistent," explains Sarfraz. "We were also surprised that the parents were so willing to let them come to classes during the summer and at irregular hours."

---

[19] The GEM training workshops had contributed to the development of the gendered Outcome Mapping (OMg) framework and had strengthened the gender sensitisation approach that was adopted by the PAN L10n. Dareecha used the OMg as its evaluation methodology.

She also recalls the story of two girls, the daughters of the headmaster at a boys' school who felt the training was so important that he took it upon himself to bring his daughters to the boys' training.

"I asked our trainers about how the boys reacted to this and was told that the head of the school was a much respected teacher, so nobody said anything to the girls and things went on as usual."

The fact that the girls were accepted without question in the boys' classes represents a significant shift in mentality by the community, and for the father himself.

"For me, it was the best part of the project," beams Sarfraz.

However, this kind of support from the community or family members was not the case for everyone. Sarfraz remembers a woman teacher who missed training sessions because she was not allowed to travel without a chaperone. In an effort to accommodate her needs, the team made arrangements for the woman's father to stay overnight as well. Their efforts were rewarded when the teacher later attended one of the sessions and the awards ceremony in Lahore, something that Sarfraz describes as a milestone for all involved.

Sarfraz was pleasantly surprised that the Dareecha team was never rejected by the villagers because there can sometimes be a negative sentiment towards women gaining access to technology and new communication channels due to the fear that the exposure to new ideas and people will have a negative effect on girls. The desire to participate by so many girls in the programme, and their strong presence at the awards ceremonies (both as attendees and award recipients) sent out a clear message: women are willing and capable of taking part in the information society.

Dareecha reaches girls and makes a real difference to them thanks to GEM

It is these cultural restrictions and obstacles to girls' and women's participation that are so often overlooked that GEM tries to address—breaking through old views about mobility, personal safety, lack of personal freedom and traditional responsibilities in the home. For the Dareecha team, GEM helped to address the societal differences between men and women that they themselves had never questioned before explicitly. Being able to formally address these inequalities allowed them to design a project that would make a real difference in the lives of rural boys and girls and their communities.

The Dareecha team used GEM throughout all the different stages of the project—planning, implementation and evaluation.

"If we hadn't learned about GEM, we would not have analysed our data with respect to gender," says Sarfraz. "Initially we only saw two groups to work with—students and teachers. However, because of GEM we looked at them as four—girl students, boy students, women teachers and men teachers."

Not only did this data breakdown by gender give the Dareecha team a better understanding of the scope of the different realities related to ICTs for the groups, it allowed the team to plan the training sessions for maximum comprehension by all groups. Instead of lumping all the students into one group with a male trainer, female students were given a female trainer and male students were given a male trainer. Public schools in Pakistan are segregated to begin with, so since it was not culturally acceptable to send men into girls' schools, a female-only team was selected for the female students. Even the way the material was presented, was catered to the different groups according to Sarfraz.

"The books we prepared were the same, but the slide shows were customised for each group," she says.

For example: slide shows included gender-specific examples and questions, according to the different interests of genders, like local political figures that interested the boys and mehendi or henna design for girls. The Dareecha team also ensured that they followed social norms when teaching about email and created separate groups for girls and boys and were also extra careful about online security.

"We thought it would have a higher impact in gaining acceptability from girls' schools and parents, because people generally don't worry about who boys communicate with and how, but are more concerned about the safety of girls."

More than a simple evaluation approach, GEM becomes a way to see daily interactions and social norms though a "gender-specific lens" because GEM allows evaluators to dig deeper and think about why things are the way they are, and how to consciously address the reasons through project design and implementation. In Pakistan, GEM helped turn a social technology initiative into a process of change for all those involved—the Dareecha team, students, teachers and community members in these rural areas.
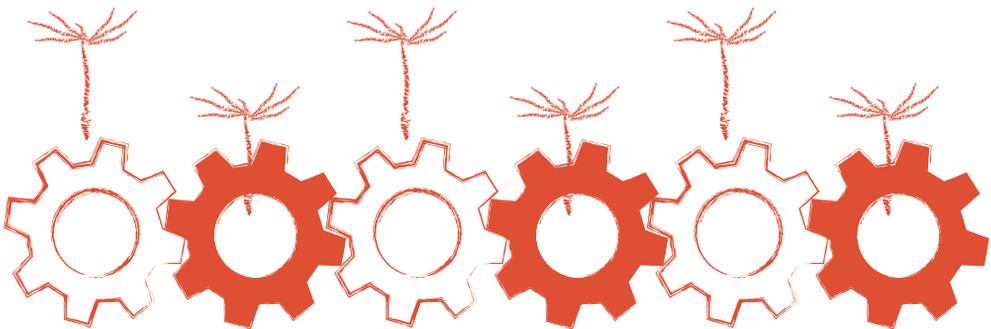
SECTION 2:
HOW TO INTEGRATE A GENDER PERSPECTIVE
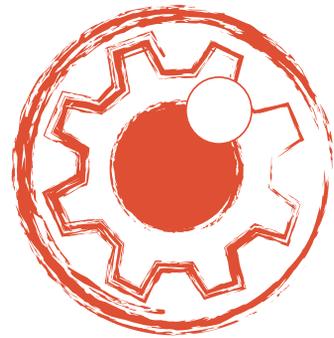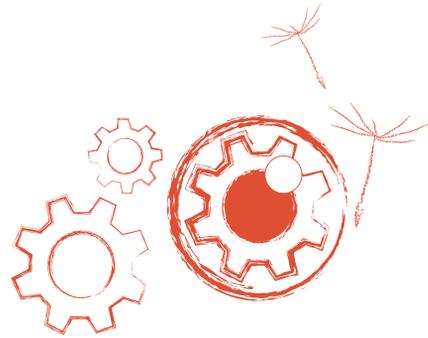
SECTION 2:
HOW TO INTEGRATE A GENDER PERSPECTIVE

2.1 Wear the gender lens

There are three interlinking but critical aspects to putting on the gender lens. These are:

- The sensitivity and ability to recognise a gender issue
- The willingness and ability to analyse a gender issue
- The commitment and ability to act to address the gender issue, which often includes ensuring the process of women's empowerment.[20]

But what is gender? Gender is a socio-economic variable for analysing roles, responsibilities, constraints, opportunities, and needs of men and women in a given context. Gender is a concept that refers to the differences in the value and roles and responsibilities assigned to men and women. Gender is socially constructed and can change over time and can vary widely within and among cultures and communities. Gender inequality comes about when society places different values and expectations on women and men in relation to their expected roles and responsibilities. Boys and girls grow up learning what is expected of them in being "proper and acceptable" men and "proper and acceptable" women, fulfilling society's standards of acceptability of masculinity and femininity within women and men.[21]

---

[20] GEM emphasises women's empowerment within a gender equality framework. This is because GEM recognises that traditionally, women have had a subordinate position to men, where, for example: they may contribute materially to the household but the husband decides how the income is spent. On a macro-political level, most governing bodies are dominated by men; legislative and judicial decisions often lack a gendered perspective and do not represent women's interests. ICT access and use may be similarly restricted: at the micro level, partiality toward boys may translate into allowing sons greater access than their sisters to the family computer; at the macro level, supposedly "gender-neutral" ICT policies regarding education, training, and price structure may have unintended yet very negative consequences for women based on gender roles and access to ICT resources.

[21] The definition of gender here is adapted from: Thomas E. Blair, Ed. *A Glossary of Terms in Gender and Sexuality*, 2nd Edition. (Nakhon Pathom, Thailand: The Southeast Asian Consortium on Gender, Sexuality and Health, 2007), 7
www.seaconsortium.net/autopagev3/show_page.php?group_id=1&auto_id=309&topic_id=309&topic_no=1&page=1&gaction=on.

In order to recognise a gender issue, one needs to be aware that there are five levels of severity of gender problems. These levels are shown in Figure 1, where general development needs are at the lowest end of the scale of severity of gender problems and gender issues at the highest level.[22]

Figure 1: Levels of severity of gender problems

Gender Issues
Gender Inequality
Gender Concerns
Women's Special Needs
General Development Needs

General development needs usually take the form of public utilities, like water systems, public roads, and electricity. However, there is growing recognition that even these issues (except for access to good clean air) no longer have the exact same impact on women and men because of the gender differentiation of women's roles, responsibilities and privileges in society vis-à-vis those of men. ICT infrastructure (telephone land lines for dial-up connections, infrastructure for broadband and/or wireless), unfortunately, is still seen as a general development need by the larger development community/sector despite the knowledge that we have on how women are losing out when they are on the "have not" end of the digital divide.

Usually, infrastructure (not just for ICT but also for the electricity needed to operate devices) is lacking in rural areas or urban areas where the poor live. This is because of the poor's lower purchasing power, and in most country contexts, women make up most of the rural poor, and hence, face issues of unequal access to ICT resources and to opportunities to learn, use and create.

Women's special needs arise mainly because of women's biological needs. Biologically, a woman's body is different from a man's and therefore, there are special needs. These include the need for maternity hospitals and ante-natal care facilities, as well as lavatories. Separate lavatories for women are usually non-existent in fields where women's empowerment has not advanced. Exclusive lavatories for women are often needed because of gender issues and to reduce the risks of sexual harassment and rape. However, because of gender defined roles and responsibilities, often women's lavatories in urban areas include nappy changing facilities or are where the special

---

[22] These levels of severity of gender problems are also discussed in the GEM manual, pages 34 and 35.

[23] In a lot of developing and rural localities, women's or girls' lavatories often do not function properly if these adopt a flush system or they may lack sufficient water supply, proper lighting and security (doors that properly lock, and if there are doors).

toilet is placed for people with disabilities — women are assumed to be "the primary caregivers," but men do play these roles as well, often less so in communities where gender inequality is very visible. Localisation initiatives may have to consider women's special needs depending on where women are situated within the localisation team or community. This often means considering providing these benefits, facilities and support to female staff or to ensure that at minimum, that localisation training is conducted in places that sufficiently cater to girls'/women's needs for functional female-only lavatories.[23]
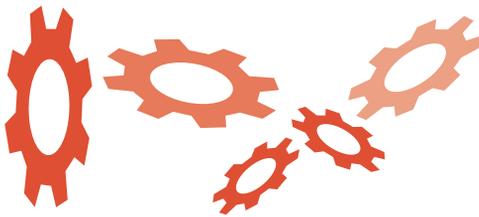
Gender concerns are needs that arise as a result of the gender division of economic and social roles. Practical gender needs are closely linked to women's triple and socially-expected roles of "reproductive", "productive" and "community."[24] These include issues of caregiving, food preparation, public roads, public transport and public utilities, especially access to clean water and the rich biodiversity of the use of plants etc. for traditional medicines. For example: women who have babies and young children would still be expected to play the role of caregiver irrespective of them wanting to attend computer classes and so may have the need for crèches or for the computer classes to be held at a more appropriate and conducive time. Gender concerns often result in women and men having different perspectives on development problems with differing experiences; women's and men's identification of problems are different; and

women's and men's identification of solutions can also be different.

One example is the use of women's voices for information or content that is focused on women's needs, or the portrayal of women as role models in ICTs during a meeting. A technical person on a localisation team cited problems of using women's voices for software applications, because women's voices are at a higher pitch compared to those belonging to men, and technically harder to capture and render with the technology that they had. However, a woman during the same meeting asked if it was possible to find a woman with a lower pitched voice. The suggested solution is very feasible because women who are in television or radio programmes often have lower pitched voices. Women's voices are already being used in interactive localised e-health solutions, because women, if confronted with an e-health system that uses a male voice, may feel shy during examination or even diagnosis, because it is as if a male person is discussing her private gynaecological-related issues.

Gender inequality arises when a gender concern is overlaid with gender inequality issues, such as access issues (facilities, resources, opportunities), ownership issues, or control and decision-making issues. For example: the requirement to grant maternity leave may be one of the reasons why female technical staff are not hired by the localisation initiative (and other organisations, in general) or why they are not given sufficient training and/or employment growth opportunities for advancement because of the "perceived loss" that the initiative will suffer when a woman goes on maternity leave or gets married. This is especially acute if she has no decision-making power over whether she continues to work or not after marriage or whether or not to move and follow her husband to his locality.[25]

---

[24] A discussion of practical gender needs and strategic gender interests can be found in the GEM manual on page 29. See GEM manual pages 26–28 for an elaboration on women's triple roles.

[25] In some cases, localisation initiatives have provided maternity benefits and other incentives so that women in their employment and their expertise and skills could remain with the initiative or organisation concerned.

Another example is when girls and women are discouraged from moving around and being in public spaces without being accompanied by a male relative. Ease of access to public spaces is denied and the decision to disallow women to travel alone, which overlaps with public safety issues, is often not the women's own. Rather than try to challenge obstacles placed by society on women and girls, most projects would rather avoid what they perceive as "costs" and "potential losses" in investing in women and girls through opportunities in expanding their work experience and for capacity-building.

Gender issue is when people recognise that a particular gender inequality is wrong, unacceptable and unjust, and wider public support is shown. Some gender inequalities that are now recognised as gender issues are linked to employment wages ("equal work, equal pay"), skills training (especially for higher level skills), food security, ownership of land (in some countries and communities, women have no inheritance rights or rights to own land), violence and discrimination (intended or unintended) against women and girls (female infanticide or female foeticide because of preference over a male child, early/child marriage, female genital mutilation, trafficking, etc.), sexual and reproductive health (maternal mortality, etc.), women's political participation, women's leadership roles, girls' education, etc.

One or more of these gender issues can and do intersect with the work and objectives of localisation initiatives. The challenge often lies in the decision as to what extent a localisation initiative should design intervention strategies that would address the societal obstacles that women face because of gender inequality. For example: a localisation initiative that conducts training sessions in schools on localised software applications may find that girls are not encouraged or supported to attend such sessions in co-ed schools (which both boys and girls attend). In developing countries or rural localities, the number of girls who are interested in such sessions is small because often female enrolment and/ or retention rates in these schools are low

anyway. What localisation initiatives might want to consider are intervention strategies that address the following issues/aspects:

- Suitability of timing of training classes
- Suitability of venues/places for training classes (consider issues of safety, distance and what the venue/place is associated with)
- Whether male or female trainers are more appropriate
- Whether efforts should be made to train more girls or not, and not necessarily equal numbers of boys and girls
- Whether or not girls would need additional support in practising their new ICT skills
- Whether or not content developed and used for training sessions would be of interest to boys more than to girls
- Whether or not it is necessary to showcase girls' newly acquired ICT skills vis-à-vis the skills gained by boys
- Whether or not there are local champions who believe in gender equality and are supportive and encouraging of girls being educated on ICTs as much as boys.

2.2 How to wear the gender lens?

We understand gender to mean, "those characteristics of women and men, which are socially constructed, and so while people are born female or male, they learn to be girls and boys who grow into women and men" and that "this learned behaviour makes up gender identity and determines gender roles." This means that in doing a gender analysis, we would have to look at many other aspects that intersect with gender. These are aspects that make gender inequality or for that matter, gender equality, always context specific. Often, these include issues of class as well as cultural and religious beliefs because these inform our value system and influence the differential valuing of masculinity and femininity. In short, we become "gendered" through our interaction with our caretakers, guardians, people of some form of authority, through our socialisation in childhood, through peer pressure in adolescence, through social pressure exacerbated by

gender biased religious beliefs and cultural practices, through gender-identified work, and through family and community roles and responsibilities.

Promoting a gender lens or gender equality is often misunderstood as being the promotion of women only. However, "wearing the gender lens" means focusing on the societal value of women vis-à-vis that of men, on the relationship between men and women, their productive and reproductive roles in the family, the community and the larger society, their access to and control over resources, their division of labour, and their interests and needs. Gender inequality is often influenced both negatively and positively by belief systems based on tradition, culture and/or religion. Gender inequality often manifests in the unequal power of women vis-à-vis men and the smaller or non-existent roles women play in decision-making.

It is important to note that gender issues are often invisible. This is the reason why feminists insist that one needs to wear a gender lens. To wear the gender lens, one is required to "dig deeper", to interrogate what lies behind "the visible problem". To wear a gender lens, one needs to know:
- What questions to ask
- How to ask the questions
- When to ask the questions
- Where to ask the questions.

Putting on the gender lens requires us to take a closer look at where women are vis-à-vis men in terms of their value in society, their roles, their responsibilities, and their control over and access to resources. Simultaneously, we need to take a closer look at the women's environment/context, the social, the political, the economic influences, the belief systems, how society perceives them, who has power over women's lives, who makes decisions on their behalf, and so on. Putting on the gender lens requires asking:
- If the definition of "gender" is changing within that particular society or locality
- What are the existing gender roles and responsibilities, and to what extent these have changed
- What are the existing gender relations (women and men, men and men, women and women), and to what extent these have changed
- What levels of empowerment do women in this particular locality or context enjoy.

Table 1 shown below presents some recommendations of what are the key questions that you could use in order to "dig deeper" to unearth and make visible gender issues within your project/initiative.

Table 1: Key questions in order to "dig deeper" and see gender

Main guiding questions	Key insightful questions
Gender, is the definition changing?	Are there very minor differences to how girls and boys are socialised? Are these differences more pronounced in rural areas compared to urban areas? Or vice-versa? Are there still major differences to how older women are treated vis-a-vis older men? Are women considered "old" at a much younger age, compared to men? Are there major differences in how women and men perceive the value of ICT policies and programmes? What influences these perceptions?

Main guiding questions	Key insightful questions
Gender roles and responsibilities, are they changing?	Who and what defines these roles and responsibilities? Who has the power? Is it "power over" (oppressive), "power with" (consultative, power-sharing), or "power within" (empowerment)? Who has the control? Who decides? Are decisions made in a consultative manner, and if yes, with whom? Who has access? What is the definition of access? How is access limited, if at all, and why? Whose voice is privileged? Whose mindset? Whose values? How do these influence how women and men benefit differently from development projects' interventions? Are there cultural and/or religious beliefs that reinforce this influence and in what way? Which beliefs? Are there traditional practices that reinforce this influence and in what way? Which traditions?
Gender relations (women and men, men and men, women and women), are they changing?	Who and what determines how men and women relate to each other in the household, in the community, and in the larger society? Who has the power? Is it "power over" (oppressive), "power with" (consultative, power-sharing), or "power within" (empowerment)? Who has the control? Who decides? Are decisions made in a consultative manner, and if yes, with whom? Who has access? What is the definition of access? How is access limited, if at all, and why? Whose voice is privileged? Whose mindset? Whose values? How do these influence how differently women and men benefit from development projects' interventions? Are there cultural and/or religious beliefs that reinforce this influence and in what way? Which beliefs? Which traditions? Are there traditional practices that reinforce this influence and in what way?
Women's empowerment– are women's self-esteem, self-confidence, capacities changing?	Are women "allowed"? Or are women encouraged and supported?

You will note from Table 1 above, that the main guiding questions can be categorised under four key concepts discussed in the GEM manual: "gender", "gender roles and responsibilities", "gender relations" and "women's empowerment." In the next section, we take a closer look at the concept of "women's empowerment."

2.3 Identify which levels of women's empowerment need to be addressed

Similar to the levels of severity of gender problems, the women's empowerment framework also proposes that there are five different levels of women's empowerment, with "welfare" at zero level of women's empowerment and "control" at the highest end of the scale.[26] The five levels of women's empowerment are to a large extent defined by the kinds of intervention that projects and organisations implement and the resulting implications from these for women's empowerment. Interventions may target to bring about one or more levels of women's empowerment and not necessarily incrementally from a lower level to a higher level.

Figure 2: Women's empowerment framework

Control e.g how income or resources are used; who makes the desicions?

Mobilisation e.g demand for equal pay, ensuring the removal of middlemen, the right to work

Conscientisation e.g women paid lower than men despite having the same qualifications

Access e.g microcredit; telecentres

Welfare e.g cash donations; free food
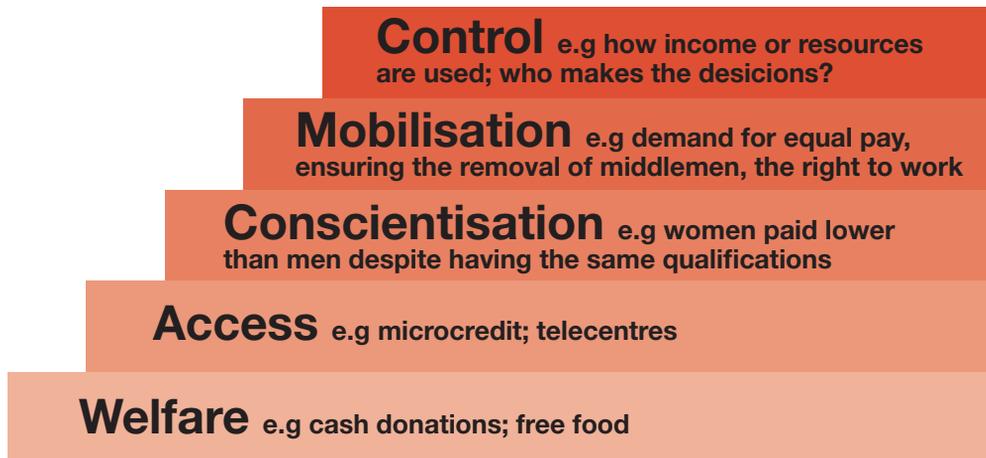
Welfare is seen here as zero level as far as women's empowerment is concerned. This is because interventions that use a welfare approach do not do anything to contribute to change the existing gender inequalities within a locality, though they may to a certain extent address the existing gender gap.[27] Welfare-type interventions are certainly important interventions (nutrition, shelter, income) and necessary in certain situations, such as in providing immediate relief and help to women during natural disasters or in armed conflict situations. However, when a project designs interventions with the intention of bringing about change and social justice, the project must identify where women are in terms of their levels of empowerment in that particular locality or context, and to further determine if bringing about the necessary change requires the project to design

---

[26] The GEM manual discusses the process of women's empowerment on pages 36–38.

[27] The gender gap is the observable (and often measurable) difference between women and men on some important socio-economic indicators (for example: ownership of property, access to land, enrolment at school, employment, etc.) and is often considered the most basic empirical evidence of the existence of a gender issue.

interventions that should help women acquire higher levels of empowerment. In relation to ICTs, sometimes a welfare approach is taken by giving free but old technology that will very soon be useless for a community or it may be technology that uses proprietary software for which upgrades and purchases of licences would be necessary but also an added burden for poor communities.

Access represents, in essence, the first level of some degree of women's empowerment. However, access in relation to ICTs is often seen only from a "supply" perspective, (for example: to establish a centre or a place and set up the necessary equipment and connectivity). In order to effectively integrate a gender perspective, access must include issues of ICT literacy (comfort levels, skills and familiarity with the technology) as well as ICT utilisation (actual use). This automatically translates to considering the levels of ICT literacy and utilisation and obstacles faced by women, which can include women's public mobility, women's literacy and educational levels, ICT affordability, women's triple roles/gender roles and responsibilities.[28] A successful project can design interventions to sufficiently address these so that women enjoy the same level and opportunities to access as men.

Conscientisation is when interventions help women and men realise that there are significant differences in how women and men are able to access existing resources and opportunities and to what extent they are able to benefit from these. Conscientisation represents the process by which women realise that their lack of status and welfare, relative to men, is not due to their own lack of ability, organisation or effort. Women become aware of the social injustices, and whether they have been discriminated against because of patriarchy and discriminatory social norms, practices and beliefs. At this level, women become active seekers and users of information and knowledge (that they themselves have discerned as useful to them) that go beyond their practical gender needs and start moving towards fulfilling their strategic gender interests.[29]

Mobilisation is when interventions support and encourage women to organise themselves collectively in order to claim their rights. This is the level of action that may result from women's conscientisation. This includes women actively seeking, claiming or creating spaces to speak out against injustices and to support each other in the sharing of experiences and the search for solutions/remedies. In the area of ICTs, this often happens when women are content producers and managers, and not just users and recipients of information shared by others, and/or women are creators and designers in relation to software and hardware and other technological development.

Control is when interventions support women in sustaining decision-making power and control over resources and spaces (social, economic, political, technological, environmental). In the area of ICTs, this includes not only sharing the knowledge of what has worked for women around the world in terms of strategies to overcome discrimination and violence, but also expanding that knowledge further.

---

[28] Discussed in the GEM manual on pages 26–28.

[29] In order for a project to fulfil strategic gender interests, it has to devise strategies that challenge existing gender roles. Challenging existing gender roles does not necessarily translate to strategies that are confrontational. One can always design and adopt strategies that are persuasive and supportive.

The five levels of empowerment do not materialise in a linear progression. In certain contexts, the level of control may be a prerequisite before issues of access can be addressed. It is also important to realise that within each level of empowerment, there are differing levels of control that can be achieved or which may be enjoyed in a particular community. For example: women may be "allowed" to make decisions over selected community resources or on selected matters in a locality and may not have any say over other resources or other matters of the community.

2.4 How to conduct a gender analysis?

When one wears the gender lens, one is better able to do a gender analysis. Gender analysis involves a systematic assessment of the different effects of the project activities on women and men. In an ICT context, gender analysis asserts that power relations in class, race/ethnicity, location, age, religion, culture, and so on produce complex and hidden inequalities that affect social change.

Table 2 shown below presents some basic gender analysis that participants in past GEM workshops had managed to do. The participants had presented contextual arguments that showed that ICTs are gendered though they seem to be gender neutral on the surface. A simple exercise like this using common symbols of ICTs could be a good way of finding out if project team members of localisation initiatives have a gender perspective or some level of gender analysis.

Which ICT?	Why is this ICT gendered?	How was the gender analysis conducted?[30]
Mobile phones	• Mobile phones have broken the control and access that men have on landline phones.[31] Mobile phones are easier to acquire, thus providing women access and with that, control.	You will note that issue of access is clearly considered here as part of the gender analysis of mobile phones. "Access" is not considered only from a supply perspective, but issues of ICT literacy, affordability, user-friendliness and women's public mobility were considered and included as part of the gender analysis.

---

[30] Please refer to the GEM manual pages 33–38 for an introduction to the "levels of severity of gender problems", "a lens for identifying a gender issue" and "a lens for seeing the process of women's empowerment."

[31] If a gender analysis is conducted on access, control and use of landline phones, one will unearth a number of hidden gender inequalities and gender issues. In India, acquiring landlines has many requirements which most women cannot meet, like ownership of residence or having a permanent residence. For a woman to apply and acquire a landline, she must first ask the permission of her husband who owns their house and has the earnings to pay for a landline. It is also expensive to install landlines. In India, 95% of landlines are owned by men. Men have public mobility and are able to go out and work. Landline bills can be paid online but one needs to have an online bank account, which most women do not have. Women have to go to pay centres, which in the case of a rural area in India, can be as far as 15 km away from their homes, and women also have limited public mobility compared to men. Husbands have access and control of landline phones because it is easier for them to own these, and landline phones can be locked by using a code.

Which ICT?	Why is this ICT gendered?	How was the gender analysis conducted?
Mobile phones	• Women have increased access to mobile phones. Many are comfortable with text messages. But many women in rural areas cannot use text messages because many cannot read and write. In Bangladesh, a voice message application is now available on mobile phones. Now, illiterate men and women can send messages through the voice message option. • There are security and privacy issues that have come up with the proliferation of the use of mobile phones. Young people use the mobile phones for dating and many young women have become victims of such schemes. Users of mobile phones are not as protected from scams as compared to users of the Internet. • On the one hand, mobile phones with recording devices or photo cameras are good tools. However, they have also been used to harass people, and to sexually harass women. • Many mobile phones have a radio (AM/FM) capability which allows women to broadcast their issues and concerns, and to reach more women and a wider audience through such mobile phones.	Another part of the gender analysis is to view how existing gender issues are further exacerbated because of existing gender inequalities with the introduction of ICTs, such as issues of privacy and security (higher risk of sexual harassment). There is a second layer to the gender analysis, which examines how the levels of women's empowerment intersect with the levels of severity of gender problems. If mobile phones are used by women only to serve their gender concerns (to fulfill their gender roles and responsibilities) and not to challenge gender inequalities and gender issues and hence challenge gender relations (conscientisation, mobilisation, control), then this means, contextually, women are still only at the level of "access" as far as their empowerment is concerned, and it would be up to the project to design interventions that would help women move up the empowerment scale to "conscientisation", "mobilisation" or "control." However, if mobile phones are already used to mobilise women and to collectively organise themselves to claim their rights, then they may already be enjoying empowerment at a higher level such as "mobilisation."

Which ICT?	Why is this ICT gendered?	How was the gender analysis conducted?
Laptops	• Because laptops are mobile, they can be carried around; they have the potential to help women access technology. Laptops have the potential to "free" women who feel trapped. • The size and weight of laptops, however, tends to be bulky and heavy if the laptops are on the cheaper end of the scale. This makes it more difficult for women to move around with such laptops. • Laptops can increase efficiency, especially since they can be brought home, but they do not necessarily transform gender roles. They can also be the tools that contribute to the additional burden of women—bringing the work back home as women continue to perform all other chores at home. • In terms of understanding technology that can help bridge the gender gap, laptops have a plus in terms of mobility and utility. However, laptops are more expensive, thus may not be available - especially to women who have less income.	The gender analysis of laptops is very similar to the gender analysis of mobile phones, because both are different forms of mobile technology. The women's empowerment level of "access" here again includes issues of affordability, ease of use, women's public mobility, ICT literacy, but also technical issues such as design, size and weight. The severity of gender problems would depend to what extent women own and are able to effectively use these laptops. So issues of women's gender roles and responsibilities and gender relations will intersect with issues of women's empowerment levels of "conscientisation," "mobilisation" and "control."

Which ICT?	Why is this ICT gendered?	How was the gender analysis conducted?
Operating system	• Most operating systems are not user-friendly and technical staff who know how to troubleshoot are often men. With religious and cultural barriers that do not encourage women to socialise with men who are not family members and with limited freedom of movement in the public sphere, women may face additional barriers compared to men when learning how to configure them to their needs. Because instructions from those with technical know-how can be full of loaded terminology that is unfamiliar to most women and especially because women are usually the ones with lower levels of ICT literacy or with less exposure to ICTs, women will often have to rely on male technical staff or male members of the family to do it for them. Very seldom do men teach women how to troubleshoot for themselves. Women are also often less inclined to explore these technical specifications. There are few women who are knowledgeable in configuring operating systems. So women are often in the dark on how to protect themselves from hacking and from intrusion of their privacy.	You will note that the gender analysis of operating systems is strongly linked to women's empowerment level of "control", at the highest end of the scale. "Control" here includes looking at the design of ICTs and the ease of configuring technical specifications, bearing in mind that women are often less exposed and have less opportunities and enjoy much less support and encouragement to learn such technical skills. So in terms of technical design and to what extent these are friendly to women, the highest levels of women's empowerment and the highest level of severity of gender problems (gender issue of training incentives, higher levels of technical training and employment growth opportunities for women in the field) come into play and need to be addressed. This is a good example of how the level of "control" in relation to women's empowerment is important to achieve before "access," another level of women's empowerment, can be fully enjoyed by women.

One key method of conducting a gender analysis is to explore the nature of gender differences and their political meanings by systematically asking questions to gauge how different men's situations are from women's in a given population. The following are some typical examples that we have come across over the years in the ICTD field.

You will see that the analysis is applied at the following three levels, with the definition of gender, gender relations and women's empowerment integral to all:[32]
- Roles, responsibilities and activities
- Resources and constraints
- Benefits and incentives.

Example 1

Finding or indicator	A computer in every household (often considered a reliable indicator for a country's development status).
Roles, responsibilities and activities	Digging deeper, one may find that only the man uses the computer but the woman is allowed to clean it.
Resources and constraints	Digging deeper, one may find that the man used household income that his wife contributes to, to purchase it. The woman has no say over how household income is used.
Benefits and incentives	Digging deeper, one may find that the man has no time to teach the woman how to use the computer and is worried that she may damage it. The man also does not think of using any of the household income so that she can go for courses to learn how to use the computer. The woman is not allowed, not encouraged and not supported in learning how to use the computer.

Example 2

Finding or indicator	Women are able to be productive and work from home using ICTs (telecommuting).
Roles, responsibilities and activities	Digging deeper, one may find that the man and other members of the family expect the woman to continue to do household chores and look after the children even if she is "working from home using ICTs" to generate income and contributes to the household income.

---

[32] This is also briefly discussed in the GEM manual on page 28.

Resources and constraints	Digging deeper, one may find that the man is not keen on hiring a domestic helper to support his wife's "working from home using ICTs" because she is at home and the rationale for her to work from home is so that she can still be there for her family and do her usual chores and care-giving roles as well. She is allowed to work from home using ICTs, but she is not supported in her multiple roles.
Benefits and incentives	Digging deeper, one may find that the man benefits from his wife being at home and continue to play her multiple roles. However, she is now doubly burdened because her household chores and care-giving role is not valued and neither is her productive role as co-breadwinner just because she is "working from home."

Example 3

Finding or indicator	An equal number of women and men trained in ICT skills.
Roles, responsibilities and activities	Digging deeper, one may find that women who are trained in ICT skills are given stereotypical jobs as secretaries, etc.
Resources and constraints	Digging deeper, one may find that women are trained in lower level ICT skills compared to men because there are not enough computers where they are located to begin with or that they were given the lower capacity computers to work with.
Benefits and incentives	Digging deeper, one may find that more women are trained in lower level ICT skills and then do not get promoted because they do not have the necessary higher level ICT skills or experience in higher level use of ICTs.

The examples above show us that we do need to systematically ask questions to get to the real picture. In short, we need to:
- Find out what lies behind the data
- Ask why
- Consider the woman's context
- Consider our own gender bias
- Consider our own project bias.

Contextualising gender and ICT issues and conducting a gender analysis require us to continue to "dig deeper" during our monitoring and evaluations. Some of the case scenarios presented below contain examples that can easily come up during monitoring but may not get identified as issues to be addressed by the project during implementation. Instead, they may get presented during the evaluation as to "why women's participation in the project was low," and so presented often as an evaluation finding or overlooked completely and not presented as a monitoring observation. In addition, sometimes too an evaluation finding is overlooked or omitted from consideration because the numbers affected are small or a handful only (the outliers, and hence, not a general trend or outcome).

Case scenario 1: Women spend more time than men on browsing the internet

- She might be looking for data and is having problems with getting the information.
- Connectivity could be slow.
- Computer may be faulty with consistent hangs-ups.
- Can we correctly infer from this observation or recorded use of the computer that she has the support of her husband and family members in spending so much time at the computer?
- Important to remember that it is not always the woman's "lack of skills" nor does length of time on the computer instantly mean substantive use or use that has met the woman's needs.

Case scenario 2: Women suddenly stop coming for training on ICT tools and applications

- She might be having problems in managing expectations of her by her husband and family members or she may not have support in managing her household chores and responsibilities.
- The training course or approach may not be effective or gender-sensitive.
- The training course was not explained well and she did not understand the benefits of ICTs. ICT training sessions must be made relevant and useful to the trainees from their perspective and needs. Too often assumptions are made as to what are women's communication and information needs without actually asking them. Information needs of women are not always necessarily about their reproductive or community roles. Maybe the women might be more interested in using the technology for relaxation or for expanding their social circle.

Case scenario 3: Women refuse to learn to use the ICT tools and applications, and say they would rather get employment

- The ICT training may have assumed that women would be able to get employment without further support or without addressing other challenges that women may be facing.
- The selection of ICT tools and applications for training did not address women's immediate needs.
- There was no baseline survey conducted with the community on women's ICT learning needs vis-à-vis men's needs.
- There was no strategy designed to ensure that the learning of ICTs is closely linked to new possibilities for employment.

Case scenario 4: Women come to the telecentre but do not use the services

- They may not have enough money to pay the telecentre.
- They do not know what kind of information they can get or what kind of services are available.
- They do not know how to use the technology.
- The question should be: what are they doing in the telecentre? If the telecentre is expensive or if they do not know how to use the services, why do they keep coming back to the telecentre? They may be using the telecentre as a meeting place; as a place to socialise, as a place to discuss their issues, and so on. Women might also be curious as to what goes on at the telecentre. Some spend time at the telecentre because they see it as a growing trend in the community and want to be part of that culture, but the important thing is to explore why they see the telecentre space as important.

Case scenario 5: Women and girls ask questions of what lies behind the technology

- This is a good finding, which may get overlooked because many localisation initiatives focus on women using the localised software without catering to a situation where women want to know how the software works. Women and girls may not be faring as well in using the localised software as expected and this outcome may then be interpreted as lack of interest or as their low participation. However, if such questions are noted and are captured during the monitoring and evaluation process, (for example: someone notes that rather than using the localised software or developing local content, women are asking questions behind the technology) this suggests that there is an interest in ICTs and generally in science and technology, but women have not been encouraged to get involved in these areas. A policy recommendation on education and higher education could be made based on similar findings.

Case scenario 6: A few girls are able to achieve higher level progress markers that were determined only for boys[33]

- This is a good finding and may require the project team to revisit the assumptions made regarding girls' capacities and their environments vis-à-vis boys, even if only a few girls were able to achieve higher level progress markers and not many girls in general. Sometimes, even though a girl's starting point seems to be much lower than that of a boy, we cannot underestimate the individual motivation to learn irrespective of how discouraging her environment may be. You may also want to find out what facilitated the girls' higher level of achievement that was unexpected by the project. Exploring why the unexpected happened is important. These kinds of data or surprises are called "outliers" or the extreme cases. It does help to interview the most difficult case because normally the most difficult case may give the richest information in terms of lessons. That will then be one spectrum of the evaluation. The other extreme would be to interview the most successful case. Then, look for the contrasts by comparing both.

[33] A concept used in Outcome Mapping, defined as "A set of graduated indicators of changed behaviours for a boundary partner that focus on the depth or quality of change." See: Earl at al. *Outcome Mapping*.

Case scenario 7: Local language is used but using the hand-held Simputer is still problematic for women

- Would the immediate assumption be that the women just cannot understand the technology (Simputer)? Would this be the right conclusion? The State of Chhattisgarh in India deployed Simputers for rural local elected leaders, some of whom were women with low levels of education and literacy. Though the Simputer had used Hindi as its main instructional language, it was a high level of Hindi supplemented by some English words as well. This then meant that most local elected women leaders were not able to use the Simputer, especially those who represented the poorer castes. Understanding these issues will then probably point to not only the design, content and delivery of training sessions on the Simputer, but also to the consultation process that informed the design and content of the Simputer. This example also shows that using the national or local language is not a foolproof solution to enable women in rural areas to access and control ICTs, but will require localisation initiatives to also consider complexities of the language and at what level would be best for all.

Case scenario 8: Mixed-sex instruction in a culture that does not encourage such methods can be beneficial

- The E-Network Research and Development (ENRD) in Nepal experimented with having both single-sex instruction and mixed-sex instruction in their training sessions on localised software applications for women. The evaluation team found that women did surprisingly better in a mixed-sex instructional environment compared to a single-sex instructional one. This was because in a mixed-sex instructional environment, women could learn from the men who were generally more skillful than them. Women were also trying harder to improve their skills in a mixed-sex instructional environment compared to a single-sex instructional environment where the tendency was to just talk about their common problems with other women.

Gender analysis with an evaluative perspective involves a systematic assessment of the different effects of project activities on women and men. Gender analysis within an ICT context asserts that power relations involving class, race, ethnicity, age, and geographic location interact with gender to produce complex inequalities relating to social change in general, and those changes brought on by ICTs in particular. Disaggregating data by sex, analysing the sexual division of labour, and understanding the gender disparities of access to and control over resources are basic components of a gendered approach to evaluation.

More information about how to conduct an evaluation using a gender perspective is available in the GEM manual, as well as the other complementary guides that have been developed. Interested parties may also contact APC WNSP to conduct a GEM workshop. GEM offers a systematic methodology to conduct a utilisation-focused evaluation with a gender perspective. Section 4 and Annex 1 of this guide are both meant to help one think more

comprehensively about integrating a gender perspective within one's localisation initiative, and what one would need to consider in order to embark on a gender evaluation.

2.5 Integrate a gender perspective in the identification of the problem

Irrespective of what stage a localisation initiative is at, one needs to examine or re-examine the situational analysis and the identification of the problem that is being addressed or that will be addressed by the project. If the identification of the problem is done with a gender lens, usually one or more of the following would be identified as an integral part of the problem:

- Gender gap—observable, and often measurable gap between women and men
- Gender discrimination—past and present effects of discriminatory treatment of women, intentional or unintentional
- Patriarchal control—system of male dominance, monopoly in decision-making, monopoly of spaces
- Patriarchal belief—system of belief legitimising male dominance
- Coercion—the use of violence to "keep women in their place."

The difference between wearing a gender lens and not wearing one for localisation initiatives can be illustrated by an example of how a development problem is articulated.

Problem defined without a gender lens	Problem defined with a gender lens
The digital divide is manifested by people's lack of ability to produce content and to access information and knowledge that would be useful to them through ICTs.	The digital divide is further manifested through a gender divide where women and girls are less able, compared to men and boys, to produce content and to access information and knowledge that would be useful to them through ICTs.

The above two definitions of the problem show that if one defines the problem with a gender lens, one begins to recognise and be able to articulate the differentiated effects of the problem on women and girls compared to men and boys. It is true that because they use local language, localisation initiatives benefit men and boys who are poor and illiterate as well. However, generally, women and girls are the ones who are more likely to lack formal schooling. Illiteracy rates in most, if not all, developing countries tend to be higher among women and girls, and the dropout rates of girls from schools tend to be higher when compared to those of boys. This is the gender gap. This difference in women's and girls' "starting point" when compared to the starting point of men and boys and the existing social, cultural, religious, political and economic barriers (where gender discrimination, patriarchal control, patriarchal beliefs and coercion can play significant roles) must be acknowledged when the problem that the programme or project wishes to address is identified and articulated.

GEM emphasises the critical importance of including gender from the start and that is why being able to see gender and ICT issues during the conduct of a situational analysis before actually planing a project or programme is important. Wearing a gender lens contributes to a heightened awareness and reality check on what a project or programme can feasibly achieve within its limited resources, and its potential for positive outcomes towards gender equality. These positive outcomes might take the form of the following:

- Development of ICT policy that recognises and redresses gender inequalitites
- Improved opportunities for men and women to access, use and benefit from ICTs
- Shared control over decision-making and resources related to ICTs
- Improvements in women's income and standard of living from the use of ICTs in the project
- More women entering the ICT technical workforce
- More women using ICTs as a result of the project

- Increased access to relevant information for women as well as for men.

One cannot know what change one should bring about and how exactly to bring it about if one does not do a situational analysis with a gender perspective.

2.6 Ensure no "fade away" effect

Box 2 shown below presents some key questions that should be considered by projects and programmes once the situational analysis with a gender perspective has been completed. These questions are necessary to ensure that gender does not "fade away" as it often does with most projects and programmes. The "fade away" results when gender is integrated or articulated in some of the project's or programme's objectives but is not considered when designing project/programme strategies of intervention for women's and men's participation or when interventions (though gender-sensitive in design) are implemented in a top-down manner, and then gender completely disappears in the final analysis of the "success" of the project/programme.[34]

Box 2: Key questions to ensure that gender does not "fade away"

1. Where is gender in your vision?
2. How is gender expressed in your vision/mission?
   - As equal opportunities?
   - As equal participation? If yes, what would you consider "equal" participation?
   - As a reduction of the gender gap? If yes, in what terms? Is it limited to equal numbers of women and men? Would your efforts focus on more numbers of women compared to men?
3. How will you gain the interest of women? How will you sustain this interest by women? What will participation mean for women? What will participation mean for men?

---

[34] The GEM manual briefly discusses this fade-away phenomenon on pages 37–38.

4. Who are your change agents? Who are the ones whose work will have a direct impact and influence on bringing about change? Sometimes these can be key members of the community you work with. How will these change agents challenge existing gender inequalities, if at all?

5. Who are your facilitating agents? Who are the ones who will work to ensure the necessary support in bringing about change but are reliant on the leading roles of others? Sometimes, this can also be your own organisation or your project with an intermediary role. How will these facilitating agents challenge existing gender inequalities, if at all?

6. How do you find out what needs to be done and how exactly to do your work? Was there preliminary research done on needs? Was a consultative process and mechanism established to continue to inform your project's design, development and implementation? If yes, how is this consultative process and mechanism inclusive of women's perspectives on development solutions and expression of needs?

7. What change are you seeking? What change are you seeking in relation to change in attitude, skills, knowledge, practices? Often projects and programmes aim to impart skills and knowledge but have not thought about strategies to change attitudes and practices (norms) and the latter are often critical in addressing gender inequalities.

8. How are you measuring change, and how does the change you want to bring about address existing gender inequalities? What strategies—causal, persuasive and supportive—are you using to bring about this change?[35] At what level are these strategies targeted, at the individual or groups, or at the environment (socialisation, culture, practices)?

If you find that you do not have answers to some of these questions for your localisation initiative, it can mean that you and your team have not been consistent on how exactly your project or programme will address gender issues and to bring about the expected change.

---
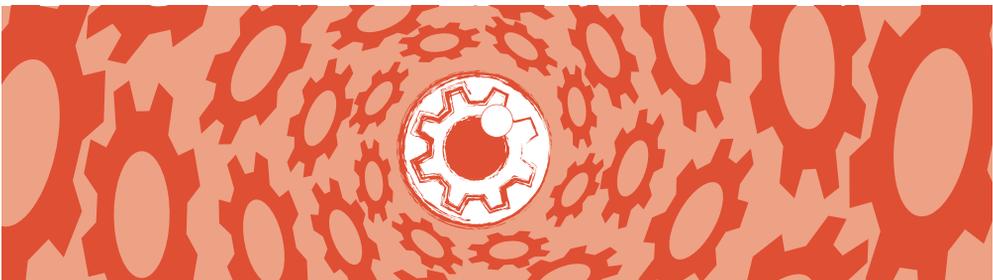
[35] See example of strategy map in Section 4 on Localisation initiatives for social change or on pages 61 and 63 of the Outcome Mapping manual.

SECTION 3:
GENDER AND ICT ISSUES AND INTERVENTION STRATEGIES
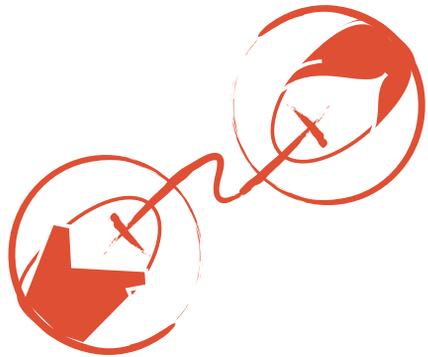
SECTION 3 :
GENDER AND ICT ISSUES AND INTERVENTION STRATEGIES

3.1 Examples of gender and ICT issues in localisation initiatives

When implementors of localisation initiatives were asked to identify gender and ICT issues within their projects and contexts during the GEM workshop in Lao PDR in January 2009, they came up with a list of issues.[36] One can try to identify gender and ICT issues from their list, which is presented below.

Access
- Community leaders do not consider issues on access of technology as a priority for women. A strategy needs to be designed to dissuade community leaders from this view. It may also be necessary to have a strategy designed to ensure ongoing support for these women.
- Women are not allowed to go to the telecentre to access information. Here,

it is important to find out why women are not allowed to go to the telecentre to access information. Is it because women have household chores and no one else will do these when women are at the telecentre or is it because of the perception that information is a form of power? So on one hand, it could be the fear of women becoming more knowledgeable and therefore more powerful. In cases of the latter, it would be important to design strategies that are persuasive and supportive so that women are not subjected to situations of violence and abuse as a result of the programme's or project's interventions. The Bangladeshi Development Research Network (D.Net) identified infomediaries (the mobile ladies and info ladies) as an integral strategy of their project. So, rather than women having to go to the

---

[36] A GEM workshop was specifically designed for project partners of PAN L10n who were implementing the training and content development components of the localisation initiatives in their countries. The workshop focused on integrating GEM within the OMg framework, and in sharpening the gender analysis of the participants.

telecentre, the mobile lady—a woman with a mobile phone and a laptop who rides a bicycle—would go to the women to serve their information needs.

- Family members do not allow women to attend training sessions. Similar to the situation above. It is important to find out why women are not allowed to attend the sessions and by whom exactly within the family. To overcome a similar situation, D.Net allows the husband to attend the training sessions with his wife, so that when the female trainee goes back to her workplace, her husband can be supportive of her role and responsibilities.

- Women's multiple gender roles are productive, reproductive and community. Without support from family members, women have very little time to do anything else.

- In rural areas, especially in marginalised communities, women are not allowed to stay in school after school hours because they have to return home to do other chores. They cannot practise their ICT skills. The main strategy adopted by localisation initiatives is, as far as possible, to arrange for training sessions to be done during school hours or before school hours.
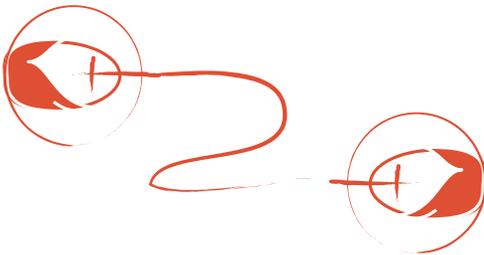
Leadership roles

- Women holding positions of leadership are generally not accepted in communities. Sometimes women face social and cultural problems when working in their communities. Culture and religion often play prominent roles in restricting women's ability to play more public roles. One strategy may include identifying and developing a role model of sorts, the way D.Net did, by identifying mobile ladies as

their infomediaries. These mobile ladies/info ladies now command a higher level of respect from their communities due to their expertise in using ICTs.

- There was a lower number of women in Khmer FOSS trainings because there are more male employees in government than female employees. Women are not encouraged to take on public roles. Here, localisation initiatives may want to develop policy recommendations as a result of their experiences in order to positively influence the education system in their countries.

Women's roles in the ICT sector

- Issues on ICT education: Most women are end users, there are very few women engineers.

- Very few female ICT teachers are engaged in activities on ICT research work and others.

- Women are mostly found working with software while men mostly dominate the work on hardware, infrastructure or networks.

- Gender issues in ICT with regards to students: Most women are not encouraged to enrol in computer science or in programming courses. Here, localisation initiatives may want to develop policy recommendations as a result of their experiences in order to positively influence the education system in their countries.

ICT skills

- No reason to attend the Khmer FOSS training because there are no computers in the work place. The issue of immediate relevance to the women's lives is important. Are the ICT skills to be acquired immediately relevant or needed by these women? If the answer is "yes," then a strategy would have to be designed to ensure that women do have access to computers at the work place. If the answer is "no," then one would seriously need to consider what would motivate these women to attend training sessions, especially if access to

the necessary resources and promotional employment opportunities do not exist for these women when the project is running.

- Most female training session participants come from families that do not have ICT tools. A strategy would have to be designed to ensure that women are able to have access to ICT tools, and to have access during periods of time when it is most convenient for them.

General education

- Issues on education with regards to women: It was difficult to find the expected level of qualifications to attend training sessions. Almost no women in the project area have reached the level of education required to attend the sessions. A persuasive strategy on the training approach may have to be designed to ensure that lower levels of education and literacy are no longer obstacles for the training of women to go ahead.
- Lower educational levels of women than men in rural areas. Similar to the above situation.
- Lack of awareness on gender issues. Education is generally insensitive to gender concerns. Here, localisation initiatives may want to develop policy recommendations as a result of their experiences in order to positively influence the education system in their countries.

All of the above identified gender and ICT issues would have a significant influence over the success of the localisation initiatives concerned. It would be necessary for these localisation initiatives to design suitable strategies in order to circumvent the possible negative impact of these gender and ICT issues on women's and men's or girls' and boys' participation, and to ensure that gender inequalities are not further exacerbated.

To do a more thorough gender analysis of the gender and ICT issues in the localisation initiative, look through Section 3.2. This section provides a list of gender and ICT considerations for localisation initiatives in the form of guide questions, the reasons why these questions need to be asked, and the corresponding implications for the design of intervention strategies and implications for resources.

3.2 Gender and ICT Cconsiderations for localisation initiatives

For illustrative purposes, we have chosen to adopt the three main areas that the PAN L10n project had used to identify key components of the work they do—technology (including issues relating to technical human capacity), content and training. Suggested guiding questions are provided below and the illustrative examples are presented in a way that shows that even when the gender and ICT issue may fall under one area, there are often linkages to gender implications in other areas.

Suggested guiding questions to see gender in localisation initiatives	
Guiding questions	Which software programs did you choose to localise? Are there cultural issues and social norms that can discourage women and girls from using that software? Is the software only FOSS? Are women sufficiently familiar with FOSS or is it mainly men?
Why ask these questions	Sometimes localisation initiatives may shy away from localising software applications that can be considered controversial. A good example are chat software applications, especially in countries where social interactions between girls and boys are not encouraged. The question is whether this should be the rationale

Suggested guiding questions to see gender in localisation initiatives	
Why ask these questions	to not localise the software, or if localised, to not introduce it to girls. The issue faced by a localisation initiative is to what extent it is willing to challenge existing gender inequalities. Localisation initiatives often face tremendous costs in localising and so FOSS applications and platforms are often used for local language computing. This is a perfectly rational choice, but there must be an added effort to make certain that women have sufficient support to become familiar and comfortable with the software since FOSS is often less user-friendly compared to proprietary software applications and platforms.
Implications for project interventions and resources	The questions asked above point to the need for localisation practitioners to realise and appreciate that they do take on an advocacy role even if the localisation initiative is still at the technical design level. Policy recommendations and advocacy do not necessarily always take place at the end of a research or project. If a localisation initiative does not have sufficient resources to roll out supportive and persuasive strategies or is unable to mobilise additional resources, the initiatives can lead to reinforcing or exacerbating gender inequalities in a particular country's context or locality.
Guiding questions	What language is being used? Is this a language only taught in schools (formal schooling system)? Is this the same language that people use on the streets? Is this language understood and spoken by women? Does the language that is commonly understood and spoken by women in your intended beneficiary group have a written script? What level of the local or national language do women and girls speak? Is it a relatively high level or low level of that language?
Why ask these questions	These questions help localisation initiatives to be more aware of the possible literacy and education issues faced by women and girls.
Implications for project interventions and resources	To a certain extent, basic literacy in a formal education system is a prerequisite to a higher level of digital literacy. It suggests that localisation initiatives may have to think of icons and graphics to supplement written scripts and software instructions, and these issues may also have implications for the design of the keyboard and what keys are needed (for example: easily recognisable icons for specific functions) in addition to the written local alphabet. For languages that have no written script, localisation initiatives would have to rely on a localised speech interface.

Suggested guiding questions to see gender in localisation initiatives	
Guiding questions	How is the local script placed on the keyboard? Will this be something easily adopted by women who have not received formal schooling? Does it require a combination of keys before the script can be used easily? Are concepts introduced that can be strange to women—for example: underlining, bolding text, changing the rule of reading the script from R to L, to L to R or from top to bottom and R to L, to L to R? Are there words borrowed from English? Are existing words used to mean something else which can be derogatory or confusing for women and girls? Are new words created? While these questions can just as easily apply to the situation of boys and men, in most developing countries, the school drop-out rate for girls is higher. Hence, in this kind of situation and context, girls and women tend to be in a more disadvantaged position when compared to boys and men.
Why ask these questions	How people learn or are able to absorb new information and knowledge is often strongly influenced by the education system that they went through. The poor have informal learning systems that are very different from formal learning systems. A programmer tends to learn better if new information is provided in a sequential manner, or if a formula is introduced. Someone who is more artistic may tend to learn in a more spatial manner, absorbing new lessons in parallel and through interconnections and relativity. While these questions can just as easily apply to the boys and men, girls and women often have less formal schooling years than boys and men because of the higher drop-out rate in schools for girls, and especially among the poor.
Implications for project interventions and resources	The localisation initiative may need to see how the science of designing the local language computing keyboard challenges the comfort levels of how people learn, through both informal and formal learning systems. It is also useful to consider these aspects in the context of standards that would be developed for local language computing. This knowledge can then inform training design when local language computing is introduced to users, especially poor women and girls.
Guiding question	What is the design, size and weight of the keyboard?

Suggested guiding questions to see gender in localisation initiatives	
Why ask this question	Most keyboards are designed based on the typewriter machine and the QWERTY keyboard layout.[37] 'However, studies on letter frequencies and the physiology of people's hands such as that done by Dr. August Dvorak show that the layout of the keyboard can cause strain on the hands, and even the distance between keys and the movement of the fingers become important issues for consideration.[38] Considering that women's hands are often smaller in build, these issues can be more severely felt by women if only the male hand is used as the model for keyboard design. Weight and size are more significant issues for women, because women are generally smaller in build and have less strength when compared to men. However, computers tend to be heavier and/ or bulkier when they are less expensive and women are often the ones with lower purchasing power.
Implications for project interventions and resources	Localisation initiatives with a gender perspective will want to consider the issues of design, weight and size and to ensure that computers with local language computing capacity are affordable.
Guiding questions	What platforms are being adopted? Is it only FOSS platforms? Is it only men who are familiar with FOSS platforms? Why not consider cross platforms?
Why ask these questions	FOSS platforms are generally not user-friendly, and because women and girls tend to be less exposed to ICTs in general, especially in relation to configuration issues, women and girls would find it more difficult to use computers that adopt FOSS platforms. Spaces and fora to discuss FOSS platforms and software applications are often very male-centric and not very accessible to women and girls, especially women and girls in rural areas. This can become obstacles to how frequently they use local language computers and may even begin to feel discouraged from using these.

[37] The QWERTY layout of keys has become the default standard for English-language typewriter and computer keyboards. Other languages written in the Latin alphabet sometimes use variants of the QWERTY layouts, such as the French AZERTY, the Italian QZERTY and the German QWERTZ layouts. The QWERTY layout is not the most efficient layout possible, since it requires a touch-typist to move his or her fingers between rows to type the most common letters. A popular story suggests that it was designed and used for early typewriters exactly because it was so inefficient; it slowed a typist down so as to reduce the frequency of the typewriter's typebars wedging together and jamming the machine. Another story is that the QWERTY layout allowed early typewriter salesmen to impress their customers by being able to easily type out the example word "typewriter" without having learnt the full keyboard layout, because "typewriter" can be spelled purely on the top row of the keyboard. The most likely explanation is that the QWERTY arrangement was designed to reduce the likelihood of internal clashing by placing commonly used combinations of letters farther from each other inside the machine. This allowed the user to type faster without jamming. Unfortunately, no definitive explanation for the QWERTY keyboard has been found, and typewriter aficionados continue to debate the issue.

[38] For more information on the Dvorak Simplified Keyboard, see: en.wikipedia.org/wiki/Dvorak_Simplified_Keyboard.

Suggested guiding questions to see gender in localisation initiatives	
Implications for project interventions and resources	Localising software applications that can be used across both proprietary and FOSS platforms would be ideal. If this is not possible, then the training design and delivery for local language computing should also include strategies that address the possible barriers that women and girls may face more than men and boys. What is important is that localisation practitioners are aware of what exactly women and girls have access to in their respective countries or localities in relation to technology and training. If the environment to enhance capacity in computer literacy is not that friendly to women and girls, then there may be issues that will require the use of only certain platforms. This will not only have implications for content training but also length/duration and frequency of the training for women and girls.
Guiding questions	Are women part of your technical team? What roles and responsibilities do they hold? What decisions can they make without further authorisation? What resources can they use? What resources are allocated for their use? What support and capacity-building do they receive? Are women on your technical team encouraged to innovate, experiment and to try new things? How are they supported when they try to take the initiative?
Why ask these questions	These questions would help you know where exactly women are on your technical team and how your localisation initiative may or may not have supported their advancement in this area. These questions also help to reveal if your localisation initiative has discriminated against women on your technical team intentionally or unintentionally.
Implications for project interventions and resources	Encouraging and supporting women to be part of a localisation initiative's technical team requires a sustained commitment and it will be necessary to allocate resources towards this end which may take the form of monetary incentives or benefits of some kind, such as: paid maternity leave; special replacement leave for working overtime or through weekends and public holidays; promotional opportunities; or opportunities for greater exposure in the field, etc. It will mean challenging existing social norms and gender inequalities that will demand that your localisation initiative go beyond just the "hiring of women" as project staff.

Suggested guiding questions to see gender in localisation initiatives	
Guiding questions	Are women's voices used (instead of men's voices) so that women and girls can feel encouraged to learn, and so that they will know that there are women who are knowledgeable about technology?
Why ask these questions	Often, the importance of women and girls as role models in technology is overlooked. Women's voices are also often used only for women-related issues while men's voices are used for technology-related issues (for example: the talking help wizard used in some software applications). The stereotyping of gender roles and responsibilities tends to extend into how role models are portrayed through technology.
Implications for project interventions and resources	Consciously portraying women and girls as knowledgeable in technology and ICT-related issues will encourage women and girls to learn. It will also help to change mindsets that stereotype women and girls as not technically inclined, or that technology is not for women and girls, and so on. A woman's voice, for example: could be used for text-to-speech software or for instructions on how to use a particular software application or computing device and for trouble-shooting technical problems.
Guiding questions	Does the language being used have gendered language forms (like Spanish, French and Italian nouns)? This means that if the woman types or "speaks" (if it is chat software, VOIP, etc.), the person on the other side will already know she is a woman. How does this affect the woman's privacy and security? How can problems be avoided if language norms demand that gendered language be used?
Why ask these questions	Online privacy and security issues are huge gender issues for women and girls. Incidents of sexual harassment and violence are not unknown, and it is important that women and girls know how to protect themselves while they are online and that the agency of protecting themselves falls on the women and girls, not on someone else. However, the internet has introduced a language of its own, and even though English is the main language, the English used is such that it is no longer "proper" English per se, yet it is understood by all. For example: the rules of punctuation and capitalisation often do not apply. Likewise, people in chatrooms have developed their own linguistic norms by using shortcuts or symbols.

Suggested guiding questions to see gender in localisation initiatives	
Implications for project interventions and resources	Because localisation initiatives are pioneering localised technology, it is important that these consider how language can increase the vulnerability of women to sexual harassment and violence. Localisation initiatives are in fact in a good position to introduce gender neutral language in the instructions and other supporting documentation for localised software applications. This will help influence how local language is used over the internet. Localisation initiatives will also have to consider privacy and security issues as part of their content and training considerations. This means developing privacy settings on localised software applications that by default, secure confidential information, rather than by default, make this information public (for example: Facebook by default makes a lot of information public rather than private).

Suggested guiding questions to see gender in content	
Guiding questions	What images and icons are being used? Are they culturally appropriate? How do they depict women? Are women depicted as knowledgeable on technological issues? Or are these usually the images of men? Are women depicted in stereotypical images? Are women portrayed as submissive or even degraded and disempowered (the victim, the sufferer, the oppressed, the temptress, the sinner)?
Why ask these questions	Content can mirror the gender inequalities in real life and the mirroring of stereotypical images often goes unquestioned.
Implications for project interventions and resources	There are numerous possibilities in content to challenge existing gender inequalities and stereotypical ideas of what is a proper woman and what is a proper man. How images of women/girls and men/boys are used and how women/girls and men/boys are depicted can strongly influence and help to bring about a change in mindset. Using images that are not stereotypical and yet culturally appropriate will not be an added cost to localisation initiatives.
Guiding questions	How are instructions provided? Is the order or arrangement of text on the computer exactly the same as it should be in a book? What level of language is being used for such instructions?
Why ask these questions	This is related to how people learn and whether they learn through formal learning systems or informal learning systems.

Suggested guiding questions to see gender in content	
Implications for project interventions and resources	Noting the differences of how instructions or text displayed on the computer differs from what people generally find in books or newspapers will help inform the content design and delivery of training in local language computing. However, it is important to note that women in developing countries in general have lower literacy levels because of the higher dropout rates in schools and especially in rural areas in developing countries. In such cases, command of the national language and possibly of the local language, is often weaker, and the lack of familiarity with formal systems of reading and writing in the national or local language can mean that women and girls could more easily adopt local language computing if there are sufficient complementary features such as voice or graphics/icons that accompany these texts/instructions.
Guiding questions	What examples are used in the instructions? Do they depict women? Are women depicted in stereotypical gender roles? Are instructions given in the male pronoun (for local languages that are gendered) to mean "people" in general?
Why ask these questions	Being aware of gender nuances in language is critical for local language computing. Sometimes the male pronoun is used to mean "people" in general. Examples that are used in instructions to depict common mistakes should also take care not to portray only women as making mistakes and only men as correcting mistakes.
Implications for project interventions and resources	This is where a gender-sensitive linguistics expert as part of the localisation project team would be better placed to advise how to strategically use language that is more gender neutral. For example: depicting women as knowledgeable on technology is a useful way of challenging stereotypical notions of women's and girls' inclination in the field of science and technology.
Guiding questions	What local content is being developed? How does this content meet women's practical gender needs and strategic gender interests?[39] Does the content only address women's typical roles of housewife, mother and caregiver (women's practical gender needs)?

---

[39] See the GEM manual on page 29 for a brief discussion on women's practical gender needs and strategic gender interests.

Suggested guiding questions to see gender in content	
Why ask these questions	The generation of local content is often prioritised for women's practical gender needs. It may also be that research has already been conducted where women have expressed the need for such information and knowledge. This is indeed a good thing to do. In addition to that, local content that speaks on rights, and how women and men can claim their rights through the different authorities should be considered. When voice is used for local content development, there is one important area—health—where the use of women's voices for women-related issues is just as important as the use of men's voices for men-related issues, especially sexual and reproductive health matters.
Implications for project interventions and resources	Wear your gender lens when local content is being developed and identify how to best address gender inequalities through local content.
Guiding questions	Where is the content from and/or who produces the content?
Why ask these questions	A lot of useful content that is gender-sensitive is being produced by women in all six of the common languages of the United Nations (English, Spanish, French, Russian, Arabic and Chinese). A lot of local content is also produced by women outside of an institutional context, especially content on indigenous knowledge. It is important that this is reflected so that women and girls in rural areas know what is possible for themselves, that they too can be content producers. Often, such content only needs to be translated and checked for culturally appropriate examples, which are gender-sensitive.[40]
Implications for project interventions and resources	Localisation initiatives can take two approaches to content production. Getting local people to create their own content by developing blogs or websites, or by getting local people to appreciate the information and knowledge that is already on the internet but produced by people like themselves from many other countries and localities. Ideally, both approaches should be used,

---

[40] Some examples can be deemed culturally appropriate yet be gender blind or serve to reinforce gender inequality. These types of content should preferably not be adopted.

Suggested guiding questions to see gender in content	
Implications for project interventions and resources	and added emphasis should be given to women and girls as content producers. Well-designed answers to this question will also help save on costs and can possibly provide speedier access to content in local language.
Guiding questions	How will preserving culture ensure gender equality?
Why ask these questions	History has shown us that women have often been tasked to preserve the culture in particular society and not men, without considering how existing cultural practices reinforce or further exacerbate existing gender inequalities.
Implications for project interventions and resources	A gender analysis will have to be conducted even on content that is considered culturally appropriate. Content that reinforces or further exacerbates existing gender inequalities should ideally be omitted.

Suggested guiding questions to see gender in training	
Guiding questions	Do your trainers pay attention to differences in women's and men's participation in the training sessions they conduct? To what extent are your trainers gender-sensitive? Will they laugh if women or men were to hold the mouse as if they were writing on a blackboard? Are women and girls encouraged to ask questions during training? Will they be impatient if women ask them what the trainers feel are "stupid/silly" questions?
Why ask these questions	Trainers are often employed based on skills and knowledge and seldom on the way they deliver their training, or how gender-sensitive their training approach may be.
Implications for project interventions and resources	Localisation initiatives should consider not only how knowledgeable and skillful trainers are, but also the attitude and manner in which trainers deliver their training and how they interact with people of the opposite and same sex. Sometimes women trainers can also mirror a lot of gender biases towards other women's learning capacities as well as the capacities of girls.

Suggested guiding questions to see gender in training	
Guiding questions	Do women and girls feel uncomfortable with your male trainers or female trainers? Do men and boys feel uncomfortable with your female or male trainers?
Why ask these questions	These questions are related to the training approach used by your trainers. Sometimes, male trainers may be more gender-sensitive than female trainers, more encouraging and more supportive. Both male and female trainers have been known to parrot gender biases in their training attitudes.
Implications for project interventions and resources	In societies where mixed interaction between people of the opposite sex is not encouraged, it is the norm to organise training sessions where women train other women and girls, and men train other men and boys. However, it is also important to know why a trainer is effective in training. It may not necessarily always be that a male trainer is more suitable for training men and boys. In some cultures, having a woman trainer who is more knowledgeable on ICTs can directly challenge notions that women are not technologically inclined or smart in technical issues. A woman trainer may be very effective for mixed sex instruction, or sometimes pairing up a male trainer with a female trainer can be a very effective approach. What is important is to be open to these possible options and to find out during monitoring which works best and in what kind of setting.

Guiding questions	Are there women trainers in your team? Do they possess the same level of knowledge and skills as their male counterparts? Do female trainers lead training sessions or are the male trainers always the lead trainers during training sessions?
Why ask these questions	It is important that women trainers are seen as equally knowledgeable as their male counterparts. If they are not, it is important that they are well supported and encouraged by their male counterparts without showing them up as inadequate or incapable. Sometimes, when male and female trainers run a session, the male trainer tends to delegate tasks to the female trainer as if she was a secretary or of lower status rather than a trainer in her own right.
Implications for project interventions and resources	It is not only knowledge and skills of male and female trainers that a localisation initiative would have to consider, but also how well male and female trainers can work together in running a training session that exemplifies gender equality.

Suggested guiding questions to see gender in training	
Guiding questions	Is training provided in separate sessions, separate for women (older), separate for men (older), separate for girls, separate for boys?
Why ask these questions	Often this is assumed to work best in societies which frown upon mixed sex instruction, and often it does. However, in settings where gender inequality dynamics may not be so evident within a locality, mixed sex instruction could work very well.
Implications for project interventions and resources	Be open to adopting both single sex and mixed sex instruction, especially if effective learning for both women and men, girls and boys, is a priority.
Guiding questions	Are training sessions set at convenient times for women and girls? Do session organisers take into account women's triple burden of productive, reproductive and community roles?
Why ask these questions	Women and girls tend to have roles and responsibilities that extend beyond a nine-to-five work day.
Implications for project interventions and resources	Schedule training times that are conducive for women and girls and in places/venues that are considered safe and friendly to women and girls.
Guiding questions	Do training sessions take into account that women have less purchasing power, and access and control over resources (including time)? Are they expected to go home and practise their new ICT skills? Or come to the training centre more often to practise?
Why ask these questions	Just because training sessions are equally offered to women and girls as they are to men and boys, one cannot assume that women and girls are able to access these opportunities in the same manner as they do not face the same challenges and obstacles. Localisation initiatives need to consider the unique challenges faced by women and girls in accessing these opportunities and how different these challenges are from the ones faced by men and boys who wish to access the very same opportunities.

Suggested guiding questions to see gender in training	
Implications for project interventions and resources	Considering that women and girls are often the ones who have had less exposure to ICTs, the length of training that is given to women and girls may have to be longer compared to the length of training that is given to men and boys. Likewise, women and girls may have to be encouraged and supported to practise their newly acquired ICT skills. This means ensuring sufficient frequency and ease of access to ICTs and scheduling access to specific time slots that would be convenient for them.

Section 3.3 presents some examples of the strategies deployed by localisation initiatives to address the gender and ICT issues they face and wish to address.

3.3 Examples of intervention strategies to address gender and ICT issues

A situational analysis with a gender perspective can lead to a better understanding of a problem taking into account all the intersections of social, cultural, economic, political and religious influences over the differential expectations on women and men. A situational analysis with a gender perspective makes gender issues visible, both in the articulation of the resulting effects of the problem and in the articulation of the initial causes. However, most situational analyses focus on general trends and at most, the gender gap. As a result, most programmes and projects tend to allocate resources to bringing about change only in relation to the gender gap. GEM tries to encourage practitioners to look beyond the numbers and to do a deeper analysis of this gender gap.

Example discussion 1: Statistical trends in IT in Mongolia

During the GEM workshop for localisation initiatives that was held in Vientiane, Lao PDR in January 2009, the following trend in the higher education statistics of Mongolia was discussed. The Mongolian participant had identified teachers and policy makers as boundary partners of the project.[41] Statistics show that a high number of women are engaged in teaching IT (40% out of 90 teachers) and a reasonably high number are involved in IT policy making (35% out of 34 policy makers, so 12 policy makers). However, the current number of female students who take up IT is getting smaller (34% out of 3,641 students, so 1,238 students in total). Statistically, since there are a number of obstacles that face women if they choose to remain in the IT sector, there is a need for a higher percentage in enrolment if there are to be female IT policy makers. Below are some of the possible inferences from the statistics that were raised by both participants and GEM facilitators:

- It can take years for the effects of education to take hold. The statistics show that more boys than girls are studying IT compared to previous years which means that in the future, the statistics will eventually reflect a higher number of males in the

---

41 "Boundary partners" is a concept used in Outcome Mapping, and defined as: "Those individuals, groups or organisations with whom the program interacts directly and with whom the program can anticipate opportunities for influence." See: Earl et al. Outcome Mapping 1.

teaching profession and a higher number of males involved in policy making for the IT sector. The statistics in Mongolia show that in the next ten years, the gap between men and women involved in policy making on technology and ICTs will likely widen.

- In Bangladesh, there are more female teachers than males because teachers do not have to go outside the community where women feel safer but the situation is the reverse when it means working in the big city, like Dhaka. Besides, cultural norms do not encourage women to develop a career and compete with men. And when women do step out of the norm, they are expected to fulfill their duties as demanded by their families on top of their career. In the same way, it may be easier for female graduate students in the IT field to enter and remain in the teaching profession as opposed to working in the development or policy making sectors.

- One of the barriers that discourage women from becoming software developers is time, as those jobs most often require working late or more than eight working hours per day. It could be useful to look at why it has become a barrier for women. The assumption is that both women and men are capable of becoming software developers. Thus, it becomes a question of gender roles. Women have other responsibilities to fulfill within their families and homes. For example: women have to go home and cook and look after their children. Men are not expected to do that. What are the barriers? Can they be addressed or minimised?

- The anxiety of leaving children at home is not because mothers by nature worry over their children's well-being than fathers do. They do worry over their children's welfare as all parents (both parents) do, but the bouts of worries are lessened when a mother knows that the father of her children is looking after them. This happens when there is a higher level of gender equality and a change in social and cultural expectations of mothers and fathers; where both parents share the responsibilities of child care. For example: in the Philippines, much has changed with regards to this. Today, Filipino women can pursue a career and even work abroad, leaving the children with their father. Filipino women are also able to do this because the larger society and the extended family members accept these new roles.

- When there are only a few women who work in computer programming which is often a male-dominated field, there is a high likelihood that women will lack the necessary experience in addressing certain higher level technical programming problems compared to men who may have been in the field for a longer time or who are able to talk with other male colleagues during work hours and social settings to help solve these technical programming problems.

- All workers should have a choice. For example: in some cases, personnel are required to meet after work hours but most women cannot or may have difficulty attending such meetings because they have to go home and attend to their other roles and responsibilities. Their situation should be accepted and as far as possible accommodated, and this would mean organising all meetings during the work day.

The above discussion points show that there are a number of possible gender issues in relation to the statistical trends in Mongolia and women's and men's current and future participation in the IT sector. Without a more thorough situational analysis, the programme or project that is intended to bring about change within the identified boundary partners may not be effective if appropriate strategies cannot be designed and implemented, to address the gender inequalities women and men or girls and boys face in Mongolia. The change that the localisation initiative was planning to bring about was articulated for each boundary partner as shown below, using PAN L10n's OMg.[42]

---

[42] Outcome Mapping uses the concept of "Outcome Challenge" to describe the ideal changes in the behaviour, relationships, activities and/ or actions of a boundary partner. It is an articulation of the program's challenge to help bring about the changes. For an example, see: Earl et al. *Outcome Mapping* 41.

BOUNDARY PARTNER	GENDER TYPE	OUTCOME CHALLENGE
Students of the National University of Mongolia (NUM) and the Mongolian University of Science and Technology (MUST)	Both male and female	The program intends to see students become aware of local language computing and its benefits and to become interested in contributing to local language computing facilities in the country. They start working on various student assignments related to computer-based Mongolian language processing, Mongolian speech recognition, localisation and local language content development works.
Teachers of NUM and MUST	Both male and female	The program intends to see ICT-related teachers become aware of local language computing and its benefits to the country's socio-economic sector. Teachers working in universities involved in preparing IT specialists will introduce local language computing based on open source to influence the information and technology field. This will help make computing affordable for students and policy makers alike. Teachers will also help conduct comparison surveys, contribute to preparing the IT specialists, and help inspire students to work on advancing local language computing. Incentives will take the form of offers to study local language computing and open source software for students in education programs.
Policy makers	Both male and female	Government agencies recognise the importance of local language computing and FOSS. Local policy makers will start creating a favorable policy environment for development.

At the time of the discussion, the Mongolian localisation initiative was focusing on teachers and students in universities as their boundary partners, as well as policy makers, because the emphasis was on local language computing. The project also had not designed any intervention strategies with a gender perspective. The implicit assumption was that both boys and girls at the universities concerned would be interested and would sustain their interest in local language computing. In order to counter the potentially adverse future trends, the Mongolian localisation initiative could have considered including female students in primary and secondary schools, and not only at the university level.

Example discussion 2: Ensuring gender balance in IT training programmes

In relation to training and capacity-building, a workshop participant from Bhutan had a specific strategy of ensuring a "proportionate number" of male and female participants. She explained that more men than women tend to participate in the training programs even when incentives and other forms of encouragement are provided to women. Because of this situation, the final decision on the strategy to be deployed was to ensure a "proportionate number" of male and female participants in the training session. For example: if there are six males in a training program, an effort was made to get at least four women to take part. Such efforts take more time before it will be possible to achieve an equal number of men and women participants.

Such a rule or policy with regards to the number of men and women participants in the training programmes means that the project aims to promote gender balance. While there was agreement that the programme or project should identify strategies to be deployed with the different boundary partners within resource constraints, it may be best to look into barriers against women among the boundary partners. Useful questions to ask would be:

- What are the roles of women and men in each of the situations of the boundary partners?
- On what terms do women participate in the private training sessions? Is participation based on qualifications that women may not have?
- How many trainers are men?
- How many trainers are women?
- Are training approaches gender-sensitive?
- When and where are training programmes conducted?
- What kind of access do women have to computers? Are they assigned computers or do they have to share a computer with others?
- Are women's existing workloads considered if they are encouraged to go for additional training? Are they given time off from work or is there someone else who takes on the work that needs to be done due to urgent deadlines?
- Will women be able to apply the new skills immediately into their work or are the new knowledge and skills irrelevant for them?

It would be fruitful to make a deeper situational analysis to answer these questions with some certainty.

The two examples above illustrate how wearing a gender lens helps in the examination of the problem beyond the initial numbers and figures. GEM emphasises the need to go beyond addressing the immediate gender gap and to address the root causes of why the gender gap exists. In comparing the two examples presented above, the Bhutanese localisation initiative did have a gender perspective on the training attendance trends, and these were obviously taken into account when the training adopted a "gender balance" approach. However, the Bhutanese localisation initiative still failed to "dig deeper" into the issues of why women were not attending the training sessions despite being offered incentives and other forms of encouragement, and how to best address the reasons cited by women.

An example to further illustrate the need to design gender-specific strategies comes from the Dareecha project, which is examined in Box 3.

Box 3: Gender and ICT issues and strategies of the Dareecha project, Pakistan

Gender and ICT issues in the Dareecha project, Pakistan

1. Lack of women's access to ICT education as a gender and ICT issue:

- Low family income. Rural community families are relatively poor so they do not want to invest in ICT education (perceived to be more expensive) for girls as they perceive that girls will not be able to contribute income to the family.
- Social/cultural role of women. Women are expected to look after the family and home and thus cannot spend more time in studies especially at home. Science subjects, perceived to require more hard work, are not preferred for girls.
- Abandoning education due to the early age of marriage.
- Restricted mobility of girls due to social and cultural factors. Girls are restricted in traveling to distant places by themselves so some girls have to abandon education early. ICT education is generally provided after high school, so there are fewer opportunities for girls to get that education as compared to boys of their age.
- Non-conducive environment of ICT education centres. Most of the ICT education centers are co-educational, and have more male students than female students. Thus, rural families restrict their daughters from joining such institutes due to the objectionable environment.
- Low female school enrolment ratio. According to the Dareecha team, the female drop out ratio (after eight years of education) is higher for girls than for boys.

2. Lack of women's control of ICTs as a gender and ICT issue:

- ICTs are mainly owned by the father and brothers of the family.
- Access to use the ICTs (especially computers) is restricted for the girls.
- Cultural barriers for women to freely use communication and social networking technologies.

3. Language as a gender and ICT issue:

- English is the lingua franca of ICTs and this limits the access of rural women to use ICTs productively as rural women tend to be less literate in English than rural men.

4. Content as a gender and ICT issue:

- According to the Dareecha project team, there was low volume of relevant web content to serve women's local information needs.

Steps taken by the Dareecha team to address specific gender and ICT issues

1. Separate training teams for girls and boys:

   • Separate female and male teams were designed to lead ICT training sessions. A team composed of one female trainer and one female technical resource person was formed for the girls' schools, and a similar male team for the training sessions at boys' schools. Trainers also came from the project team. Two teams (consisting of two members each) would work together during the teacher-training sessions.

2. Customised training lectures for girls and boys:

   • Project trainers were requested to use and give specific gender relevant examples during ICT training program.
   • Lecture slides and exercises were customised to have the specific gender relevant example.
   • Women teachers were sometimes found to emulate the society's perceptions of girls' ability (or need) to learn how to use the computer and were not as supportive as they could have been in teaching the girls how to use the computer.

3. Various facilities to address women's "special needs"

   • Daily local transportation was arranged.
   • The teachers who lived far away from training venue were provided with accommodation and logistical support.
   • The project also provided accommodation to the parents of female teachers just to ensure their participation.
   • Program design changed from hosting the teacher training at the Center for Research in Urdu Language Processing (CRULP), which would have required a very distant commute, to a local school within the district.
   • However, there were still issues of mobility for women teachers. Female teachers who lived approximately four hours away by bus from the training venue, refused to attend the training sessions. Instead, they were provided copies of the training material before the initiation of student training sessions. A female teacher was no longer selected by the school principal because she could not travel to the city for teacher training from the resident village. After being appointed, three teachers were unavailable for maternity reasons, which also meant that the schools had to support their absence for one year.

4. Avoiding computer terminologies that have a negative connotation for women in the cultural context:

   • For example: the word "Chatting" (instant messaging) was avoided during the entire project life cycle.

Steps taken by the Dareecha team to address specific gender and ICT issues

5. Customised competitions for girls and boys:

- For the active participation of both genders, some competition activities and quizzes were designed differently for females and males without changing the context of competitions. Even different types (gender specific) of gifts were awarded to girls and boys. For example: hair clips, bangles and girlish cartoon posters were awarded to girls, while warrior cartoon key chains and Superman/Spiderman stickers were awarded to boys. While giving gender-specific gifts can be seen as stereotypical, the idea was to ensure that the community members, school authorities and parents would not find reason to object to girls' participation in the competitions.

Resulting encouraging outcomes

The Dareecha project witnessed equal eagerness and enthusiasm among women teachers, headmistresses and girl students to learn about ICTs as that of men teachers, headmasters and boy students. The project participants also did not notice any negative attitudes towards ICTs or their use from women teachers, parents or students. The Dareecha project team also felt that there was active and enthusiastic participation by women although these had to be within the culturally acceptable limitations. Localisation of ICTs was perceived positively by both boys and girls, and their teachers. The school and district administration was equally enthusiastic about setting up computer labs and training courses in both girls' and boys' schools.

Having a gender perspective often means that we recognise that women may have a different starting point, or may even have a "handicap" vis-à-vis men. When we say equal opportunity, equal participation, we usually see this expressed in numbers. However, is it just about equal numbers of women and men that we would wish to see as an achievement? Or is it about creating opportunities and designing strategies so that women can catch up to "finish the race" (if we see the race as an analogy of the situation) or at least to achieve a specific point in the race? Seeing women "finish the race" would be ideal, but we recognise that all programmes or projects have limited resources and other types of constraints and may not be able to adopt too diverse a set of gender-specific designed strategies.

Case example 1: Identifying differential levels of achievement for women and men or girls and boys during planning—Is that being gender-sensitive?

The localisation initiatives under PAN L10n used gendered Outcome Mapping (OMg) to plan their project, and so they had different outcome challenges and progress markers for each boundary partner. Their evaluation plans therefore showed the different strategies to effect change from the boundary partners by understanding the social and cultural settings that affect them. Because the female boundary partners are limited by their circumstances, the evaluation plan that the localisation teams developed employed specific strategies to effect change from them, which are different for the males. However, this meant setting lower levels of achievement for female boundary partners compared to male boundary partners.
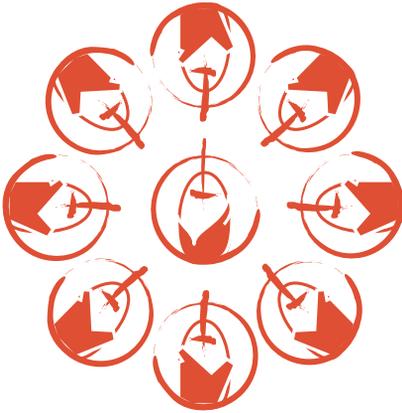
The rationale for the different levels of achievement between women and men was further explained through an example from the Dareecha project. The team from Dareecha argued that the different outcome challenges that Dareecha had for male school principals and female school principals show gender differences, not capabilities. The male school principal is expected to run a business model for the delivery of the training while the female school principal is expected to deliver training sessions for other schools. The female school principal is not expected to run the business model because she has to go home to attend to her family and household. It does not mean that she does not have the capacity to run a business model. It shows that the culture and society she belongs to imposes conditions on her that are different from those imposed on the men. The men are not expected to perform or even have a share in doing the household chores, which is why they can stay out late, even after work. Somebody else takes care of the family and the house, and that is the woman. The different outcome challenges, it was argued, show a keen understanding of gender differences. However, by the end of the project, the Dareecha team found that the female school principal had shown much more interest in the business model compared to the male school principal.

The same project had different outcome challenges for male and female students because they assumed that the girls would not achieve the same outcome challenges to the same degree or level due to the different starting points of girls vis-à-vis boys and the effects of past and current discrimination against girls. Overall, the project had the same objective — for all students to be able to use the local software. However, the expectation was for the boys to use the software competently, and for the girls to demonstrate the use of the software, but not necessarily be able to use the software competently. The second example from the same project differentiates the capacity of boys and girls to achieve a certain level of skills. In this way, the second example is about capabilities of the girls vis-à-vis the boys, and not necessarily about the differences in gender.

Ideally, the same level of skills should be expected as an achievement by both boys and girls but different strategies should have been designed and used to bring about this achievement. As it turned out, towards the end of the project, the Dareecha team had observed that in one of the rural schools in Pakistan, the male teacher had his two young daughters of twelve and ten years old learn to use the computer along with his son in an all-male school (catering to boys' education between the ages of fourteen to seventeen years). The male school principal did not object and neither did fellow male teachers or other male students. His twelve-year-old daughter turned out to be better skilled at the computer than his fourteen-year-old son and would teach her brother how to do certain things on the computer. She also won first prize when a competition was organised in relation to the computer skills that they had acquired.

This showed that even if the project did not think of designing a specific strategy, the girl managed to out-perform the boys only because her father had encouraged and supported her learning to use the computer. This happened without the project specifically designing a strategy that would support girls achieving the same level of ICT skills as the boys. In the future, a strategy

around the role of male teachers who have very young daughters of a similar age may be something plausible to design and use to effect change and to ensure that the same level of ICT skills by girls could be achieved. It may also be necessary to deploy such a strategy in similar rural contexts.

Dareecha took into account the social obstacles faced by women and girls in the society when they identified different levels of achievement after specific periods of time. Dareecha did this, recognising that the project had limited resources and felt that the project could not sufficiently address the social obstacles faced by women and girls that reinforced gender inequality. This is one approach to designing a gender-sensitive project and which can bring about some surprises as Dareecha's evaluation unearthed. However, there is another approach to developing a gender-sensitive project, and this is explained in Case example 2, using D.Net's experience in increasing information access of the rural poor.

Case example 2: The different strategies deployed for encouraging equal participation and ensuring equitable benefits make a project gender-sensitive, not the different levels of expected achievement

Poor Bangladeshis generally do not have access to information sources like the television or the radio. They also cannot afford to buy newspapers and most are illiterate. This creates a difficult situational context. D.Net concluded in its analysis that it was not only a problem of lack of skills, literacy and access, but there was also a need for behaviour change—for poor Bangladeshis to actively seek information rather than to wait for the information to be told to them.

D.Net first conceptualised its project, Pallitathya, in 2001 as an action-research. By 2003, the theoretical model of Pallitathya was developed. The central idea was to find out if access to information and knowledge, with the complementary support and use of

information and communication technology, had any role in addressing poverty. The action-research which began in 2003 was premised on three broad questions:

- To what extent are ICTs relevant to the life and livelihood of the poor and the marginalised as they cannot afford access to ICTs and as, generally, they are more illiterate in terms of basic literacy and ICT literacy?
- Why do the poor and marginalised choose an ICT-based information and knowledge system when they have their own mechanisms of maintaining their livelihoods?
- Can a system of information and knowledge for the poor and the marginalised be sustainable?

The Pallitathya model consists of five basic components: content, multiple channels of information and knowledge exchange, infomediary (human interface between the information and knowledge database and people), ownership, and mobilisation (marketing) (see Figure 1).

Figure 1: Five basic components of the Pallitathya model
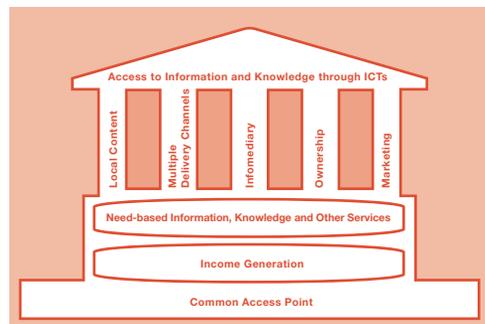

Source for figure 1:
Back cover of Ananya Raihan *Pallitathya: An Information and Knowledge System for the Poor and Marginalised—Experience from Grassroots in Bangladesh* (Dhaka, Bangladesh: D.Net, 2007).

The situational analysis and difficult context of the poor in accessing information made D.Net think more critically about the delivery

approach that they would adopt to ensure accessibility to information and knowledge. They soon realised that the Pallitathya model required an interface that combined information, technology and people. Learning from the Grameen Bank and other similar micro-credit initiatives in Bangladesh, D.Net knew that the human element of the interface, which could theoretically either be male or female, had to be female in order for the project to be able to access every household and deliver services to both women and men. If the human element were male, many women would not have been able to access the services as there were cultural obstacles that prohibited women from interacting with men without the presence of at least one of their male relatives. This would have made access impossible for widows and women who had no male relatives at all. It would have also been very difficult for women to request for information that had to do with their reproductive and sexual healthcare, as well as issues of violence and sexual abuse.

D.Net therefore adopted the supportive strategy of an infomediary, the mobile lady (who went around the village providing information services for a fee using the mobile phone), for its Pallitathya helpline project.[43] This project put together an information and knowledge system that utilised existing infrastructure, and information and knowledge resources, as well as existing local expertise to ensure that the poor could have timely access to information and knowledge that they need. So even when D.Net did not identify differential outcome challenges for each of their boundary partners, and so levels of expected achievements remained the same for both women and men, they did adopt a gender perspective in the design of their intervention strategy.
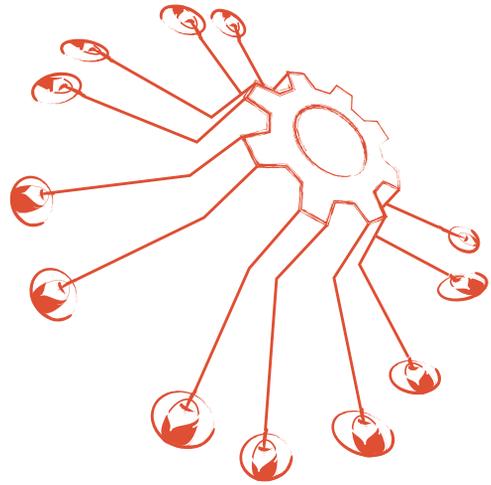
[43] For more information on the Pallitathya helpline project, see: www.pallitathya.org.bd/MainDetails.php?Id=47. You can also download the D.Net case study and its experience of using GEM from: www.genderevaluation.net/gemworks.

SECTION 4:
LOCALISATION INITIATIVES FOR SOCIAL CHANGE
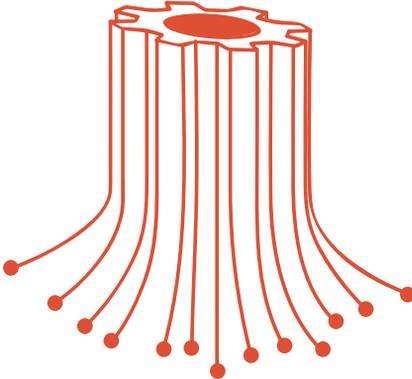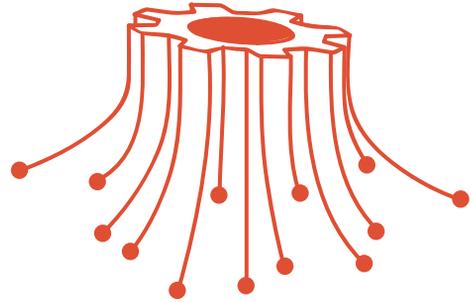
SECTION 4:
LOCALISATION INITIATIVES FOR SOCIAL CHANGE

4.1 Localisation initiatives and issue areas for social change

A holistic approach is necessary if localisation initiatives are to bring about positive social change. This means that localisation initiatives should not only focus on developing products, but ensure knowledge and participation through an inclusive and extensive process.

It is important to discern how women and men participate in and benefit from software localisation initiatives and products. Without conducting a gender analysis and without taking into account the gender considerations in the development and deployment of localised software, localisation initiatives may very well end up widening the digital gap between women and men. The challenge lies in finding out what roles women are playing in localisation efforts. What are men's roles? Women are usually invisible in localisation initiatives.

Our goal, as gender advocates, is not merely for people to use technology. Our goal is also to influence how technology is constructed. We need to find out what technical standards and cultural conventions are reinforcing unequal gender relations in localisation initiatives. Localisation initiatives are, in effect, adapting existing software that has embedded values which are being transferred. What are those values, standards or conventions? Are they advancing or addressing existing gender relations and inequalities? What views and practices in gender relations are replicated or promoted? For example: the PAN L10n realised that boys and girls have different rights and privileges, and therefore different expectations. Girls might be prevented from using software applications for communication (email and chat). However, this should not necessarily translate into not introducing localised email and chat software applications to girls. The Dareecha project still introduced localised email and

chat software applications to girls, but the software was not called "chat" and there was a limit with whom the girls could email and chat (in this case, only with girls from other schools that were involved in the project). If the PAN L10n team were not aware of these existing gender relations within communities and society in general, they might not have seen how gender inequalities could have been further exacerbated if access to email and chat was disallowed completely.

The following matrix (Matrix 1) identifies four key issue areas where it is necessary to bring about social change, but where levels of severity of gender problems can also vary depending on the context and situational analysis. The less gender inequality there is within a country or context, the higher the likelihood that these issue areas could also sit on lower levels of severity of gender problems for that particular country or context.[44]

Matrix 1: GEM's proposed key issue areas for social change for localisation initiatives

Key issue areas for social change	Longwe's women's empowerment framework[45]	Gender and ICT issues
Access to resources and opportunities	Welfare access	Opening hours Distance Content Language Cost Cultural barriers Mobility Safety Age Sectoral issues Urban-rural issues Personnel (trainer, facilitator, coordinator, manager)

- Is access to ICTs by women and girls assumed? Is there suitable infrastructure located where women are the majority in a particular locality? Is the location for access to ICTs provided in a market place or in a religious place where men predominate and women may not feel comfortable to enter or be in? To what extent is access to ICTs facilitated to reach women and girls in their homes?

---

[44] Levels of severity of gender problems are described in the GEM manual on pages 34–36.
[45] See pages 33–38 of the GEM manual.

Key issue areas for social change	Longwe's women's empowerment framework	Gender and ICT issues

- Are women and girls provided access to ICT resources and opportunities, but not supported in effecting their learning? Is the attitude of the personnel where access to ICTs is provided unsupportive or unfriendly to women's and girls' needs?
- Are cultural and religious barriers considered in relation to women's and girls' mobility and access to public spaces (where men and boys may be) in order to learn and use ICTs?
- Are women's and girls' free time and time constraints considered in providing access to ICT resources and opportunities, considering that women and girls often have household chores?
- Is distance and access to public transport, safety of public roads, the existence of public lighting, etc. considered in providing access to ICT resources and opportunities?
- Is access easier to facilitate for girls compared to facilitating access for women?
- Are women and girls assumed to be able to afford access? Or are they assumed to have control over the use of ICT resources in the household?
- Are tools and software being developed using local languages? What tools and software applications are being chosen for localisation? Do these choices conform to what is deemed more appropriate for boys/men and what is not chosen is what is not appropriate for girls/women?
- How will intellectual property rights affect women's and girls' use and appropriation of localised ICTs?
- Is the available content relevant for women? Have women and girls been consulted about content development?
- Have efforts been made to protect women's traditional knowledge, particularly about crops and plants, so that it can be preserved, used without exploitation, and patented?
- Is the language used only known to those schooled formally? Is the language used only English?
- How will intellectual property rights affect information and knowledge sharing among women and girls?
- Are the gender and ICT issues assumed to be the same across the different sectors and communities (farmers, fisherfolk, informal labourers, seasonal workers, etc.) and between urban and rural areas?
- Are technology choices being made that are affordable to low-income groups that are likely to include more women than men?
- Have assessments of technology choices been done to determine who will use the technology and for what purpose?
- Has consideration been given to user-friendly technology, appropriate to those with low literacy levels?

Key issue areas for social change	Longwe's women's empowerment framework	Gender and ICT issues
Capabilities	Access conscientisation	Literacy Education Skills training—what level? Employment—what level? Use (immediate needs)

- What level of ICT skills are imparted to women? Are they mainly secretarial-type skills, or do they include more technical training and "looking behind the technology" such as taking the computer apart, examining the components, doing repairs, learning software programming, understanding information systems, etc.?
- How often can people practise these newly acquired skills so that these skills effectively remain with them through time and they are better able to find suitable employment?
- How exactly will these newly acquired ICT skills increase the productivity of women and men? Are these ICT skills for women and men conforming to the gendered division of labour within that particular community or locality?
- Are necessary adjustments made to facilitate women and girls' participation in view of multiple roles and cultural constraints?
- Are training opportunities available not only for technology professionals, but for non-professionals to use ICTs?
- Are girls and women given encouragement and incentives to enter all segments of the ICT labor force?
- Are there social and cultural issues that obstruct or discourage women from entering the science and technology sectors?
- Are there cultural or social issues that call for single-sex instruction in ICTs?
- Are there any social or cultural problems with mixed-sex instruction?
- Are there differences between men and women in subject and technical skill levels that require remediation or accommodation?
- Are there women facilitators and trainers?
- Are training materials accessible to illiterate populations and non-English speakers?
- Are child-care facilities necessary?
- Are training activities and access times/locations compatible with women's daily schedules and possible travel limitations/issues of public mobility?
- Where are women in localisation initiatives? Are they end-users? Are they content developers? Are they the technical designers? Are they the clerical or secretarial staff? Do they do lower end technical work only?
- To what extent are girls and women encouraged to engage with ICTs? What support and incentives do women and girls enjoy if they enroll in science and technology courses? Are there scholarships and grant programs to encourage women to enter the science and technology field? What type of policy recommendations can you make to ensure this?

Key issue areas for social change	Longwe's women's empowerment framework	Gender and ICT issues
<td colspan="3">   - Are there incentives that encourage women to engage in ICT research and innovation?   - Is there research and development on technologies for the illiterate and neo-literate?   - Are there subsidies for research efforts that promote women innovators in ICTs?   - Are there means to ensure that ICT research and development programs promote and accept women's participation?   - To what extent are feedback mechanisms friendly in getting inputs from women and girls and to what extent is such feedback incorporated into content development and technical design matters?   </td>

Key issue areas for social change	Longwe's women's empowerment framework	Gender and ICT issues
Voice	Access Conscientisation Mobilisation	Self-confidence Awareness Questioning Participation (active) Content creation Use (strategic needs) Producer Security Privacy Women organising

- Have specific goals and strategies been designed so that both women and men can influence, participate in, and benefit from ICTD-type initiatives and processes?
- Will measures to equalise opportunities and access to ICTs for both women and men in any way adversely affect the situation of women? If any negative impacts are foreseen, what can be done to overcome them?
- What are the constraints that might prevent men or women from equitable participation in the project? Are there cultural, religious, social, political and economic barriers and constraints that might affect women's or men's access to opportunities, resources, and decision making?
- How are women's privacy and security issues considered and addressed? Have content and training components considered these issues? Are content and training components perpetuating these issues?
- How will localisation initiatives contribute to the increase in trafficking of women, pornography and censorship?

Key issue areas for social change	Longwe's women's empowerment framework	Gender and ICT issues

- How are women included in the design and development of localisation initiatives? How are their perspectives and needs considered?
- How are women involved in the development of localisation standards?
- Whose voice is being privileged? Are these only women of a certain background and social, political and economic influence?

Key issue areas for social change	Longwe's women's empowerment framework	Gender and ICT issues
Power and decision-making	Mobilisation Control	Leadership roles Advocacy roles Decision-making Ownership of resources Equal access to and ability to make use of opportunities Privacy Security Political participation Community organising

- Do both women and men have equal access and control over the ICT resources and opportunities?
- Do both women and men have equal access and control over the benefits that can be obtained through the use of these ICT resources and opportunities?
- Who makes ICT policies in your country? Are women consulted or part of the policy making process?
- If women are consulted in policy making processes, is there equitable representation across all social, economic, political and geographical strata?
- Are there policies on localisation and to what extent are women involved?
- Are women and girls able to use and influence feedback mechanisms in relation to policy making? What other policy making mechanisms exist to measure whether or not women and girls will benefit from localisation initiatives?
- Who decides how resources are allocated in the ICT sector? How are women and girls affected by the allocation of these resources?

The questions posed in the key issue areas for social change matrix closely relate to what Outcome Mapping suggests as part of project planning, identifying a strategy map (see Matrix 2).[46] A strategy map will be more gender-sensitive if one deploys a gender lens in the planning and design stages of the project. That often means thinking of and deploying different strategies for women's and men's equal participation in the project. [47]

Matrix 2: Strategy map

Strategies	Causal	Persuasive	Supportive
Individual (aimed at individual, organisational or institutional boundary partner)	What will be done to produce an immediate output? Usually, causal strategies are direct inputs that produce an immediate output, like purchase of equipment, set up of a lab, etc. When these strategies are employed, the primary control and responsibility for the consequences rests only with the programme or project. These strategies are the only ones that can influence a direct input or output.	What will be done to build capacity or bring about a change in level of skills and knowledge, attitudes and practices? Usually, persuasive strategies are designed to encourage or influence behaviour change, but these strategies cannot guarantee 100% direct influence on influencing that behaviour change. These strategies are aimed to facilitate change, but the ultimate responsibility rests with the individual, group, or institution (for example: with the boundary partner).	How will sustained support, mentoring or guidance be provided? Usually, supportive strategies are designed to help sustain the behaviour change so that the medium to longer-term change can be achieved. Their effectiveness will rely very much on the boundary partners' active participation and sustained interest and motivation. These strategies aim to facilitate change, but the ultimate responsibility rests with the individual, group, or institution (for example: with the boundary partner).

[46] Outcome Mapping defines the strategy map as, "A matrix that categorises six strategy types (causal, persuasive and supportive for the individiual and the environment), which a program employs to influence its boundary partners. Strategies are aimed at either the boundary partner or the environment in which the boundary partner operates." See: Earl et al. *Outcome Mapping* 131.
[47] Ibid. 61–63.

Strategies	Causal	Persuasive	Supportive
Environment (aimed at boundary partner's environment)	What will be done to alter the physical or policy environment?	How will the media or publications be used? Are there other channels that are community-based that could be used?	What networks or relationships will be established or utilised?

If you intend to use this strategy map, do take note that Outcome Mapping emphasises that the goal of the strategy map exercise is not simply to ensure that all boxes have something in them. Some boxes may appropriately be left empty, depending on the nature of the programme's or project's work. The appropriateness of strategies largely depends on the type of changes that the programme or project wants to encourage in its boundary partner.[48]

---

[48] Ibid. 62.

SECTION 5:
NEXT STEP
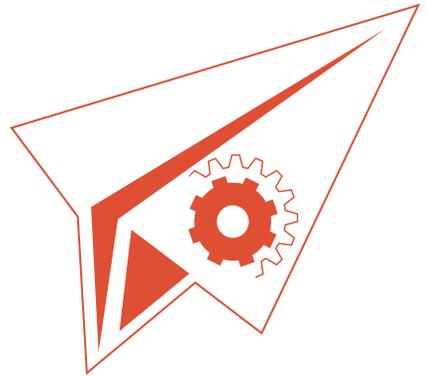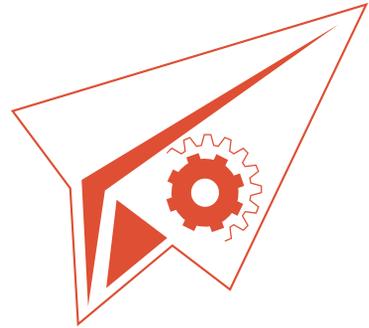
SECTION 5:
NEXT STEP

There is a wide range of gender and ICT issues for localisation initiatives. There are also four key priority issue areas that GEM recommends for localisation initiatives to consider in bringing about social change: access to resources and opportunities; capabilities; voice; and, power and decision-making.

Some of these you may be able to address through your projects and some of these will go beyond your limited capacity, time and resources. You have to be realistic and you also have to ensure that you do identify and address some of these gender and ICT issues because if you do not, you may be further exacerbating existing gender inequalities in a community or locality.

Wearing the gender lens and being able to recognise gender issues is only one side of the coin. In order to know to what extent you have addressed the identified gender and ICT issues, an evaluation with a gender perspective is required. GEM is a utilisation-focused evaluation methodology. Using it wisely can help you avoid collecting too much information and data that can easily overwhelm you and your evaluation team members. GEM also encourages you to consider designing your evaluation during the planning of a project or programme, based on the purpose and intended uses of the evaluation. To know how to conduct an evaluation using GEM, read the GEM manual, which can be downloaded from www.genderevaluation.net/gemworks.
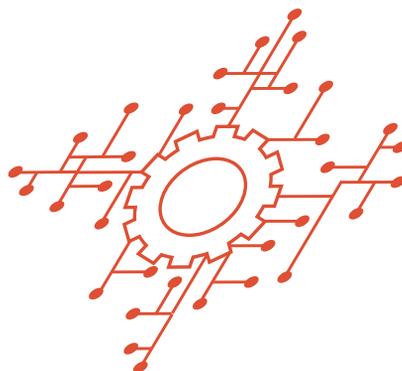
BEFORE YOU BEGIN A GENDER EVALUATION

Conducting a gender evaluation: What do you need to consider?

The GEM manual stresses the importance of integrating gender in the composition of the evaluation team. This means that at least one member of the team should have experience and understanding of gender issues, but that the team is not over-reliant on this one person to ensure that gender is integrated throughout the evaluation. It is also important to consider the following key questions:

- Is gender analysis included in the terms of reference of the evaluation team?
- Is the evaluation team gender-balanced?
- Is the evaluation team aware of the gender issues or gender and ICT issues in their country's context? If there is no awareness of gender issues that should be addressed in the evaluation process across all evaluation team members, then there may be disagreement on the importance of collecting and analysing sex disaggregated data, including the identification of sex-disaggregated indicators. This disagreement will in turn result in a higher likelihood that gender will not be sufficiently and effectively integrated throughout the evaluation.
- Is there a need for gender sensitivity training for the evaluation team members to help facilitate their awareness and increase their understanding of gender issues that should be addressed in the evaluation process?

In addition to considerations on the composition and capacities of the evaluation team members, there are five other key considerations before conducting a gender evaluation:

- Organisational values
- Stakeholdership
- Capacities of personnel
- Understanding of gender
- Budgetary implications.[49]

---

[49] See page 77 of the GEM manual for a further elaboration on the other considerations.

A.1 Organisational values

Organisations tend to have strong working cultures of their own which are based on a set of values. Sometimes, these values continue to evolve and sometimes they remain the same over decades. The value system of the organisation is often influenced by its leadership.

Matrix 3 shown below presents a possible organisational framework to examine organisational values. It identifies three key organisational dimensions, with each dimension having its own three areas of organisational characteristics or nine areas of organisational characteristics in total. In summary:

Matrix 3: Organisational dimensions and characteristics to examine organisational values

Organisational dimensions	Organisational characteristics		
	Mission / Mandate	Structure	Human resources
Technical dimension (The tangible parts)	I. Policies and actions	II. Tasks and responsibilities	III. Expertise
Socio-political dimension (The process or power play)	IV. Policy influence	V. Decision-making	VI. Room for Manoeuvre / Innovation
Cultural dimension (The personality)	IV. Policy influence	VIII. Cooperation / Learning	IX. Attitude

Organisational values can influence the level of understanding about the importance of gender inclusion at the conceptualisation stage of a project, the level of readiness of implementing agencies as a whole to conceive the importance of gender inclusion in the project life cycle, and the absence or existence of a gender policy within the project implementing institution. If the top management believes in gender equity as a core value, then it is much easier to incorporate GEM in the life cycle of the organisation's various projects. It is important to understand that GEM is not just for evaluation, but is very applicable too

for the life cycle of projects. A gender policy within the organisation is very useful for mainstreaming gender issues in day-to-day activities. The practice of a gender policy creates a conducive environment within it for incorporating GEM in all programmes and projects.

There were two handouts that the GEM facilitation team developed to discuss organisational value issues during GEM workshops. Often, these were distributed towards the end of the workshop for internal reflection by the participants. Handouts 1 and 2 present these in detail.

Handout 1. An example of an organisational framework for localisation initiatives

Organisational dimensions	Organisational characteristics		
	Mission / Mandate	**Structure**	**Human resources**
Technical dimension *The tangible parts*	**I. Policies and actions** The guiding policy and its operationalisation in action plans, strategies/ approaches, and monitoring and evaluation systems. Questions to ask: Are your policies transparent to all? Are monitoring and evaluation systems transparent to all? Do meetings include everyone? What meetings exclude the women in your team? Are there mechanisms for peer feedback and are women able to give feedback to their peers and superiors without having to worry about the security of their jobs?	**II. Tasks and responsibilities** The way people are positioned and the way tasks and responsibilities are allocated and related to each other through procedures, information and coordinating systems. Questions to ask: Where are women in your organisation? What roles and responsibilties do they hold? Only in content development? Only in training delivery? How does this affect their multiple gender roles of productive, reproductive and community?	**III. Expertise** The number of staff and the requirements and conditions to allow them to work, such as job description, appraisal, facilities, training, etc. Questions to ask: If women are on the technical team, what type of support and encouragement are they given? What kind of work space do they have? What resources can they use without prior permission? What further capacity-building / training do they get? What new lessons or new learning opportunities are they able to access? What new lessons or new learning opportunities are they not able to, or allowed to, access?

Organisational dimensions	Organisational characteristics		
	Mission / Mandate	Structure	Human resources
Technical dimension *The tangible parts*		**II. Tasks and responsibilities** Are they on the technical team? If yes, in what way? What responsibilities and roles do they hold? Are they only assigned tasks which are repetitive, require detailed work that is typical of clerical / secretarial and documentation-type work? What decisions can they make? What information are they allowed to access?	

Organisational dimensions	Organisational characteristics		
	Mission / Mandate	**Structure**	**Human resources**
Socio-political dimension *The process or power play*	**IV. Policy influence** The way and extent management-level people from within the organisation and people from outside the organisation influence policy and the running of the organisation. Questions to ask: Are women part of the policy-making process within your organisation/ project team? If yes, at what levels of decision-making power are they at? Can they influence policy decisions? Are they able to suggest ideas or make recommendations without any male support?	**V. Decision-making** The patterns of formal and informal decision-making processes, and the way diversity and conflicts are dealt with. Questions to ask: How are decisions made in your organisation and project team? Does it include everyone? Are there participatory decision-making processes? How do these processes involve women of your organisation/ team? What decisions can women make over the use of resources? How are resources allocated to women's needs? Do they end up with the most outdated computer, the slowest, etc.?	**VI. Room for Manoeuvre / Innovation** The space provided to staff (through rewards, career possibilities, variety in working styles) or created by staff to define their work. Questions to ask: Do rewards and career possibilities hinge on experiences and skills that women will never be able to acquire without further support and opportunities? Does the current work environment encourage women to experiment and innovate and to initiate and try out new ideas?

Organisational dimensions	Organisational characteristics		
	Mission / Mandate	**Structure**	**Human resources**
Socio-political dimension *The process or power play*	**IV. Policy influence** Are women's ideas and recommendations ever considered seriously? Who influences the policies of the organisation and project team the most? Do they ever consider women's interests and gender inequality issues in their policy-making? Are they open to considering gender inequality issues? Will they need persuading / convincing?		**VI. Room for Manoeuvre / Innovation** How are women supported if they do proceed with trying out new ideas or new ways of doing things? Are they ridiculed or discouraged from doing so, and yet rewards and career possibilities are given to those who show initiative, creativity and are innovative?

Organisational dimensions	Organisational characteristics		
	Mission / Mandate	**Structure**	**Human resources**
Cultural dimension *The personality*	**VII. Organisational culture** The symbols, rituals, and traditions. The norms and values underlying the running of the organisation and the behaviour of staff. The social and economic standards set. Questions to ask: What is the learning culture within the organisation/ project team? How is information and more importantly knowledge shared? Can women access this knowledge? How are women involved in the information and knowledge system? How are social norms that perpetuate gender inequality reinforced within this organisation or project team?	**VIII. Cooperation / Learning** The way the work relations between staff and with outsiders are organised, such as working in teams, and/or networking. The norms and values underlying these arrangements. Questions to ask: Are women and men encouraged to work together? What roles do women play if they are part of a work team? What responsibilities do they tend to hold? Are they able to initiate and discuss new collaborations with those outside the organisation? Are there considerations given to assure women and their families that it is safe for them to work closely with their male work colleagues in the field?	**IX. Attitude** The way staff feel and think about their work, the working environment and about other employees. The extent to which staff stereotype other staff. The extent to which a staff member identifies him/ herself with the dominant culture of the organisation. Questions to ask: How are women in the organisation and on your project team viewed? Are they ever objectified, sexually harassed? Are they ever ridiculed for asking questions? Are they discouraged in any way? How do women feel as part of the organisation and project team? Do they seem self-confident? Do they seem to have high self-esteem?

Organisational dimensions	Organisational characteristics		
	Mission / Mandate	**Structure**	**Human resources**
Cultural dimension *The personality*	**VII. Organisational culture** Can women, for example: be heads of this organisation or project team? Do women always hold secretarial-type positions and/or support positions rather than managerial positions?	**VIII. Cooperation / Learning** What kind of mechanisms or support is given to provide reassurances if women go into the field? What social rules are women expected to follow which do not apply to men? Do men share their skills and knowledge with their women colleagues freely? Or is this done in an impatient manner, if done at all?	**IX. Attitude** Can they be outspoken yet still respected? What respect do they command immaterial of the positions they may hold? What do men think of women being their work colleagues? Do they prefer all of the team members to be men? Do they think women should stay at home while men should be the ones who are given all the employment opportunities since many men are still unemployed? Do male staff in the organisation refuse to work under a female supervisor or boss? Is pornography viewed during work hours and by male colleagues? Are women colleagues subjected to pornographic materials?

Source:
Adapted from: Verona Groverman, Jeannette D. Gurung "Part 2: Organisations and Gender" in *Gender and Organisational Change Training Manual* (Nepal: International Centre for Integrated Mountain Development, 2001) 45.

Handout 2 shown below examines eight key organisational practices through which more gender-sensitive values could be brought about within an organisation by influencing the organisation's overall values. The column on "Key actions needed to change or improve on organisational practices" is meant to be completed by workshop participants or by internal stakeholders of the organisation.

Handout 2. Critical reflection exercise on organisational practices

Organisational practices	Questions for critical reflection from a gender perspective	Key actions needed to change or improve on organisational practices
Practice 1: Prospecting for new ideas, opportunities and resources.	Are women encouraged to do this? Can they play a leading role in initiating new ideas, opportunities and resources? Can women take the lead in forging new deals, initiating collaborative opportunities, identifying new boundary partners, etc.?	
Practice 2: Seeking feedback from key informants.	What feedback have you sought from key informants? Does it include a gender perspective or analysis of the situation/context and your area of work? If your situational analysis did not include a gender perspective, what can you do to gain these insights? Do your key informants continue to play an advisory role to your project? Are gender experts part of your project team in any way, do they play advisory roles, were they among your key informants?	

Organisational practices	Questions for critical reflection from a gender perspective	Key actions needed to change or improve on organisational practices
Practice 3: Obtaining the support of your next highest power.	Have you included the need to address gender inequality issues with your next highest power? Is further persuasion needed? What else would help convince them of the importance of addressing gender inequality issues? How are you able to influence your next highest power? Are there participatory decision-making processes in place that include women and allow for women's perspectives?	
Practice 4: Assessing and (re)designing products, services, systems, and procedures.	How ready are you and your team members to go back and redesign your product, especially now that you have localised it? What if the software program you chose to localise is not culturally acceptable for women and girls? What if the software program you chose to localise uses language and icons that perpetuate the idea that the man knows more about technology than the woman (for example: the help wizard in the image of a man)? How can your current strategies change to be more effective in addressing gender inequality issues? Are you willing to change these strategies? Where are women in terms of the roles they play in your procedures and systems? Are they decision-makers? What level of decisions are they allowed to make? Can women be supported to play higher level roles? What changes can you put in place to help make this happen?	
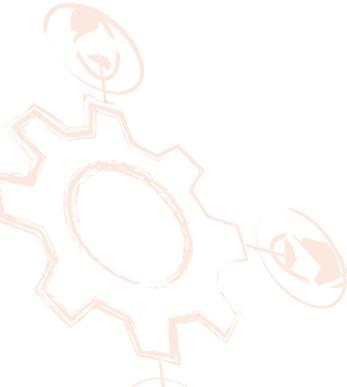
Organisational practices	Questions for critical reflection from a gender perspective	Key actions needed to change or improve on organisational practices
Practice 5: Checking up on those already served to add value.	What is your boundary partners' own understanding of gender and ICT issues? How committed are they to addressing gender inequality issues? What other support can you provide or strategies that you can adopt (causal, persuasive, supportive) that can help them do this better? How can your current strategies change to be more effective in adding value to the work of your boundary partners?	
Practice 6: Sharing your best wisdom with the world.	Are you transparent in also sharing your lessons learnt, and what did not work? Are you honest in elaborating how you addressed gender inequality issues, if at all? Are you explicit about the challenges and problems you faced and which of these you could not overcome and why, so that others can learn from your experience?	
Practice 7: Experimenting to remain innovative.	How are women in your team encouraged to experiment? How are they supported? How are your boundary partners encouraged to experiment in addressing gender inequality issues? How are they supported?	

Organisational practices	Questions for critical reflection from a gender perspective	Key actions needed to change or improve on organisational practices
Practice 8: Engaging in organisational reflection.	How are gender inequality issues included in staff meetings and discussions? Are they raised at all? Is organisational reflection limited to the immediate work and outputs (quantitative aspects) and not to the processes of "how" and "why" these may or may not work (qualitative aspects)? Do reflections include the differences in how women and men are responding to your program strategies and the importance of finding out why? Is evaluation an important part of your planning, design and re-designing, and monitoring processes? What kind of learning culture does your organisation have? Is it a "learning for change" culture? Are there biases in terms of which reflections get considered and which do not? Does organisational change mean to you the willingness to make changes within yourself?	

Source:
Developed based on Outcome Mapping's Design Worksheet 4 on page 74 and the Gender Evaluation Methodology's "Learning for Change", pages 19 to 22.

A.2 Stakeholdership

Depending on the organisation or project, stakeholders can range from the organisation's board members to the community. They can include both internal and external stakeholders such as staff, management, community organisations, local government units, sponsors, funding agencies, government agencies, internet service providers, media, development organisations, educators and researchers, and others. Your stakeholders are often able to influence your decision-making and direction as well as the organisation's commitment to "learning for change."[50] For example: a governmental organisation with its range of stakeholders may have

---

[50] "Learning for Change" is the overall framework of GEM and is described in the GEM manual on pages 19–21.

a very different attitude towards "learning for change"compared to a private sector enterprise. A gender evaluation, especially one that is utilisation-focused, cannot be conducted if there is no commitment by key stakeholders to commit to incorporating the evaluation findings into the organisation's work, practices and policies. Conducting gender sensitisation workshops for stakeholders could be a necessary step to help them better understand the gender issues within ICTs and specifically within localisation initiatives, so that they would be more open and appreciative of the importance of conducting a gender evaluation. GEM workshops for those who want to use GEM also serve as gender sensitisation workshops as participants are brought through a process of identifying and understanding gender concepts and how these play out in relation to gender and ICT issues, and how these issues can affect planned outcomes.

A.3 Capacities of personnel

Gender analytical capacities of staff can always be complemented or strengthened by additional training or by bringing in a resource person to conduct gender sensitisation. Staff, who are not part of the evaluation team, can sometimes lack motivation to support the conduct of a gender evaluation if they mistakenly see that the evaluation is only going to examine how women benefit from their work. There is a tendency to forget that a gender evaluation is still about evaluation but conducted with a gender lens. This requires identifying the key evaluation questions[51] to serve the objectives or purpose (intended use or uses)[52] of the evaluation which should integrate differentiating how women and men benefit from the project or work carried out. The following are some of the typical problems that an organisation or project may face:

- Skilled women project leaders, project personnel are not readily available at head-office level as well as at field level

- One has to invest in developing female human resources before launching a project on the ground, especially if the culture restricts women's mobility in public spaces
- Challenges faced at home by the female personnel both at head office level and field level

- Attitude of male colleagues within a team both at the head office level and field level
- Lack of a gender perspective and appreciation of gender issues in evaluation throughout the project life cycle.

Because readily available women leaders for project management and implementation are scarce, it is important to recruit fresh female graduates and to build their capacity to lead or implement projects. This process is sometimes painful, and it is always a risk that when staff are trained, male or female, they would leave for better employment prospects.

The typical problems described above are usually strongly linked to and influenced by socially defined and expected gender roles and responsibilities. The reverse can and does happen because men in some societies are considered physically stronger and so are expected to continue to play a major and active role, for example: in the rural areas in relation to livestock rearing and herding or farming, without opportunities for further studies or to expand their potential. What is important when examining capacities of personnel and the relational advantaged or disadvantaged position of female staff vis-a-vis male staff, is to also look at whether there is oppression and discrimination of one over the other, whether there is subjugation and

---

[51] GEM identifies this as step 3 of the evaluation methodology, and is described on pages 84–87 of the GEM manual.
[52] This is step 1 of GEM and is described in the GEM manual on pages 72–77.

coercion by one of another, and whether this subjugation or coercion is informed by a belief and/or domination system.[53]

An implementing organisation can introduce a mentoring programme for all colleagues so that the relationship between male and female colleagues becomes respectful and considerate, promoting better teamwork in pairs. Debriefing on sexual harassment can also be important, both for the field level and head office level staff. The management can identify five benefits, why the project team(s) should use GEM in the life cycle of all projects of the organisation. The management can organise workshops on GEM at the beginning of a project so that the project team can learn and apply GEM in designing and developing the evaluation plan of a project.

Localisation initiatives would do well to have a social scientist, a technologist and a linguist on their team and ideally, these would each have a gender perspective on how their field of work can further exacerbate or circumvent gender inequalities.

A.4 Understanding of gender

Gender can be a difficult concept to grasp and so it is important to find ways of communicating the concept through the lived realities of your audience, be they your board members or the community you work with or your other stakeholders. Most organisations that work with communities never begin with the concepts and theories. Many begin to explore gender through existing needs, and the differences in needs between women and men, and then relating these to the roles and responsibilities women and men play in that community or locality.

In most societies, the terms "gender" and "sex" are interchangeable. This idea has become so common, particularly in western

societies, that it is rarely questioned. Yet biological sex and gender are different; gender is not inherently connected to one's physical anatomy.

Gender is all around. It is actually taught to people, from the moment they are born. Gender expectations and messages bombard our societies constantly. Gendered interaction between parent and child begins as soon as the sex of the baby is known. In short, gender is a socially constructed concept and like other social constructs, gender is closely monitored by society. Accepted social gender roles and expectations are so entrenched in culture that most people cannot imagine any other way. As a result, individuals fitting neatly into these expectations rarely if ever question what gender really means. Most never have to, because the system has worked for them.

Over the past 25 years, the sociology of women has given way to the sociology of gender and understanding women in relation to men in terms of what they were, are or can be. Today, there is an understanding that there are 'feminities' and 'masculinities' which are more multiple than singular expressions of gender.

Lessons in the development sector have increasingly begun to relate gender in connection with other basis of differentiation in society based on religion, caste, class, sexual orientation, age, or sex, all of which come into existence but are always subject to change. With that comes the conclusion that gender is a cross-cutting theme which cuts across all religious, ethnic, sex, age, class and caste barriers placed by society.

The term "power" is often used when describing gender differences. "Power" is a broad concept that describes the ability or freedom of individuals to make decisions and behave as they choose. It can also describe

---

[53] Longwe proposes a lens for analysing a gender issue by providing a framework to examine the underlying causes of a gender issue. It is these underlying causes that should inform a project's or organisation's decision-making and actions, and not merely what is most visible. For more information, see pages 35–36 of the GEM manual.

a person's access to resources and ability to control them. When the term "power" is associated with gender, it usually refers to inequities between men and women.[54]

Women's gender roles do give them some power. Usually, however, women's power is much more limited in scope than men's. Like a man's power, a woman's power is influenced by such factors as her culture, age, income, and education. Some studies have found that women's power increases as their status in the community improves.

A.5 Budgetary implications

The use of GEM has budgetary implications, as it includes organising workshops, inviting trainers or facilitators, hiring external expertise for the evaluation if necessary, field visits, dedicating time to create tools for gender awareness, surveys and questionnaires to gather information with a gender perspective, training local people, etc.

It is important to take into account these possible expenses, including expenses that might be hidden at the beginning but that in the long run could become a burden for the organisation if they were not considered at the very start. The following are only examples of some of the possible expenses that can easily be overlooked if planning for the evaluation is not sufficiently detailed enough:

- Field visits: Travel, time dedicated, phone calls, internet use, etc.
- Honorariums for gender expert and gender facilitators
- Per diems for volunteers
- Purchase of tools to use in workshops and fieldwork: MP3 recorder, LCD projector, netbook, digital camera, etc.
- Organising gender awareness or gender sensitisation workshops and GEM workshops

- Creation of tools for workshops
- Creation of tools for evaluation including surveys, questionnaires, guides for focus group discussions, etc.
- Time dedicated to team work, to researching for resources, to field work, to gathering and analysing data, to reviewing field interviews and to debriefing
- Networking with other organisations, and possibly telecentres and ICT initiatives in the community or nearby region
- Meetings with project beneficiaries and the wider community (including those not reached by the project) to discuss and involve them in evaluation plans at the beginning of the process and to share results at the end of it
- Special activities in the community to share information, resources and lessons learned
- Budgeting for the changes that the evaluation process creates (for example: budgeting for use of the evaluation findings).

---
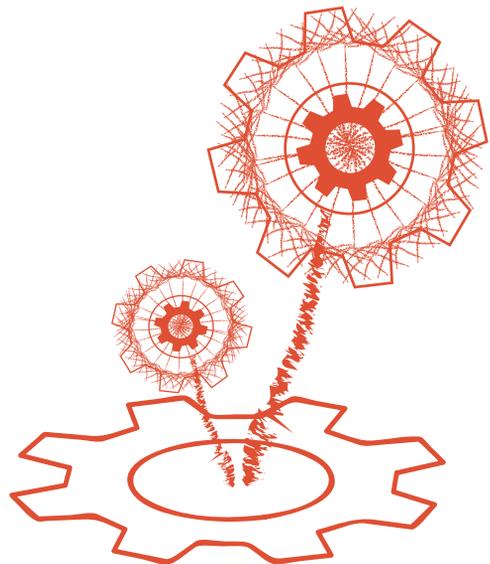
[54] Megan Drennan, et al. "New perspectives on men's participation" *Population Reports* 26, 3 (1998) http://info.k4health.org/pr/j46/j46chap4_1.shtml

PIONEERS IN GENDER EVALUATION IN THE ICT FOR DEVELOPMENT SECTOR

We are committed and experienced gender evaluation practitioners who provide monitoring, evaluation and planning services to organisations to ensure that their efforts are impacting favourably on the lives of girls and women in their communities. We have a strong focus on building capacity in integrating gender and development in ICT-related or ICT-enabled initiatives in developing countries.

We are gender evaluation specialists within the Association for Progressive Communications (APC)—the world's oldest online network working for social change and gender equality. We created the Gender Evaluation Methodology for Internet and ICTs (GEM) which has been used by hundreds of development initiatives around the world since 2002.

We are a multicultural and multilingual team and have built our reputation on:
- Integrating gender into project planning
- Mentoring and capacity-building in gender evaluation
- Effective collaboration with government agencies
- Supporting organisational change and network building
- Evaluation of information and communication and technology projects particularly ICT for development.

We have extensive experience, expertise and established presence in developing countries in Africa, Eastern Europe, Latin America and in parts of Asia, particularly South Asia, Southeast Asia and East Asia.
The evaluation of gender dimensions is an important part of project design because achieving gender equality contributes to development effectiveness and social change. We help our clients understand the gender issues at stake in their projects and contexts so that they are able to develop plans that can respond to the different needs of women as well as men.

What we offer our clients

- Facilitated self-evaluation and external evaluation
- Gender-sensitive project design and planning
- Quality assessments
- Gender Evaluation Methodology training
- Gender sensitisation training
- Digital storytelling training for evaluation.

For more information on our products and services and fees, please contact: gemsolutions@apcwomen.org or visit www.genderevaluation.net/gemsolutions

Localisation of information and communication technologies (ICTs) is the process of adapting and customising software so that a specific community or locale can use it. It involves translating websites, software and online documentation into the language of the specific target audience, and ensuring that the content, style, graphics and cultural conventions used are appropriate.

Localisation initiatives do not exist in a vacuum. From design and development to testing and scaling-up, they are not free from the influence of social norms. Without a gender analysis, and without taking into account the gender considerations in the development and deployment of technological infrastructure and software, localisation initiatives could widen the digital gap between women and men.

The *Gender Analysis for ICT Localisation Initiatives* guide reflects the collective lessons of localisation initiatives in Asia which used APC's *Gender Evaluation Methodology for Internet and ICTs* (GEM) to strengthen their gender perspective in project planning, monitoring and evaluation.

Use this guide to obtain ideas of what is possible within existing resource constraints, to gain a better understanding of the significance of gender and its effects on localisation initiatives, and to promote a "learning for change" culture within your project or organisation.

This is a complementary guide to the GEM manual which was developed by APC within the APC's women's programme after we began investigating the impact of our work in 2000. We asked... What changes are empowering women? How are these changes being measured? What role do ICTs play in these changes? How do these changes shift gender relations between women and men?

www.apcwomen.org