HOMEWORKERS AND ICTs
-- MALAYSIA --

eHomemakers Malaysia

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-- MALAYSIA --

eHomemakers - Malaysia

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Amanah Ikhtiar

Amanah Ikhtiar Malaysia (The Endeavour Trust of Malaysia) or AIM is a Non Governmental Organization. It was established by the Deed of Trust on the 17th September 1987. The main objective of AIM is to help the poor in the country, both from the rural and urban areas to receive loan to start any approved economic activities to generate extra income for their families. The Ikhtiar Loan (SPI) is a specialized credit delivery system focused exclusively on delivery of credit to the target beneficiaries who in turn will be empowered to improve their living conditions.

Asli

Orang Asli (Malay: 'aboriginal people') is a general term used for any indigenous groups that are found in Peninsular Malaysia.

Astro

The cable TV provider in Malaysia

Bumiputra

Bumiputra (from Sanskrit Bhumiputra; translated literally, it means 'sons of the Earth'; Malay, translated literally, it means "princes of the Earth"), is an official definition widely used in Malaysia, embracing ethnic Malays as well as other indigenous ethnic groups.

Cheongsam

The cheongsam (長衫) also known as qipiao (旗袍), qipao (旗袍儿), or chi’i-p’ao, or mandarin gown, is a body-hugging one-piece dress for women in China originating from the Manchus, modernized and popularized in 20th-century Shanghai. The English loanword cheongsam, which comes from the Cantonese pronunciation of the original Shanghainese term, is used for the garment. Cheong means "long", and sam refers to "tunic".

eHomemakers

eHomemakers, based in Kuala Lumpur, Malaysia, is a social enterprise network dedicated to economic empowerment through training, research, information sharing and advocacy. Founded in May 1998, the network promotes the use of Information and Communications Technology (ICT) to its active network of 13,000 home workers, home-based entrepreneurs and homemakers (www.ehomemakers.net), while carrying out corporate social responsibility activities to bridge the digital divide and help the disadvantaged.

EPF

Employee Provident Fund

e-UPCOM'

e-upcom is a pilot project under the Ministry of Housing and Local Government funded by Demonstrator Application Grant Scheme. The acronym e-upcom stands for "Urban Poor Community Organising & Mobilising" through ICT. This project aims to build the capacity of the urban poor through ICT as an instrument of social transformation to enhance the socio-economic status of the local residents. It is yet another innovative approach in enhancing the quality of life of the urban poor through ICT applications.

DWMA

‘Distributed Work Management Application’ (DWMA). A web to mobile phone application used by eHomemakers to distribute work orders and training/job information to Saalam Wanita members, and to receive their confirmed acceptance of work/activities.

FGDs

Focus group discussions

HIV-AIDS

Human Immunodeficiency Virus/ Acquired Immunodeficiency Syndrome

ICTs

Information and communication technologies

KUNITA

Organisation of the Wives of Fishermen

MYR

Malaysian Ringgit

NCWO

National Council of Women’s Organisations – an umbrella body of over 100 women’s organisations.

NGOs

Non Governmental Organisations

OTOP

One Tambun One Product -- was originally started in Thailand in 1999, the name coming from the administrative unit ‘Tambon’ which is the equivalent of village or town in English. Its purpose was to, improve upon/define the locally available resources and produce goods that are acceptable internationally. Inspired by this idea, the Thai government has been promoting the local industry through the manufacturing of attractive specialty products based on the abundant native culture, tradition and nature.

Pan ASEAN

PAN ASEAN E-Mall is designed to serve organizations and merchants selling a variety of
e-Mall goods. The high costs and daunting logistics of running a centralized order fulfilment depot led to an early decision to decentralize order fulfilment for all physical products to the respective merchants. The E-mall would present an online catalogue of goods for customers to browse, take their orders, process credit card transactions, and then automatically communicate the orders to the respective merchants for fulfilment. www.panaseanemall.org
CITATIONS

- Chan Li Leen, “Computer literacy and access go hand-in-hand” in The Star, Friday 10 June 2005, Kuala Lumpur, Nation p 27
- New Straits Times, (Computertimes), Oct 17 2005. The Internet services becoming more widespread and freely available. Kuala Lumpur
EXECUTIVE SUMMARY
1.0 EXECUTIVE SUMMARY

This research project addresses key gender-specific issues and challenges affecting poor urban women homeworkers in Malaysia, including how their situation may be supported and improved by the utilization of information and communication technologies (ICTs). It explores whether the introduction of ICTs will facilitate working from home to become a viable option for women grouped in this vulnerable section of society as well as provide a means to overcome many of the gender related challenges within which they are immersed.

The Malaysian study focuses on the enabling/disabling environment of women homeworkers in the areas of welfare (material wellbeing) of homeworkers; their level of awareness and ability to improve their situation; their access to and control of resources including the extent to which ICTs are utilized to improve their work; activities related to gender equality issues with regard to their use of ICT and the effects of these efforts and the potentials in their environment to support gender governance.

The literature and data on Malaysian women homeworkers and their use of ICTs are scarce. This arises from the non-recognition of homeworkers as well as the lack of appreciation of their contribution to the economy, industries and community.

The project findings are based on interviews of 90 women homeworkers and sectoral stakeholders who work directly or indirectly with homeworkers. The 90 homeworkers interviewed (30 each from Penang, Ipoh and Klang Valley) were selected from a wide representation of race, age and type of home-based work and included those who are themselves or have dependents that are chronically ill or physically or mentally challenged. All 90 are from urban households earning less than RM2,000 or USD538 per month although the official poverty line in Malaysia for a family of five is RM510 or USD134. This is because the high cost of living in the urban sites. In addition, focus group discussions, oral histories and case studies/observations gain insight to gender issues beyond the interviews. The use of photos in the report give glimpses into the lives.

The majority of the homeworkers were pulled from rural areas to work in the factories in Free Trade Zones as unskilled workers or cheap secondary labour. The majority are spatially confined by their religious and traditional sense of duty and their responsibility to their family, especially disabled children. Others are restricted by their immobility in a disable unfriendly environment or spatially confined like on an island (Pulau Aman, Penang). Homeworking has given them an opportunity for self-actualization to produce works of beauty and empowers them to train others to do the same. However, many homeworkers are still subcontracting from factories or selling through middlepersons who exploit them. This exploitation is made possible due to their isolation, atomization, lack of recognition as ‘workers’ and inadequate safeguards to protect their welfare.

While the Government of Malaysia has provided many assistance schemes for the poor and vulnerable groups, these programmes do not have homeworkers as their target. In addition heavy investment into ICT infrastructure and its related programmes to promote k-economy and the widespread availability of ICTs, has yet to narrow the digital divide. The special needs of these homeworkers are not adequately taken into consideration.
While all homeworkers have access to some form of ICT tools, be it radio or television, fixed line or mobile phones, many are unable to personally own the tool themselves. Fewer have access to a computer and the Internet. They are aware of its potential for work. However, some due to their limited education, lack of literacy or their inability to demystify technology, are fearful to attend training or explore the full potential of ICTs for their home-based work. The majority, in varying degrees, have learnt to use ICT tools for their work to gain greater access beyond the bounds of domestic confines.

It is found that many supported by a network or organisations are able to build capacity and network and use their skills to become home entrepreneurs. This enables them to improve their own circumstances as primary or supplementary earners. They learn to download application forms, discuss matters with fellow homeworkers on chat sites and learn online, thus saving them the inconvenience of travelling. Some learn to earn extra cash by regularly visiting websites offering jobs like data entry, translation, market survey and telemarketing. eHomemakers’ Salaam Wanita Project members through the use of its web to phone applications, receive specifications of orders for their baskets via SMS. They can confirm orders, set a date and time for delivery of goods using text messaging which is much cheaper than phone call. Others reach more clients and wider markets through the Internet, thus opening windows to opportunities for them.

It is evident that much has to be done to assist the homeworkers including their recognition as significant contributors to the economy, industry and community and according them with the necessary legal protection and work benefits. There is also the need for integrated programmes and capacity building to help them access resources and acquire appropriate technology and ICT tools. With greater gender justice, these homeworkers will be able to transform gender relations and technology issues to be empowered to gain knowledge and use ICTs to access wider markets, skills and opportunities and uplift their lives and that of their families.
RESEARCH PROBLEM AND CONCEPTUAL FRAMEWORK
2.0 RESEARCH PROBLEM AND CONCEPTUAL FRAMEWORK

This research is part of a regional research involving women homeworkers in three countries of South-east Asia – Indonesia, Thailand and Malaysia and their use of Information, Communication Technology (ICT) for work. It utilizes the Gender Equality and Women Empowerment Framework (UNICEF 1994) and Gender Governance Framework (Chong et al 2004). It attempts to put two questions centre stage:-

- **What are the key gender-specific issues and challenges faced by urban poor women homeworkers in Malaysia carrying out home-based work?**

- **How can women homeworkers be empowered by the use of ICTs for economic activities and thus take ownership/control of the management of social networks, information sharing and other activities that enable them to work from home and enjoy the full benefits thereof?**

The research focuses on the homeworkers’ awareness of the gender-specific issues and challenges of being a homeworker as well as those related to their use of ICT for work. In addition, it studies the acceptance of the need for change, the action to be taken and the degree of assimilation to maintain that change. It explores the barriers and the enabling factors for the use of ICT for work. The research studies those homeworkers who have acted to assimilate ICT into their home-based work and how they are able to assist in building capacity in others to use ICT for their home-based work. Thus, the key areas in the research are :-

- **The contexts, structures and mechanisms supporting women homeworkers and their use of ICTs for work;**
  - Here the study examines the personal characteristics of the homeworkers and the factors that help or hinder their entry into home-based work. It studies their household and home-based work socio-economic features; community features and ICT structures in the community and how these support or hinder the homeworkers in their use of ICT for work.

- **Activities or efforts to address gender equality issues of urban women homeworkers;**
  - In this area, barriers or facilities enhancing the homeworkers’ knowledge, skills and resources for use or non-use of ICT tools for work is studied.

- **Understanding the Potential for ICT-Empowered Women Homeworkers**
  - In this key area, the focus is on three interrelated gender and technology relations issues :
    - **Marginalization of women in the labour market.** This issue arises because certain jobs and job attributes such as low wage, flexibility and deregulation continues to be associated with women’s work. Women’s status in formal sector has not improved and women
workers are primarily found in low-status and low-waged sectors (Standing, 1989).

Women bear multiple burden and multi-task as they perform both productive and domestic tasks simultaneously (Pearson, 1998). Where gender household division of labour dominates, the introduction of ICT usage maybe an added burden to their responsibilities instead of reducing their workload. The access and control of resources is also a key element that needs examination.

- **Invisibility of Women.** The visibility of women’s work is reduced by the low-status and low-waged work. Subcontracting or producing components and parts of an end product renders women’s contribution invisible and unappreciated. As a result women are not regarded as significant users of technology. Consequently, most technology providers do not design appropriate technologies for women users.

- **Masculine culture of technology.** Technological work are often regarded as masculine and mastery and control are often in the hands of men. This hinders women from gaining access to knowledge and information about using technology. (Wajcman, 1991). However, women, if empowered, can creatively transcend this culture and stereotypes.

The issue of technology as a masculine culture encompasses two sub-themes:

- **“Woman question in technology”**. The central issue of this issue is the exclusion of women from technological work as a result of structural barriers to women’s participation, such as sex discrimination in employment, and the criteria and process of identifying participants of assistance projects (Wajcman, 1991). Women’s utilization of technology is often related to different socialization, access and equal opportunities to education, training and employment due to gender stereotypes.

- **“Technology question”**. This issue is related to the exclusion of women from technological work due to the nature and structure of technologies and technology work which are not suited for women users (Wajcman, 1991).
LITERATURE REVIEW
3.0 LITERATURE REVIEW

The literature available on Malaysian home-based workers is rather limited with only 79 related materials available from the 5 resource centres reviewed of which 27 were relevant to this research. However, none gave attention specifically to homeworkers and their use of ICT. This arises from the government policy, which does not define or ‘recognize’ the informal sector and its contribution to the economy (Loh-Ludher, 2002). Home based work in Malaysia, though mentioned in some of the literature (Cecilia Ng, 2001, Jariah, 1999 and pre 1997 literature Samuel, 1996; ILO, 1996, Loh-Ludher 1994; Chong and Loh-Ludher, 1993) is generally not the main focus of study. There are only two recent major works giving the profile and characteristics of home-based workers in Kuala Lumpur. (Loh Ludher, 2002, Chong, 2004)

Home-based work related to ICT in Malaysia is mainly in the area of Teleworking (Cecilia Ng, 2001, Cecilia Ng and Shanthi Thambiah, 1999). These articles however, do not differentiate those who work from home from those who do not. Also the articles do not focus on the poverty groups or give information according to location of work. As such the literature does not focus on the issues of home-based workers and ICT in the selected sites related to this study.

The per capita national income for Malaysia is US$4,142 per annum. Even with US$1,620 per annum being the poverty line for a family of 5 the percentage of poor households in Malaysia is 7.5 % with 3.4% in urban areas (Economic Report, 2004-05).

The Government of Malaysia since 2001 has allocated MYR28.3 million to 235 agencies for 577 women/family capacity building programmes for low income families with some emphasis on single mothers. These include ICT training and ICT literacy and skills training (Economic Report, 2003-04). However, reports on most of these projects by Yayasan Strategik Social (YSS), NCWO, Yayasan Salam Malaysia are not available. Again the assistance is not solely for home-based workers and even fewer are specifically for poor women home-based workers.

The government too has invested heavily into providing ICT infrastructure and encourages private sector investment, providing a Multimedia Super Corridor as the hub linking Kuala Lumpur to Cyberjaya and Putrajaya and encouraging every major city to adopt an e-city policy (DBKL, DBI, MPPP websites). The entry of ICT into life of the people is fast increasing but the digital divide is also widening (Mohd Azzman Shariffadeen, 2001, Ng and Thambiah, 1999, Chan, 2005). The 2003 figure for the number of personal computers per 1000 persons is 166 while Internet host per 10,000 persons is 2 and number of Internet users is 2.89 million. (Economic Report 2004-05). The number of mobile phones in 2003 was 11.12 million with 8 providers and the average monthly call cost was approximately $4. However, this cost is fast decreasing with better technology and greater competition. Landline telephones per 1000 is about 190 (Cecilia Ng, 2001) with almost the same cost as mobile phones. This too is fast decreasing. This pervasiveness of the ICT tools and decreasing cost has contributed to greater accessibility to women homeworkers but the playing field is far from level. Many of the issues are gender related and the barrier to the use of ICT for home-based work are many and have yet to surmounted (Cecilia Ng and Shanthi Thambiah, 1999, eHomeworkers, 2004)
There is ample research done in other countries for reference for issues relating to homeworkers and ICTs. Issues related to poor and vulnerable women home-workers are best discussed in “Invisible Hands: Women in Home-based production” edited by Andrea Menefee Singh and Anita Kelles Viitanen. The studies, though done in India, are relevant to Malaysia and primarily confirmed in the study of Loh Ludher, 2002 on “Chinese Women in Industrial Home-based Subcontracting in the Garment Industry in Kuala Lumpur, Malaysia: Neither Valued nor Costed.” The studies noted the central issues of invisibility, vulnerability to exploitation including self-exploitation due to marginalisation. It also discussed how the fear and avoidance of authority and the cost of informality keep the homeworkers in the periphery entrenched in the informal sector.

The studies also found poor working conditions and lack of protection for homeworkers due to instability of jobs and income, long working hours, substandard working environment and little or no social and welfare protection given to a normal worker such as social security and sick or maternity leave.

The Malaysian economy continued to move towards industrialization (6.3% increase from 1997 to 2004) while agriculture continued to be squeezed (-0.2% for same period). The fast increasing sector is in professional services including ICTs, witnessing a 15% growth over the period 1997 to 2004. With the advance of technology, home-based work is on the increase and home business has been regarded as a mega trend for women (Aburdene and Naisbitt, 1993). This knowledge-based work involving information and communication technology can be easily spatially desegregated and decentralized to allow the labour process itself to be decentralized and decollectivized. However, this trend is yet to benefit the poorer stratum of society because of the level of competency, capacity and professionalism required.

For more details on the literature consulted for this report, please see the companion document “An Annotated Bibliography of Selected Literature on ICTs and Homeworkers in Malaysia”.
METHODODOLOGY
4.0 METHODOLOGY

The areas where the fieldwork was conducted consisted of the Klang Valley, Ipoh and Penang. These three sites were chosen as they are the priority ICT development areas and home-based workers, mostly invisible, can be located and identified due to previous encounters in other research (Loh-Ludher, 2002, Salaam Wanita, 2004). This was an important factor as there was no formal register or record of homeworkers available from which to form the sampling frame. As homeworkers tend to avoid authorities, contacts from earlier research formed the main lead and were vital for locating and identifying the homeworkers.

The fieldwork for this research was carried out between May and August 2005. The researchers interviewed 2 main groups – women homeworkers and stakeholders. The stakeholders comprised Government agencies, non-governmental organizations and the private sector. In ideal circumstances the two samples would be drawn randomly from the respective sampling frames. However, neither population was known as there was no existing comprehensive list of homeworkers or stakeholders intimately connected to homeworkers.

1. Selection of Homeworkers

For the reasons stated earlier, snowballing of samples was used commencing with those encountered in previous studies. This was both effective and fruitful. Because these women homeworkers did not perceive their work as formal in nature and consequently avoided and distrusted authority, they were not readily available for interview. The introduction by a common acquaintance allayed fears and suspicions and literally opened the doors.

Although the literature survey gave some useful general information about the industries using home-based work in Malaysia the industry and sector data breakdown do not have disaggregated information for home-based work nor give its size or contribution to the economy. The sectors identified were confirmed from the experiences of Salaam Wanita and previous encounters of the Research Team.

The list of home-based work identified includes:

- Tailoring and sewing/embroidery/quilting/patchwork
- Handicrafts including basketry
- Packaging
- Tuition for academic subjects as well as music and arts
- Trading and selling at home including multi-level marketing
- Cooking including catering and baking
- Food processing
- Beauty related business (hairdressing, facial, massage, bridal makeup and other treatment)
- Electronics and electric appliances assembling
- Babysitting, playgroup and before and after school care.
- Secretarial and accounting services including data-entry, translation and typing
- Shoemaking
A total of 90 homeworkers, thirty in each location, were selected through the process of discriminate sampling. The number of thirty was decided upon to achieve a balance of generality and intensity.

In the absence of a sampling frame, snowball sampling was used to identify the community. Through this method the research was able to make a conscious decision to select in a manner to ensure a wide representation of race, age, type of home-based worker and deliberately include the vulnerable groups where either they or their dependents are disabled or chronically ill. This was achieved by seeking out centres for the disabled and chronically ill.

Although the poverty line in Malaysia is MYR510 per month for a family of five, it was agreed for this research that the sample would be from households with a monthly income of MYR2,000 or less. This decision was taken because the research is in the city where the cost of living is very much higher and is not supplemented by subsistence agriculture or rent-free family inherited accommodation. A monthly income of MYR2,000 for a family of 3 to 5 members, is barely enough to meet basic needs. From the literature review, a typical home-based worker is aged between 26-45, married (78%) or single again, unmarried is rare. Most lived with extended families and have children, especially sons (92%). Most have only six years or less formal education and have worked in factories. In the literature there was an absence of data illustrating the composition of vulnerable groups among homeworkers. While the identified profile serves as a rough guide, the criteria of vulnerability was given emphasis when selecting samples e.g. from the Salaam Wanita group.

To ensure a proper balance, it was decided that not more than half of the Ipoh and Penang home-based workers interviewed should be Salaam Wanita members. The sample from the Salaam Wanita membership list was chosen based on the criteria of race, age and vulnerable mix. No Salaam Wanita member was included in the Klang Valley to ensure a better representation in the sample.

2 Selection of Stakeholders

The selection of the stakeholders to be interviewed was based on certain criteria and it was decided that the breakdown to be interviewed in the localities would be as indicated in the table below.

<table>
<thead>
<tr>
<th>Area</th>
<th>Category</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Penang</td>
<td>Government</td>
<td>NGO</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Ipoh</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Klang Valley</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Total</td>
<td>11</td>
<td>14</td>
</tr>
</tbody>
</table>

The reason for more stakeholders being interviewed from the Klang Valley is that the Federal government and headquarters of relevant organizations are based there. Further, to capture the necessary information relevant stakeholders to both home-based
work and ICT usage must be sought out and interviewed since the integration of home-based work and ICT usage for the poor income group is not apparent.

In addition the stakeholders chosen represent those industries and sectors that either use or are identified with home-based workers. Stakeholders who are in the same industries or sectors but not utilizing the services of homeworkers are included. It is important to find out the reasons these factories are not employing the services of home-based workers.

Further details on the selection of homeworkers, sectoral stakeholders and focus group participants can be found in Appendix A1.

3. Selection criteria for Oral Histories, Focus Groups and Case Studies

a) Selection Criteria for Oral History

Altogether ten oral histories were gathered, three cases in Penang (two from Pulau Aman), four cases in Ipoh and three cases in the Klang Valley.

Table 2: Key informants Selected for Oral History

<table>
<thead>
<tr>
<th>Name</th>
<th>Location</th>
<th>Type of h/w</th>
<th>Special characteristic</th>
<th>Criteria for Choice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sau Hong</td>
<td>Penang</td>
<td>Sewing/ cross-stitch</td>
<td>Disabled, polio and partially blind, husband-blind; limited use of ICT</td>
<td>To understand the use of ICT by physically impaired. Trained by St. Nicholas, Home for Blind.</td>
</tr>
<tr>
<td>Siti</td>
<td>Penang (Pulau Aman)</td>
<td>catering</td>
<td>Single mother, informal leader, coordinates catering</td>
<td>Informal leader of Kunita on Pulau Aman.</td>
</tr>
<tr>
<td>Rashidah</td>
<td>Penang (Pulau Aman)</td>
<td>Sea Cucumber oil (gamat)</td>
<td>Single mother, learnt making oil from grandmother</td>
<td>Spatially confined on an Island family inherited skill, KUNITA member</td>
</tr>
<tr>
<td>Radha</td>
<td>Ipoh</td>
<td>Basket weaving</td>
<td>Poor, 2 disabled children,</td>
<td>Salaam Wanita member, history of basket making</td>
</tr>
<tr>
<td>Rafidah</td>
<td>Ipoh</td>
<td>Basket weaving</td>
<td>Disabled son, Retired from formal work</td>
<td>Very skilled at ICT, Salaam Wanita member</td>
</tr>
<tr>
<td>Sharon</td>
<td>Ipoh</td>
<td>Retail sale</td>
<td>Asli, very poor, no formal schooling</td>
<td>Asli indigenous group, use of ICT by this vulnerable group</td>
</tr>
<tr>
<td>Fong Shi</td>
<td>Ipoh</td>
<td>Rolling paper for basket weaving</td>
<td>Physically impaired, brain degeneration, poor eyesight, well educated</td>
<td>Had tertiary education but with brain degeneration, special need for ICT tools. Salaam Wanita member</td>
</tr>
<tr>
<td>Barbara</td>
<td>Klang Valley</td>
<td>Home Tuition</td>
<td>ICT literate</td>
<td>Use of ICT for knowledge work</td>
</tr>
<tr>
<td>Meena</td>
<td>Klang Valley</td>
<td>Sewing / baking</td>
<td>Has community ICT facility, YSS member</td>
<td>Has support from YSS, use of community ICT centre</td>
</tr>
<tr>
<td>Ho Ming</td>
<td>Klang Valley</td>
<td>Tailoring</td>
<td>Supportive husband, tailor for customers</td>
<td>Members of household ICT-skilled but she does not use</td>
</tr>
</tbody>
</table>
b) SELECTION CRITERIA FOR THE FOCUS GROUP DISCUSSIONS

A total of forty one homeworkers in eight groups participated in the focus group discussions. Three discussion groups were convened in Penang, three in Ipoh and two in Klang Valley. Of these groups, two groups were primarily Malays (in Penang); one group was totally Chinese (in Klang, Klang Valley) and one group mainly Indians (in Petaling Utama, Klang Valley). To ease the flow of discussion and allow better participation each group was facilitated by native speakers from the respective language group in which they are fluent. The other groups were composed of homeworkers from various races. To better capture their experiences with development agency and non-governmental organizations (NGO), one group in Penang composed mainly of KUNITA (Fishermen’s Wives’ Association), one with Salaam Wanita (Ipoh) and one group of Yayasan Strategik Sosial (Foundation for Social Strategic Development) in Klang Valley were selected for Focus Group Discussions.

c) SELECTION CRITERIA FOR THE TWO OBSERVATION CASES

The two cases selected for observation are Jamilah from Ipoh and Lina Lee from Penang. The stories of these two homeworkers offer us glimpses into the lives of different vulnerable groups studied in this research. Jamilah represents one of the 13 poor urban mothers with disabled children, whereas Lina Lee is one of the 8 homeworkers who are disabled themselves. Jamilah is married and Lina Lee is a single mother, abandoned by her husband but not legally divorced. Both are spatially confined, Jamilah by her religious and traditional sense of duty and responsibility to her family, especially her disabled son, while Lina Lee is restricted by her immobility in a disable unfriendly environment. Both turned to homeworking for self actualization of their talents and skills to produce handicrafts.

Despite Lina Lee’s disability, the Association for the Disabled does not encourage her to work from home. Jamilah, on the other hand, is a member of eHomemakers, a homeworker’s network, which through the Salaam Wanita Project assists her in many ways to be a home entrepreneur and provide access to markets and other opportunities. Lina Lee’s window to opportunities is very much through ICT. Jamilah has acquired limited knowledge concerning the use of ICT tools and wishes to be able to expand this further.

4. Research Method

Four methods were used in this research -- interview, focus group discussion, oral history and observation for case study.

Key informants, both homeworkers and stakeholders, were interviewed using an interview guide to determine issues, challenges and activities related to home-based workers and their use of ICT for work. It also helped develop the profile of the homeworkers illustrating their characteristics and giving visibility to them and their work.

Focus group discussions were used especially to elicit attitudes, ideas, experiences, perceptions related to the challenges and issues regarding ICT usage for home-based work. Selected homeworkers from those interviewed earlier were invited in groups of 6-8 for discussion. A total of six focus groups were held, two in each location. Oral history was
recorded from ten women to give a longitudinal aspect to work history and changes in work situation including the entry of ICT and its use. Given the limitation of time coupled with the reticence of homeworkers to expose and invite entry to their privacy, only two case studies were carried out. These two cases give depth to gender specific issues on deployment of ICT for home-based work. The women were primarily the subject of study while contextual information was collected from the other members of the households including the husband, children, and members of the extended family. The husband, children and members of both households, nuclear or extended, were interviewed and involved in participant observations in the two case studies.

These multi-stage research methods were chosen to balance intensity and generality. The desire was to have depth without losing something in generality. The method chosen reflected the variations and the reality. The qualitative methods complement the quantitative approach. It is important in feminist related studies to adopt a more sensitive approach to the women under study allowing the voices of the women to be captured in their own understanding and terms.

The data gathered for this research was both qualitative and quantitative. The quantitative statistics from the interviews helped to present an overview of the profile of the homeworkers and use of ICT in the study. As the study involved women who did not freely comment about themselves or their work publicly, the analysis had to take into account more than what was articulated. The general profile was thus, supplemented by the analysis recorded, the observed visits to the homes and oral accounts given by the women.
RESEARCH FINDINGS
5.0 RESEARCH FINDINGS

Introduction

Over the last 10 years, the relatively low rate of women’s participation in the labour force (average 44%) has been a concern. Although efforts have been made to increase women’s participation in the formal sector, little has been done for the informal sector especially for the homeworkers. These homeworkers remain unaccounted for and are not recognised.

This research will add significantly to the existing body of knowledge. The findings based on the interview of 90 homeworkers and 40 stakeholders in three sites, Klang Valley, Penang and Ipoh, give a deeper insight into the lives of these homeworkers and the challenges they face through their home-based work and the utilization of ICT for work. The findings from focus group discussions, records of oral history and observation provide depth to gender specific issues on the deployment of ICT for home-based work.

1) Enabling environment or contexts, structures and mechanisms supporting women homeworkers and their use of ICT for work

This section presents the findings related to the context, structures and mechanisms existing in the households and community which may help or hinder homeworkers in their use of ICT for work. It discusses key gender-specific issues and the challenges faced by these urban poor women homeworkers in carrying out home-based work as well as identifying efforts to address gender equality and empowerment.

a) Profile of home-based work

The homeworkers are involved in a wide range of products and services, including the traditional handicrafts and food processing cottage industries, labour intensive work subcontracted from factories as well as knowledge-based services. They are not registered as a separate category of workers in the labour force but are generally grouped together with other own account workers or as unpaid family labour. Waged homeworkers and home-based subcontractors are also not regarded as workers and are not accorded the legal benefits of a worker such as medical and maternity benefits, paid leave or social security and provident fund contributions. As these women work from home, they are sometimes harassed by local authority officials who assert that residential premises cannot be used for production or that they are operating without a licence or registration. Consequently, the homeworkers become invisible and their production and services are not perceived as work by principals, factories or the government. The value of their work is not costed and their contribution to the economy goes unrecorded.

The majority of the homeworkers have worked in labour intensive factories but entered into home-based work after childbirth when confronted by a gender insensitive environment unsupportive of mothers with small or disabled children and aged parents. This confirms the earlier research finding by Loh-Ludher (2002) that home-based work offers women an opportunity to be gainfully employed when they are either unable to participate or have to withdraw from the formal labour force after childbirth.
The invisibility of their work is also due to the fact that homeworkers intersperse their productive work with domestic duties in a flexible manner. In homes where gender division of labour is strong, homeworkers bear primary responsibilities for care and maintenance of the home. The domestic tasks take central role and the home-based work fills the spare time and space. As a result, these women are perceived as ‘housewives’ rather than ‘workers’ by themselves, their family members and the community.

The majority of homeworkers work on an individual basis. Some 65% of homeworkers work alone supplying products or services directly to wholesalers, retailers or clients. Another 17% are subcontractors. These are mainly involved in packaging, garment sewing and electronic assembly work, contracted from manufacturers. The others (18%) work in partnership mainly with relatives, neighbours or friends. These partnerships are not always formal or permanent.

As the homeworkers negotiate individually with principals or factories, they remain isolated and atomized even in a neighbourhood like Menglembu, Ipoh, where the numerous home-based subcontractors from shoe factories live on the same street. Though they are aware of each other’s home-based work, they do not discuss or reveal the payment or conditions of their subcontracting. This reluctance to share information is compounded by their perception that since they lack registration and local authority officials sometimes harass them for conducting business in residential areas, their home-based work is illegal. Consequently, they do not form work groups or organise themselves to strengthen their bargaining power. Factories take advantage of this to externalize costs and exploit subcontractors e.g. paying on 4 to 5 cents for sticking a pair of soles or 8 to 10 cents for sewing a pair of shoes.

Due to their informal nature and isolation, most homeworkers have little access to assistance and training programmes. As a result, the handicrafts and foodstuffs which they produce are, normally, of low quality and thus restricted to the local market. Other products, which are exported, such as garments, shoes, gloves and electronics are produced by subcontractors for factories. Generally most homeworkers neither see the final product nor are aware of the destination for these goods. They are generally unfamiliar with fair trade as most of the homeworkers have little or no access to either information or organisations promoting fair trade.

b) Homeworker’s personal characteristics

Of the 90 homeworkers interviewed for this research project, 38% of the homeworkers are Malays, 33% are Chinese, 18% are Indians, 4% are Asli, and the rest are other races. This reflects the approximate composition of Malaysia’s population. It shows that homeworkers are not confined to any one race. The majority of the homeworkers are between the ages of 30-49 as shown in Table 3, and is slightly older than the home-based subcontractors studied by Loh-Ludher (2002). However, it is the same age cohort that represents the group of rural women that were pulled to the Free Trade Zones, to work in the garment and electronics factories during the Malaysian industrialisation programme of the decade 1985-1995. These zones are primarily concentrated in the Klang Valley, Penang and Ipoh. The Asian Financial Crisis of 1996-97 saw the shifting of many of the garment and electronics multinationals to countries like China, Cambodia and Vietnam in search of lower cost labour. After the Crisis, local entrepreneurs having learnt from these multi-national corporations expanded their operations to meet increasing global demand.
They encouraged even more experienced and skilled workers to be their home-based subcontractors. In this way they are able to externalise costs and casualise labour in order to stay competitive and flexible.

**Table 3 : Age of Homeworkers Interviewed**

<table>
<thead>
<tr>
<th>Age-group</th>
<th>No. of homeworkers</th>
<th>% of homeworkers</th>
</tr>
</thead>
<tbody>
<tr>
<td>19 and below</td>
<td>1</td>
<td>1 %</td>
</tr>
<tr>
<td>20 - 29</td>
<td>8</td>
<td>9%</td>
</tr>
<tr>
<td>30 - 39</td>
<td>26</td>
<td>29%</td>
</tr>
<tr>
<td>40 – 49</td>
<td>29</td>
<td>32%</td>
</tr>
<tr>
<td>50 - 59</td>
<td>14</td>
<td>16%</td>
</tr>
<tr>
<td>Over 60</td>
<td>12</td>
<td>13%</td>
</tr>
<tr>
<td>Total</td>
<td>90</td>
<td>100%</td>
</tr>
</tbody>
</table>

Generally, fewer younger women take on home-based work. They prefer working in factories and other organisations where they have opportunities to socialize. The employers also prefer younger, unmarried workers who can be paid less. They do not take maternity leave or have competing family responsibilities and demands.

Two-thirds of the homeworkers are married and the remaining third are unmarried, widowed, divorced legally, abandoned or separated (see Table 4). Because of decreasing social stigma associated with divorce and separation, the women are more open to reveal their status or the infidelity and irresponsibility of their husbands. As Islam permits men to marry four wives, Muslim women feel insecure for fear of losing their husbands. In fact, half of the Muslim women in this study are separated or divorced with little or no alimony or financial assistance from their husbands. All the 15 single mothers (12 Muslims and 3 others) live close to the poverty line. A third of the homeworkers are the primary earners of their households.

**Table 4 - Marital Status of Homeworkers Interviewed**

<table>
<thead>
<tr>
<th>Marital Status</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married</td>
<td>59</td>
<td>65%</td>
</tr>
<tr>
<td>Unmarried</td>
<td>5</td>
<td>6%</td>
</tr>
<tr>
<td>Divorced/separated</td>
<td>15</td>
<td>17%</td>
</tr>
<tr>
<td>Widowed/abandoned</td>
<td>11</td>
<td>12%</td>
</tr>
<tr>
<td>Total</td>
<td>90</td>
<td>100%</td>
</tr>
</tbody>
</table>

Almost all homeworkers have dependents and bear the main responsibilities for the physical care of elderly parents or young children. Thirteen of them have disabled children who need a great deal of care and attention, particularly those who have to be taken for daily physiotherapy.

Almost 10% of the homeworkers interviewed have disabilities or are chronically ill. Some complain of aches and pains due to ill-designed furniture. The eye-sight of some has deteriorated. “Stitching black and bright red shoes and clothes are most strenuous on the eyes. Black thread on black cloth is hardest to see. It is even worse when unpicking has to be done,” Su Lin explains.
c) Household and home-based work socio-economic features

Most of the homeworkers live in low cost housing areas or villages. All including the Asli village on the fringes of Ipoh and Pulau Aman, off Penang, have access to electricity and piped water. Through the urban development efforts of the Government to provide proper housing with amenities for the poor, 25% have been relocated from the squatter houses to low cost flats. They are able to acquire these flats. Their average housing loan repayment is MYR130 (US$34) per month, which is lower than most rented houses in the three sites covered by the research.

The majority (55%) of the homeworkers belong to nuclear family households. The average size of a family is six. One third of the homeworkers have more than four dependents. The other 45% live in extended families or share their residence with other families. Sixty percent have relatives occasionally living with them. About 20% have other tenants sharing their homes. A few live in rented rooms.

Work is done in any available part of the house, with the dining or living room being most frequently used. Naturally, the kitchen is used by those with food processing. Their own bedrooms become the workplace for those living in rented rooms. Few have the luxury of a special place set aside for their work. Thus, generally there is no spatial segregation of productive work.

Almost all homeworkers bear the physical and psychological responsibility for domestic work. If she is unable to carry out her household chores, the person most likely to assist her is another female. Male members, even sons, are less likely to help unless it involves ‘manly’ tasks or heavy work. The gender division of labour within the home is obvious with the majority of the husbands bearing little or no responsibility and avoiding domestic work. Few clean and even fewer help wash or cook. More than a third of the homemakers receive little or no help from their husbands. The women are generally socialized to accept the virtue of being the ‘good wife and good mother’. The Chinese FGD group from Jenjarom in Klang Valley, talked about what they had learnt in the concept of “xian fu jiao zi” (care for her husband and teach her son) and accept their husbands as ‘yi jia zi zhu’ (a family’s lord), even in absentia. Similar concepts are also very much part and parcel of the Malay and Indian cultures.

Homeworkers in their desire for their children to break out of poverty and attain a better future, often prefer their children, particularly their sons, and to a lesser extent daughters, to focus on their studies rather than help in household chores and home-based work. Thirty-six percent, however, cannot rely on support from in-laws, siblings or parents for babysitting or even occasional child-care due to distance, estrangement, unwillingness or inability to help. The general lack of facilities and support infrastructure for the physically disabled and the elderly add a heavy burden on these women.

The gender relations of their parents in sharing domestic and productive responsibilities and decision-making has an impact on homeworkers. The majority of the homeworkers have mothers who had worked along with their fathers or had worked to support the family as primary earners. They learned the responsibility and dignity of work from helping their mothers. Their fathers or in the absence of their fathers, the male relatives, are the main decision makers in the families. In their present households, most homeworkers defer to their husbands in decision making. In the absence of husbands,
many refer to male relatives, often brothers, uncles or grown-up sons, for guidance and advice.

Based on the available opportunities or the pressure of financial needs, most homeworkers assert that the decision to enter into home-based work was primarily theirs. Initially, since home-based work is mainly undertaken during the time their husbands are not home, most of the husbands are unaware of the work, and, often take no interest in the home-based work as long as domestic duties are not neglected. The homeworkers have to manage their time and resource strategically and creatively to ensure that they are able to attend to their domestic responsibility. This is often achieved by buying labour saving devices like washing machines, electric blenders and food processor or sauces, prepared ingredients and cooked food to save time and energy.

Approximately 41% of the homeworkers work fulltime i.e. more than eight hours a day and 44% work part-time. The rest have other regular employment but work at home to supplement their income. Based on homeworkers’ estimates, 33% earn below US$50 per month 29% between US$51 and US$150 per month and 40% of the homeworkers earn between US$151 and US$250 (see Table 5).

<table>
<thead>
<tr>
<th>Level of Income</th>
<th>No. of Homeworkers</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;US$25</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>US$26 - 50</td>
<td>26</td>
<td>29</td>
</tr>
<tr>
<td>US$51 - 150</td>
<td>24</td>
<td>27</td>
</tr>
<tr>
<td>US$151 - 250</td>
<td>28</td>
<td>31</td>
</tr>
<tr>
<td>US$251 - 500</td>
<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>

Twenty-nine percent of the homeworkers come from households earning less than US$134 per month, the national poverty line. These are mainly the single mothers and those whose husbands do not regularly and adequately provide for the families. The primary means for sustaining the families is the income generated from home-based work and any other supplementary income generated by occasional odd jobs. One third of the homeworkers interviewed are sole earners. Another 17% are primary earners with other household members contributing small amounts towards household expenses. Half are supplementary earners, although in some cases, the amount contributed is significant. It is apparent that the personal earnings of the majority of the homeworkers are substantial additions to the household income and significantly uplift families out of poverty.

Increasing fuel prices have reinforced the decision for some women to pursue home-based work. Since February 2006 Premium Petrol prices have increased from MYR1.62 to MYR1.92 (18.5% increase), Regular Petrol has increased from MYR1.58 to MYR1.88 and Diesel has increased from MYR1.281 to MYR1.581. Previous petrol price increases were limited to an additional 10 cents per litre - now it has been increased by 30 cents per litre. This price increase of 18.5% is far above the normal increment for most salaries. In addition it is widely anticipated that bus fares will also be increased in the near future. Bus companies currently plan a fare surcharge of 10%. The companies have not yet been permitted by the government to increase their fares so they levy a surcharge. Taxis are asking for increases from an initial price of MYR2 for the first 2km to MYR3 and 10 sen per 100 km instead of 150 km. Avoiding these transportation costs, along with
other expenses associated with working outside the home (i.e. clothing, childcare, and lunches) allows Siti’s earnings to stretch farther when compared to her sister Aminah. “In the end, she earns just enough to pay for all these with hardly any saving,” says Siti about Aminah. “I am happy I am working at home and able to care for my son. All those costs will burn holes in my pockets.”

d) Skills and training

The largest numbers of homeworkers are engaged in tailoring and embroidery (30%), followed by those in food processing (20%) and handicraft making (14%). Other activities include the beauty and health business (10%) such as massage, bridal makeup and hairdressing; packaging/assembly of industrial products/components (9%); babysitting (8%); secretarial and accounting including translation and data-entry (4%); private tuition (3%) and others such as multi-level marketing (2%). There is no concentration of one particular type of industry in a village or housing area. The majority of the homeworkers in Kuala Lumpur subcontract from factories – sewing and glove making; and knowledge based work e.g. home tuition; and babysitting. The ones in Penang focus more on food processing e.g. baking and cooking and those in Ipoh with basket making and knowledge work e.g. freelance work in accounting, translation and data entry.

Almost all the homeworkers started home-based work utilising their own skills or previous work experience and using whatever materials or resources available at home. This is generally done with little capital investment and which, when required, was generally sourced from their own resources or loans from relatives. Because of inexperience and the lack of accounting and record keeping, most homeworkers are unsure about the amount of set-up capital expended.

Table 6 - Education level of Homeworkers Interviewed

<table>
<thead>
<tr>
<th>Level</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>No formal education</td>
<td>9</td>
</tr>
<tr>
<td>Elementary 1- 6 years</td>
<td>43</td>
</tr>
<tr>
<td>Secondary 7-10 years</td>
<td>35</td>
</tr>
<tr>
<td>Post-Secondary &gt;10 yrs</td>
<td>3</td>
</tr>
</tbody>
</table>

There was a consensus among the majority of homeworkers regarding the failure of schools to prepare them for employment. Almost all of the homeworkers have less than 10 years of education with 48% having less than 6 years of formal schooling (see Table 6). The main medium of instruction in government schools is Malay. Most of the Chinese and Indian respondents studied in vernacular schools with Mandarin and Tamil respectively as the medium of instruction while English and Malay were studied as two separate subjects. Their command of English and Malay is, thus, weak, resulting in difficulties in using either a computer or the Internet.

Four cases worked as teenagers; one weaving ‘pelekat’ (cloth); two sewing and one farming and food processing. Only three had some form of professional training such as classical dancing, designing and translation. A lot of the homeworkers stated that before working at home they had accrued some experience previously from the formal sector. Much of this experience was gained from participating in family businesses while others had developed useful skills from working as unpaid family labour in either the agriculture
or fishery sectors. Because it was generally unpaid they did not perceive it as work. Others had acquired skills and experience from working as low paid, unskilled, secondary workers in factories while those with a better education had been employed as support staff in burgeoning industries. The women in the 30-49 age group had previously worked in the formal sector, from which they gained most of their skills and experience. They entered home-based work because of the lack of opportunities to re-enter the formal economy. This difficulty was exacerbated by the preference of factories for younger women.

e) ICT structures in the community

The government’s efforts to make ICT available has provided homeworkers access to ICT. All the homeworkers have radio and television. However, these two tools are more commonly used for entertainment than for work. There are both public and private stations licensed to broadcast. Although there is no community radio educational and community service messages are announced daily over both the radio and the television. However, few of these announcements are related or beneficial to the work of homeworkers.

The policy of relocating squatters to multi-storey low cost flats enables homeworkers to have electricity and telephone access even in the Asli village on the outskirts of Ipoh and the island of Pulau Aman off Penang. Fixed line telephone density is about 190 per 1,000 persons (Ng 2001). In the same year, the number of mobile phone users was 11.12 million with eight providers. Ninety percent of the homeworkers use the phone daily even though it may not be for their work. More than half of the homeworkers (55%) personally own mobile phones and another 30% have access to mobile phones owned by other members of the household. It is the most widely used ICT tool for work. The average monthly call charge is approximately US$4, although this cost is fast decreasing through better technology and greater competition. The costs associated with land line and mobile phones are similar and are reducing due to competition.

The Malaysian government advocates and promotes extensive use of ICT, as evidenced by its heavy investment in the Multimedia Super Corridor of Malaysia and e-cities. City and Municipal councils have invested heavily into infrastructure thereby facilitating the payment of bills and application of licences while providing hotspots for the free use of the Internet. By 2003, the number of personal computers per 1,000 persons was 166, (Economic Planning Unit 2005). About one third of homeworkers have access to computers at home. Because of its costs (above $350 per unit), computers are usually shared by the members of the household. Internet hosts per 10,000 persons is two, and the number of Internet users was 2.89 million (Economic Planning Unit 2005). Dial-up access is available in all three sites but, although broadband penetration is expanding, it is still limited. The average cost for a dial-up connection is about US$5 per month and broadband is about US$15 per month. Public Libraries and community centres provide free use of computers and Internet services. Cybercafés and Internet cafés are easily accessible as they are located in most commercial centres in the vicinity of residential areas. They provide services at a low cost of 50 cents per hour.

The use of computers and the Internet is taught in school and thus children of homeworkers are often able to use them. Homeworkers however, especially those with little education, are not always able to use them. While the educated are able to utilize
these facilities for their work, the less educated and the poor require assistance to acquire and learn how to use this higher end equipment.

Twenty-seven of the homeworkers especially the knowledge workers use computers and the Internet daily. Key informants, from companies that subcontract work in publication, translation and ICT-related work to homeworkers, point out that such companies do not have any provisions to train or provide hardware for ICT work. They generally would only take homeworkers with skills and previous experience. Companies are also cautious to subcontract data entry jobs to homeworkers as companies fear leakage or theft of information if data entry is conducted from home.

2) Activities or efforts to address gender issues of urban women homeworkers

a) Challenges facing women homeworkers

Most waged homeworkers and home-based subcontractors suffer the inequality of power relations with middlemen or contracting agencies. There are no provisions for medical benefits, paid maternity leave, social security or employee provident fund contributions. It is a case of ‘no work, no pay’. There is also no occupational health and safety provided for the worker and her family. The presence of sewing machines, pins and needles, packaging materials like large plastic bags, glue and soldering irons pose potential danger to both infants and children. Accidents do happen and while the homeworkers are keenly aware and concerned of such danger there is no compensation for such injuries to her or her family.

Factories externalize their own costs by subcontracting to homeworkers. The shoe making and garment manufacturing factories place machines in homes of home-based subcontractors like Su Lin (for stitching slippers and shoes) and Jia Li (for sewing garments), rent-free and thus reduce their own requirements for space and rent. Subcontractors also pay for utilities, especially electricity, and sometimes other supplies like thread, glue or packing material. Often these are not costed into the payment to subcontractors.

The oral history of earnings of subcontractors conveys tales of exploitation. Piece-rate for sewing shirt collars can be as low as US$0.48 per dozen or 4 cents per collar or an average of US$0.80 per dozen for more complicated designs. Subcontractors are often paid a fraction, about 10-20%, of the wholesale price. This is similarly reflected in the piece rate for shoe making. The marked up retail price maybe 100% or more of the wholesale price depending on the outlet -- boutiques being at the top end and night markets at the lower with department stores somewhere in between. The more up-market and high fashion the product, the greater the disparity between the piece rate paid and the retail price.

Isolated homeworkers in food processing like those in Pulau Aman also endure the imbalance of power when dealing with middlemen. These women unable to take their own boats to the mainland, depend on the men who own boats to buy materials and take their goods to the mainland for sale. After deducting the cost of the ingredients, cooking
gas and other variables, they earn little or no profit. Due to the seasonal and irregular nature of the work, homeworkers, like Anusha, have to take on other jobs, like selling newspapers, to supplement income when it would otherwise be inadequate. Much of this exploitative nature of subcontracting is softened by previous working relationships as many homeworkers are ex-workers of the factories and in many cases have a close interpersonal relationship with the factory owners. This is especially the case in small or micro enterprises. Often subcontractors address these owners as ‘brother’ or ‘sister’ and turn to them for advice and assistance beyond that of a working relationship on such matters as their children’s studies or applications for documentation including passport and legal matters. Occasionally, owners give them gifts from their travel or during festive seasons, extending their relationship into a family-like nature.

While special assistance for bumiputra entrepreneurs is abundant in Malaysia, almost none of the Malay or Asli homeworkers in this research have received such benefits. For example neither Jamilah, a Malay home entrepreneur with a disabled child nor Sharon, an Asli living below the poverty line while engaged by her village to provide provisions, believe that these assistance packages are meant for them (housewives doing small things at home), but is only for those with political connections. This is because government organizations and NGOs servicing the poor do not generally target homeworkers and thus do not design suitable programmes for them. Administrative procedures often edge these homeworkers towards the formal sector, including working outside the home, rather than supporting them to stay on in homeworking. Applications for assistance often require the formality of registration or documentation which homeworkers do not possess, thus disqualifying them for such help.

Many agencies also fail to see the obvious benefits of homeworking for the disabled. Clearly, going out to work presents obvious obstacles in a disable unfriendly environment, a phenomenon common in developing countries like Malaysia, and particularly when confronted by the spatial confines of locations like Pulau Aman, Penang. The Fishery Development Board office in Pulau Aman, for example, does not assist the women to better process fishery products nor organize them to promote their products at Trade Fairs or through marketing agencies. Rather than helping them to innovate and develop commercial cage fishing and value-added processing of food, it appears that homeworkers are allowed to be cheated by unscrupulous traders who take their products on consignment and then subsequently claim that the quality is too inferior to be marketable or that any money derived from those sold was charged as administrative costs and commission.

Those who belong to networks and organisations have a better chance of breaking out of these limitations. Forty-nine percent of the homeworkers belong to some form of formal or informal organizations including -- Salaam Wanita, Stepping Stone Occupational Therapy Centre, Daybreak Association Occupational and Rehabilitation Centre, Asia Community Service, different single mothers’ associations and faith-based organizations. These support groups are instrumental in creating greater business opportunities for homeworkers in terms of marketing and product improvement. With a membership of 13,000 eHomemakers stands out as the primary network for homeworkers facilitating networking for homeworkers and raising the profile of unpaid and home-based work in Malaysia. Details on the assistance programmes for homeworkers can be found in Appendix A2
b) **Action towards ICT-enabled home-based work**

Networks and organisations are better able to provide capacity building and training programmes for homeworkers to utilize ICT for their work. Forty percent of homeworkers received training in using computers for work. They are able to utilize ICT to increase their access to information on opportunities and strategies to expand their business.

Homeworkers cite ‘lack of capital’ and ‘lack of skills’ as the main problems concerning the use of the higher end ICT tools such as computers. Computers cost at least US$350 each representing double the monthly income of most households. Since 2001, the Malaysian government has allocated MYR28.3 million to 235 agencies for 577 women and family capacity building programmes for low-income families with some emphasis on single mothers. These included ICT training, ICT literacy and skills training (Economic Planning Unit 2003-04). However, only 49% of the homeworkers benefit from some form of assistance programme for ICT facilities or capacity building offered by government agencies or NGOs. Even for programmes with ICT components for women, none are specific to poor female home-based workers. Only eHomemakers, with the Salaam Wanita programme, focussed on vulnerable women working from home. This programme started in 2003 with Nestle donating second hand computers to disabled women. It has since evolved into a small business entity to help equip vulnerable women with ICT knowledge and skills for income generation.

Ten percent of the homeworkers have access to community computers or Internet centres operated by a NGO or a community association. Internet cafes are not popular among homeworkers as they are perceived to be patronized by the young for games.

While places like Pulau Aman, Penang have a community centre with Internet facilities operated by a NGO and government agency (Fishery Board), the officers and volunteers make little effort to encourage or facilitate homeworkers to use these facilities or educate them on the potential for using these ICT tools for enhancing their business. Even those serving as informal leaders, coordinating catering and other cooperative businesses, and office-bearer s of KUNITA (Wives of Fishermen) do not use these community facilities.

The case is similar to the homeworkers in Petaling Utama where YSS has established the ‘e-UPCOM’ computer centre for the residents. YSS collaborating with Petaling Jaya Municipal Council has provided this computer centre as part of the urban poor community development programme. Although homeworkers have received some training in the use of ICT, they have not utilised this facility. Since most homeworkers do not possess their own computers, many lose the skills gained during training due to the lack of practice. It is thus essential that in addition to providing training and hardware homeworkers must be supported with regular refresher courses. Another major reason cited is that their clientele are non-users of the Internet.

While almost half of the homeworkers have some training in computer skills and knowledge of the Internet, only a few use computers and the Internet in any practical way. Less than half of the homeworkers use ICT to enhance home-based work. They use the tools mainly for building personal relationships and business such as contacting customers or receiving orders. Few use it to advertise and promote sales. A few surf the Internet for
information to upgrade quality and skills, while others may use it to search for teaching materials for tuition classes. The other major barrier for homeworkers using these ICT tools is related to literacy. Although these homeworkers can read and write Malay, Tamil or Chinese, their level of fluency and comprehension is low due to their lack of reading and use of writing skills. Most are not conversant with English. This presents a problem in acquiring knowledge or accessing information from the Internet. There is however widespread interest among homeworkers to learn how ICT could help them maximize business opportunities.

While it is the policy of the government to provide access to ICT, the lack of coordination between agencies may cause flats like Petaling Utama, Klang Valley to be without land telephone lines for a long time. Thus community projects for computer and Internet centres like e-Upcom, though sponsored by the Petaling Jaya Municipal Council, remained closed for months because of no telephone connection. Organizations like YSS try to engage these women in a dialogue to help them give priority to the acquisition of ICT tools for work over equipment for entertainment, such as Astro (cable TV), which costs US$100-250 for the console and a minimum of US$18 for monthly subscription.

Thus, the lack of usage of ICT for work is not always a question of affordability but, as stated by the participants from Petaling Utama during the FGD, submitting to a family preference for entertainment. This, the research team members surmised, was most likely determined by their husbands. Sometimes ICT tools that are helpful to the homeworkers are placed at the disposal of other members of the family giving them preference over the homeworkers’ own ICT needs. As in the case of Lina Lee, the computer which is essential for her work, is kept in the room of her son, giving him more access to play games with friends. Lina Lee, like many single mothers, indulges him, sacrificing her needs and wants because she feels guilty that he is without a father and also as he will be her support for old age.

3) Understanding the potential for ICT-Empowered Women Homeworkers

Access to knowledge and information increases the opportunities to improve the quality of their products and increase their marketability. Some organizations enable homeworkers to experience the benefits of learning and using skills to earn. Further they promote individual capacity building through acquiring the capability to use ICT for work with the potential of becoming a home entrepreneur. This helps to narrow the disparity of earnings between the different types of homeworkers as currently knowledge workers, using ICT, working less hours earn twice as much as subcontractors working a full 30 or more hours a week.

Home entrepreneurs like the Salaam Wanita artisans supported by the eHomemakers network have opportunities to upgrade skills and learn new designs suitable for higher end markets. This contrasts with those who are isolated such as those in Pulau Aman with poor quality handicrafts. With enhanced quality, the products can reach higher paying clients and a wider market.

a) Preventing marginalization of women in the labour force
The association of home-based work to handicrafts, food processing and tailoring causes it to be perceived as traditionally ‘female’. The informal nature of this work, carried out at home alongside domestic work, enhances its perception that home-based work is an extension of women’s hobbies and only requires simple, basic skills common among women. Consequently, homeworkers are not recognised as workers and are marginalised. Their contributions are not accounted for by the industries and the economy even though they have contributed to the competitiveness of the industries and the resilience of the national economy. As mentioned by a stakeholder, “the formal sector rides on the back of the informal sector. Without these homeworkers, many local businesses would not have weathered the Asian Financial Crisis and come up stronger. These women gave them competitiveness and flexibility and help them recover faster.” If this awareness is created and increased, the public and private sectors will not continue to marginalise these homeworkers but recognise the significance of their contributions and bring them into the mainstream to be further assisted and developed.

Relegating home-based work to low skill jobs (and thus low pay) is another cause of the marginalisation of homeworkers. The level of skill required varies with the nature of home-based work. While some types of home-based work need only basic skills, others need high skills and knowledge. Teaching Indian classical dance, basket-weaving, food catering or stitching collars or zips are not simple jobs or low skilled. They require training, experience and creativity. Home-based work in the current knowledge-based economy beyond teleworking and telemarketing opens a whole vista of opportunities for those who choose to work from home. It can offer great savings to the economy in reducing the need for infrastructure to serve commuting workers, provision of premises for offices and housing rural to urban migrants.

Home-based work is a viable alternative for those who either by force or choice accord priority to their domestic responsibilities to meaningfully use their time and skills to earn an income. As they do not go out to work, they are regarded as ‘housewives’ rather than ‘workers’ and their work is not valued by their families, community, nor the private and public sectors. Often this results in the homeworkers, themselves, having low self-esteem and dismissing the significance of their own work. Businesses and industries engaging home-based subcontractors and waged homeworkers take advantage of this weakness of the homeworkers and exploit them. Little is then done to create awareness of the important contributions of these homeworkers and introduce registration or legislation to incorporate these homeworkers into the labour force and accord them the necessary work benefits and protection.

In some areas efforts by the government and other agencies perpetuate the marginalisation of this vulnerable group instead of providing much needed assistance. Agencies, like KUNITA in Pulau Aman for example, involve homeworkers through one-off activities rather than comprehensive programmes. Instead of sustained efforts to help these women become fisherwomen, better at food processing or own fishing cages to improve earnings, the organization usually utilizes their financial provisions for one-off events such as feasts and celebrations which are catered for by homeworkers in rotation. The women are regarded as ‘wives of fishermen’ and are thus marginalized rather than assisted to enter the fishing industry. With only one primary school on the island, the children have to continue their secondary education on the mainland. Having experienced shopping complexes and cinemas, it becomes difficult for this generation to return to their island home. Those who do, have few job opportunities besides agro-tourism and fishing.
Linking and networking these isolated homeworkers facilitate training and capacity building. These homeworkers are better able to produce high quality products and improve their bargaining powers with a consequent increase in their earnings. The home entrepreneurs are able to earn approximately 40% of the retail price, which is significantly higher than subcontractors at 10-20% of the wholesale price or unorganized home entrepreneurs. It is evident from the oral histories of subcontractors, like Jia Li and Ai Meng, that their earnings over the years remain meagre. Ai Meng, also a garment factory subcontractor from Jenjarom, sewing housecoats for the night market has been subcontracting for the last five years after her son, the second child was born. She, initially, earned US$2.16 a day, working a few hours on some days, sewing pockets of men’s trousers. Her monthly income was around US$48. A year ago, she sewed housecoats for US$0.59 a piece, earning US$6 a day or about US$180 a month. Now she sews school uniforms (pinafore) for US$1.40 per piece, earning US$10 a day or about US$280 a month. At present increased hours of work or finer skills for higher quality products are the basic mechanisms to achieve an increase in earnings. If the subcontractors can be aided to be home entrepreneurs, their earning can be substantially increased.

With substantive earnings, homeworkers are able to help their households emerge from the margins of poverty, improve the quality of life and the nutritional intake of the family. They also financially contribute to help their children, especially daughters, to improve their access to better education. Most of these homeworkers have less than primary education and attributed their low status to their own inadequacy. Many resolved to help their daughters out of a similar fate and spend a proportion of their income on their daughters’ tuition. This is necessary as most husbands, with patrilineal views, were generally only willing to pay for their sons’ education as they were perceived as the future breadwinners of their families as well as the support for their old age. This sacrifice by the homeworkers will help prevent their daughters from future marginalization in the labour market.

b) Making women visible in the economy

Key informants from government agencies, NGOs and private sector organizations show that little has been done to encourage and facilitate home-based work. The Ministry of Human Resources and Social Security do not classify homeworkers as ‘workers.’ Some, though not clear what type of home-based work and the number involved, are counted as ‘self-employed’ or ‘contract workers’ which are included in the labour force and given certain provisions under the Labour Law. This compounds the problem of ascertaining the true number of homeworkers. The research confirms how the fear and avoidance of authority and the cost of informality keep homeworkers on the periphery of the informal sector. Poor working conditions, the lack of protection for homeworkers due to the instability of jobs and income, long working hours, substandard working environments, and little or no social and welfare protection (unlike a normal worker who receives social security, sick or maternity leave) also characterize the experiences of homeworkers.

NGOs working with the chronically ill, including those with HIV-AIDS, the blind, deaf and disabled are focussed more on the social and emotional needs rather than on encouraging home-based work. Similarly, trade organizations of industries that rely
heavily on homeworkers have almost no systematic assistance programme to facilitate homeworkers to use ICT. These have been central issues for women homeworkers’ -- invisibility and vulnerability to exploitation due to marginalization.

Traditional arts and crafts are losing visibility in the modern mass production, manufacturing world. By networking and organizing these skilled homeworkers are enabled to exhibit the products for others to see. Besides training, organizing them will give these women more visibility in the economy and have their contributions recognized and accounted. The Salaam Wanita members, for example, are proud of their high quality crafts which even carry a ‘brand’. They are also free to train others and make private sales, thus giving them more freedom than franchise holders and subcontractors.

eHomemakers, one of the leading advocates for homeworkers, has done much to increase the visibility of this contribution and highlighted the significance of home-based work. Through its website and newsletters it is able to link and recruit more members as well as provide encouragement to homeworkers. By networking, the homeworkers attain solidarity and are empowered to break the cycle of exploitation experienced by many isolated homeworkers especially the subcontractors.

The ability to earn as a primary or supplementary provider is definitely empowering for these women. The exhilaration of receiving their first wage is fresh in the minds of most homeworkers. Earning sometimes more than their fathers or husbands tests the social and power relationships. Often this money is not kept for them but is used to substantially uplift the life of the family as a whole. Due to the lack of the homeworkers’ mobility, their husbands, in some instances, assist by delivering products and collecting payment. The consequence of which is that the woman has unwittingly surrendered control over the money she has earned to her husband.

**Table 7 - Estimate Income and Expenditure of Jia Li’s Family**

<table>
<thead>
<tr>
<th>Monthly income</th>
<th>US$</th>
<th>Monthly Expenditure</th>
<th>US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Husband’s contribution to household expenses</td>
<td>350</td>
<td>House rent</td>
<td>162</td>
</tr>
<tr>
<td>Rental of room to tenant</td>
<td>50</td>
<td>Utilities</td>
<td>35</td>
</tr>
<tr>
<td><strong>Subtotal</strong></td>
<td><strong>400</strong></td>
<td>Mobile phones</td>
<td><strong>30</strong></td>
</tr>
<tr>
<td>Jia Li’s income from subcontracting</td>
<td>243</td>
<td>Children school expense, bus and tuitions</td>
<td>150</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>643</strong></td>
<td>Household expenses</td>
<td><strong>150</strong></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other expenses</td>
<td><strong>90</strong></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>617</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Homeworkers who have substantial earnings are better able to transgress their domestic confines and overcome their insecurity arising from their husband’s infidelity. Islam has provisions to legally allow the man to have four wives and there is often an inner fear and a sense of insecurity on the part of many Muslim women that their husbands may take another wife. Jamilah, for example, uses part of her earning to beautify herself and dresses up for her husband. Even though their contributions are substantive, most husbands still perceive their earnings are just ‘gincu’ (lipstick) money – the icing not the cake. However, analysis on household income and expenditure, such as Jia Li’s oral history of her earnings as a subcontractor in garment stitching, proves that without her
earnings, the family expenses exceed her husband’s income (see Table 7). Jia Li’s husband is a house painter for a contractor. Jia Li does not know what his income is but his contribution to household expenses is about $350 a month. They have two sons, both still schooling. While the husband refuses to acknowledge the significant contribution from Jia Li’s home-based work, it is obvious from the estimated household expenditure, that it would not be possible to cope without her income. With this extra income, Jia Li supplements the nutritional intake of the family with both better quality food and vitamins for the family members and fees for the son’s self-defence classes. Some like Ho Ming, who sews clothes for her customers, (solo entrepreneur) sometimes earn more than their husbands. Her extra makes it possible for the family to pay the mortgage of their single storey link-house.

When homeworkers contribute to household income, they are better able to summon the support of husbands and children to assist in the housework. Their purchasing power also helps them acquire labour saving home appliances like washing machines to reduce the burden of housework. These machines can be purchased through hire purchase agreements at a relatively small percentage outlay from their earnings. In a few cases, the homeworker is able to employ the services of relatives or other women for household maintenance. In most cases, husbands are more willing to assist in productive work than domestic chores. Thus, it is evident that the gender division of labour remains unchanged and husbands/male members of the household’s domestic role and responsibility are largely unaffected.

The homeworkers often use their skills to train others, including relatives or neighbours, to help them meet the demands of high seasons. Jamilah for example trains her neighbours and mother to weave baskets when she cannot cope with the pre-festive season orders. A few more enterprising ones organize workgroups of two to three to take on greater volumes of work, thus improving their power of negotiation.

While 49% of the homeworkers have access to some form of assistance for capacity building, few can easily access loans due to financial agencies, insensitive to the situation of homeworkers, imposing standard requirements of formality and procedures. Thus, it is only those homeworkers who receive support and financial assistance from siblings, relatives or friends who are able to gain further knowledge or own machines/equipment; that manage to breakthrough this vicious circle of poverty to become knowledge workers. The monthly earnings of subcontractors e.g. Yan Yan (US$160), is far below home entrepreneurs like Ho Ming (US$450), both sewing at home. Lina Lee, a disabled homeworker and a tailoring instructor, on the other hand, with additional machines and added training, has considerably greater potential to earn even more. ICT provides a passage into the world for the spatially confined whether by disability or domestic responsibility.

It is also evident from the interviews and oral history that the majority of homeworkers, including the knowledge-based ones, keep poor accounts of their income and expenditure or cost their profits. Organisations like eHomemakers, Asia Community Service and YSS offer courses and mentorship in business management and accounting help homeworkers to keep records. More important than the actual record-keeping is that it is a step towards formality of business practice, building their capabilities towards entrepreneurship, while opening a new vista for their home-based work. Such value-added
knowledge and capacity building enables them to surmount the barriers leading towards entrepreneurship.

c) Transformation of meanings attached to gender and technology

All homeworkers have access to an ICT tool, including radio, television or fixed line telephone. Three quarters of those interviewed have access to some form of ICT besides radio, television and fixed-line telephone. More than half of the homeworkers own personal ICT tools, mainly mobile phones, with a significant number jointly owning the mobile phones with their family. It substitutes for a land line and stays at home. Normally, it is the man of the house who owns and pays for the maintenance of the phone. As it is often a pre-paid card, the expenses can be limited or controlled to some extent. The husband is therefore also the most likely person to take the phone out or determine how else it can be used.

The majority of participants in FGD, however, are aware of their bosses or husbands using ICT for productive work but lack confidence to overcome the myths associated with technology. ICT tools are presented as sophisticated complex equipment that requires a high level of skill or education above and beyond that of most of the homeworkers. They believe that using these ICT tools for work will require extensive training as well as financial support to own and pay subsequent maintenance costs. While family members may extensively utilize the higher end ICT tools, like a computer and the Internet, few who understand the potential and power of ICT teach these homeworkers the advantages that may be gained from using ICT for work.

Training and capacity building stand out as the key activities for promotion of gender equality and empowerment. Organizations hold seminars and training courses to enable homeworkers to learn new skills in their trade as well as ICT related work. Courses related to computer programmes like Lotus and Microsoft Office and sometimes non-proprietary software, legalities of setting up home-based businesses, basic e-commerce and health maintenance courses are all very empowering for homeworkers. The organizations also help advertise the skills of its members on web pages and secure contracts for homeworkers.

The utilization of ICT for work helps alleviate the isolated nature of home-based work. All of the homeworkers have access to public, land line or mobile telephones. Many were previously too poor to acquire their own mobile phones. Now they own
donated second-hand phones. Owning such a tool is seen as empowering as it uplifts their status to that of a ‘modern’ techno savvy person. This is especially liberating when their knowledgeable family members have not found the time or shown interest in teaching them how to use one. The phone also links them to their friends. Conversing with fellow homeworkers or friends, sending them short messages and connecting with them through emails, chat rooms etc., enhance the social aspects as well as the learning components of the homeworkers’ lives. Some said it gives them confidence to venture out knowing that help or support is just a phone call away.

ICT allows homeworkers to read newspapers, books and gain information through other media. Some benefit from educational programmes broadcast on radio and TV as well as on home computers through the Internet without leaving their homes. Disabled homeworker, Lina Lee who specializes in stitching cheongsam, a traditional figure hugging attire with a high collar which demands a high level of skill, is able to download application forms, discuss with fellow tailoring instructors on chat sites and learn on line, thus saving her the inconvenience of travelling. Some, like Marilyn, learn to earn extra cash using ICT. They regularly visit websites offering jobs like data entry, translation, market surveys and telemarketing. Salaam Wanita members receive specifications of orders for their baskets via SMS using the web to phone application ‘Distributed Work Management Application’ (DWMA). They can confirm orders, set up dates and times for delivery of goods using text messaging which is much cheaper than phone calls. Similarly they can reach more clients and a wider market through the Internet, thus opening windows to opportunities for them beyond the confines of home.

Homeworkers like Jackie learn about using Google to help with her translation work while basket weavers learn to use SMS to receive specifications of baskets and details of orders. For example, the Salaam Wanita project coordinator uses the web to phone application to send by SMS the specification and requirements of orders of baskets to Salaam Wanita members. Those who are able to fulfil those orders will confirm acceptance by return SMS. In this way the project equips vulnerable groups, like those who are disabled, single mothers and poor women, to network as homeworkers to improve their power to negotiate and by-pass the middleperson.

With an awareness of the possible utilization of ICT comes the interest of the homeworkers to learn how to maximize the benefits of these tools to improve quality of products, access wider markets and save time and costs, especially those related to transportation.

d) Resolving “women in technology” issues

The advance of Malaysia in communication technology in 1990s and now in information technology has been phenomenal but the digital divide could be traced along the fault lines of geographical area, race, income, age, education and household type with the possibility of women being locked out. (Shariffadeen 2001). As most homeworkers generally have poor education, 58% with less than six years of formal schooling, low self-esteem coupled with the belief that technology is complex and sophisticated, the majority tend to believe that much of the ICT is beyond their comprehension. While the Ministry of Education and private TV provides educational TV programmes to supplement education in school, this is not properly utilized to infuse a culture of learning through
television. Radio programmes seem to have a better impact as it is common for homeworkers to listen to radio programmes while working. Gender issues interwoven into radio and TV soap operas have significant impact. However, most programmes still portray women as victims of inequality rather than empowered individuals. In the FGD, none could recall shows where home entrepreneurs or successful homeworkers took centre-stage. Most think there are no shows where a homeworker is featured in the lead role. The images of the successful professional/corporate women were more fresh in their memory. Role modelling of successful homeworkers will definitely result in a higher level of confidence and self-esteem for this marginalised section of the community.

Many of the homeworkers are still overwhelmed by technology. The identification of gender with specific jobs is still strong in Malaysia. Women are encouraged by their families to work more with their hands in ‘female’ jobs like craft and sewing, than with technology. Some are convinced that they are incapable of understanding and controlling higher end technology like cars and computers. Even though they have access to them, they do not use them for fear of damaging them. Thus they remain dependent on their husband for information and transportation.

Women’s organizations can help resolve the women in technology issues by being the creators, advocates and providers of services to various groups especially marginalized and vulnerable ones (Farida Habib Shah eds, 2001). While about 49% of homeworkers have gained from training programmes, incorporating some gender sensitivity will enhance its benefits. Currently where training programmes for these women are organized by NGOs or government agencies they engage professional trainers who are often male. This engenders hesitancies and reluctance on the part of homeworkers to participate in these programmes because of the feeling of inadequacy. Peer to peer training by more experienced homeworkers or those manifesting the ordinariness similar to themselves will ease these concerns. Rafidah, an elderly homeworker whose ability to master computer skills is an example to fellow homeworkers, is able to empathize and understand their fears and barriers.

Language literacy and comprehension also presents obstacles to the use of ICT tools for work as many of the websites are in English with only a few being multilingual. Most homeworkers have oral fluency but reading ability and comprehension has degenerated with the lack of use over the years. Homeworkers educated in Malay, Tamil or Chinese lack fluency in English. To most homeworkers, computer usage is synonymous with English and they feel therefore that it is imperative for them to learn English before they can utilize high end ICT tools.

Personal ownership of ICT tools including mobile phones among homeworkers is only 55%. Many are the possessions of their husbands, others are second-hand phones obtained from their daughters or sons, while others receive donations from organizations like Crystal Circle or good hearted individuals. Ownership is even less for computers. Most computers are a joint possession of family. Even when they own one like in the case of Lina Lee, preference is given to the son. She places it in his room and then when she requires it for work she has to cajole him to withdraw from using it to play games. Only in one case, in Petaling Utama, is there a communal computer centre sponsored by YSS and the Municipality of Petaling Jaya. However, homeworkers are reluctant to use it as they feel embarrassed to utilize it alongside male youths who are generally the most frequent users. If a homeworker does not have continued access to computers for hands-on practice
or have regular access to guidance and advice for continued use, she normally loses the
skills over time. Unfortunately most organised training activities, other than for women
working in telecentres, are one off events. Retraining or refresher courses are necessary if
training is to be effective.

e) Resolving the “technology question”

There is now widespread acknowledgement of the need for women homeworkers
to master technology to assist them in domestic work and it is no longer an alien concept.
Whether it is in isolated Pulau Aman or the remote fringes of Ipoh where indigenous *Asli*
live, women have acquired labour-saving equipment like blenders and washing machines
to reduce their domestic chores. It enables them to cope better with their multi-tasking
needs and multiple burdens. Thus many already have the experience of utilizing
technology for their work. Technology can be appropriately designed to assist
homeworkers in developing their businesses.

The ubiquitous availability of radio and television squeezed these two ICT tools
into the arena of leisure and entertainment. The use of radio and television for community
service is limited. The majority of the current educational services offered by these two
tools for community information and education are sponsored by public or private
institutions. Generally homeworkers believe that they are unable to access such services
for their own work without considerable expenditure. To them this is not commensurate
with their small or micro businesses. The radio and television agencies, both public and
private, need to make their services more generally available to the public including
homeworkers. While services like cable TV (Astro) can provide information on stocks
and shares, emails and programming for recording etc, most homeworkers are seldom
aware of these possibilities. Only a limited number of the knowledge-based homeworkers
are able to use the Astro learning channels to gain knowledge about business and ICT
practices. The majority still feel that the programmes are primarily for entertainment,
especially when many of the women’s programmes focus on the ‘homemaking’ aspects
rather than gender conscientization or entrepreneurial skills.

The penetration of telephone and mobile phones in Malaysia is good and their
availability is widespread but its potential for work is not fully exploited. While most
homeworkers do use it for receiving orders or contacting suppliers/middlemen, most are
still unaware of its full potential for work. Most do not have access to appropriately
designed software and user-friendly programmes suitable for their home-based work. Few
have been taught to use short messaging to receive order specifications and replying for
confirmation of supply. It will save cost and time especially if used to contact foreign
buyers.

As the personal computer market increases, prices even for the newer, upgraded
models are expected to fall below US$500 per unit. (New Straits Times (Computertimes),
Oct 17 2005). The Internet services becoming more widespread and freely available.
Places like Ipoh announced the implementation of a five kilometre radius hotspot around
the City Hall. Internet penetration is highest in Kuala Lumpur with slightly more than one
in three city residents or 36.3%, but, in poorer states like Kedah and Kelantan, it is only
about 7%. (In Tech, The Star, 29 July 2004). This digital divide between the poor and
rich, educated and less educated, should not be allowed to continue to widen. ICT holds
great potential for development of the poor and uplift them from poverty.
Some online services like e-banking or phone banking, which can greatly assist homeworkers, are not perceived as tools to help vulnerable groups consequently homeworkers are not approached as desired target groups. Thus the use of online banking facilities from home, which could greatly assist homeworkers, is not promoted amongst women. When some of the homeworkers attempted to use online banking they found that the financial institutions were not sensitive to their difficulties. Disabled individuals find it inconvenient to go to the bank to collect personal identification numbers or other documentation each time login fails or similar technical errors occur.

Homeworkers like Marilyn can use search engines like Google for translation work and chat rooms for improving translation. Barbara uses it to help her tutoring while Lina Lee uses ICT to liaise with her clients after the initial contacts to obtain measurements and confirmation of agreement. She has in the past searched for ways, especially on the Internet, to enable her to be more mobile and found willing assistance in a friendly garage owner who helped modify her car. Gradually she learns to articulate the modifications required in the car to overcome the barriers.

The demystifying of ICT will greatly assist homeworkers like Jamilah to be unafraid of technology. Once they master one tool, such as a mobile phone, it will empower them to explore the use of others. Mobile phones for example will also greatly assist those who work with their hands. Unfortunately Bluetooth and wireless hands free technology are currently still too expensive for homeworkers and the use of cheaper ones from China, which are available in night markets for a tenth of the price, cause headaches as well as hurting the ears. Clearer and larger keys and screens will help those with impaired eyesight to better utilize mobile phones. Others may need voice activated devices. While this technology is all currently available, vulnerable groups are not the target of profit making companies and thus will continue to be marginalized unless more concerted efforts are made by the government, NGOs and individuals to empower homeworkers to access them.

Similarly if homeworkers are better able to use online services, they will be able to pay bills and make banking transactions without leaving their homes. Homeworkers who depend on their husbands to collect their payments or credit their cheques into their saving accounts, will be better able to know and control their earnings by using e-banking to view transactions. In this way, they will be able to regain some control over their earnings.

Once homeworkers like Lina Lee know how to master the use of ICT they will be able to find ways to overcome barriers and utilize it for improving their well-being. Lina Lee surfs websites for ‘cheongsam’ designs and emails the design to her clients. They send her the material or authorize her to purchase one of her own choice. Once agreed, she stitches the dress and couriers the final article to her client upon completion. She prefers payments to be banked into her account instead of a mailed cheque as it saves her the inconvenience of going to the bank. Unfortunately not all her clients are ICT savvy. ICT will enable her to reach a wider market beyond the confines of her lack of mobility. Aware of the possibilities, she aspires one day to offer her own tailoring course online. Each step towards resolving the technology question is an important advancement for these homeworkers. In their determination to overcome disability or immobility, some homeworkers focus on gaining information to overcome the barriers to their success.
RECOMMENDATIONS
6.0 RECOMMENDATIONS

This research has given voice and visibility to homeworkers in Malaysia. Their earnings contribute, often significantly, to their households and can enable improved nutritional intake as well as improving the general quality of life within the family. These homeworkers, financial contributions help improve their children’s access to better education, especially daughters. With the use of ICT, homeworkers are able to access valuable knowledge and information leading to better income generation and empowerment as displayed in their confidence level and sense of self-esteem. With the networking and assistance of organizations, these homeworkers can experience the beneficial effects of learning and using skills to earn and acquire new skills like the capability to use ICT for work or becoming a home entrepreneur. Unlike isolated homeworkers, such as those in Pulau Aman with poor quality handicrafts, home entrepreneurs, supported by networks and organisations, have opportunities to upgrade skills and learn new designs suitable for higher end markets. With enhanced quality and reach, the products can get to higher paying clients and wider markets.

This report has provided evidence and examples of situations where ICT are used to enhance the livelihoods of homeworkers. However, the potential of ICT to assist these homeworkers can be further realised if obstacles are removed and challenges are turned into opportunities. Based on the findings of this research study, the following recommendations propose approaches to realize the opportunities and overcome (or diminish) some of the obstacles.

6.1 While the national policy for infrastructure promotes the availability of ICT, the digital divide between the rich and the poor, educated and less educated and men and women is still wide. This research demonstrates in concrete terms how the gender digital divide takes meaning amongst a particular group of Malaysian women. To support national ICT policies and programmes there is a need for more research and gender policy analysis and exposure to the experience of NGOs working with homeworkers to highlight their plight, especially the vulnerable groups, and their current use of ICT.

The digital divide is also evident in terms of e-inclusion for persons with disabilities. The special needs of homeworkers with disabilities have to be conveyed to the policy makers and those in the ICT industry. This is essential to ensure awareness of the plight of these vulnerable groups together with an understanding of their needs and interest in using ICT for both their work and for reaching out to the world in search of opportunities. This research must be highlighted and agencies like eHomemakers can play an advocacy role to present the needs and interests of homeworkers to these industries. If included in their corporate social responsibility programmes, special efforts maybe made to address these needs of the persons with disabilities.

6.2 Many of the problems concerning accessibility to resources and capacity building are related to the lack of formal acknowledgement of homeworkers as workers and entrepreneurs by the government and subcontracting factories. Because of this, the significant contribution of homeworkers to the well-being of their households, industry and the general economy is neither valued nor recognized. There is a need to create mechanisms to formally recognize homeworkers among the government agencies, as well as the private sector and NGOs. NGOs and homeworkers’ networks can provide
critical support as advocates for its implementation. This formal recognition will provide a means to deliver certain entitlements for basic protection and privileges such as paid sick/maternity leave and Employee Provident Fund contributions.

Currently government and industry-sponsored assistance programmes are not customized specifically to meet the needs of homeworkers, especially for capital and business development. In the absence of any formal recognition of homeworkers, there is an urgent need for these assistance programmes to take into consideration the informal nature of the work and to omit the requirement for either registration or details of a registered place of work. This will also assist subcontractors and solo producers to become home entrepreneurs, thereby increasing their income. In addition, NGOs working with vulnerable groups can provide these individuals with much needed support and encouragement to work from home. This will reduce the inconvenience and costs associated with attending established workplaces in a non-disable friendly environment.

6.3 Women homeworkers lack the integrated support of networks, government and private sector agencies. The majority of Malaysian homeworkers need the direct support of the government and other agencies, as practiced in Thailand (OTOP programme) to organize and improve product quality and help market products more extensively so that they may reach the wider domestic and international markets. This, together with the expertise and experiences of public and private agencies assisting homeworkers with more software solutions to use ICT for work, similar to the web to phone application experience of eHomemakers, will enable the homeworkers to utilize affordable ICT to become home entrepreneurs.

In Summary – A possible future programme

In conjunction with building awareness and strengthening existing networks of homemakers, future programmes to facilitate ICT access and use, geared to improving the livelihoods and empowerment of homeworkers in Malaysia, could include efforts from government agencies, NGOs as well as private sector firms.

Government agencies should welcome the opportunity to build statistical indicators and baseline data around the situation of homeworkers in Malaysia and other parts of the region. In addition, they can encourage organizations aimed at helping homeworkers which have the necessary experience and an established record of success to organize, network and propel homeworkers into the global market.

There needs to be a holistic and comprehensive effort to assist homeworkers by addressing their current situation and identifying areas for improvement. National and international agencies can assist homeworkers to enhance their quality and quantity of work by funding projects aimed at assisting and empowering them, as well as providing capacity building and training especially with the use of ICT. In addition these agencies should provide the necessary ICT tools to enable homeworkers to have hands-on experience after training. This should be further supported by a continuous consultancy service to help them when they encounter problems.
APPENDICES
Appendix A1

Selection Criteria and List of Stakeholders and Homeworkers who Participated in key Informant Interviews, Oral Histories, Focus Group Discussions and Case Studies

(Please note that names have been changed to preserve confidentiality.)

The selection of the stakeholders to be interviewed was based on various criteria and it was decided that the breakdown to be interviewed in the localities would be as indicated in the table below.

The reason for more stakeholders being interviewed in the Klang Valley is because the Federal government and the headquarters of various organizations are based there. Also since the integration of home-based work and ICT usage for the poor income group is not apparent, stakeholders related to both categories have to be sought out and interviewed to capture the relevant information.

In addition the stakeholders chosen represent those industries and sectors that either use or are identified with home-based workers. It is important to find out the reasons these factories are not employing the services of home-based workers.

List of organizations interviewed are:

Government

Penang
HAWA, Women’s Affairs Department – Assistant Director
Municipal Council, Penang – (Councillor)
Town and Rural Planning Department – (Assistant Planning Officer)

Ipoh
City Council Ipoh – (IT Manager)

Klang Valley
Ministry of Science, Technology and Innovation – (Deputy Secretary General)
MIMOS Internet provider – (Manager)
Malaysian Science and Technology Information Centre, Ministry of Science, Technology and Innovation – (Information Centre Officer)
Malaysian Communications and Multimedia Commission (MCMC) – (Head, Corporate Communication)
Malaysian Technology Development Council (MTDC) – (Executive Officer)
Ministry of Human Resources – (Director)
Social Security Council – (Chief Executive Officer)
Handicraft Development Board – (Public Relations Officer)

NGOs
Penang
Fishermen’s Wives Group (KUNITA - Kumpulan Isteri Nelayan) – (Programme Officer)
Fishermen’s Association – (Operation Manager)
Society for Disabled Persons, Penang – (Vice-President/President)

**Ipoh**
Stepping Stone Occupational Therapy Centre – (Manager)
Daybreak Association Occupational and Rehabilitation Centre – (CBR Officer)
New Horizon Rehabilitation Centre for disabled children – (Executive Chairman)
Vision Home – (Manager)

**Klang Valley**
Single Again (Single Persons’ Group) – (Initiator)
National Council of Women’s Organisations (NCWO) – (Vice President)
Young Women Christian Association – (Programme Officer)
Strategik Sosial Foundation – (Service Director) – community building for relocated urban poor provide ICT centre
Amanah Ikthiar Loan for Entrepreneurs – (Programme Officer)
Malaysian Textile Manufacturers Association – (Executive Officer)
Malaysian Textile and Apparel Centre – (Director)

**Private Organisations known to use Home-based Workers**

**Penang**
Jelita Ayu Craft – (Director) – handicraft outlet
Neways Worldwide Direct Selling – (Director)
Chee Bin Banana Chips Factory – (Proprietor) – sub-contracted out packing
Ghee Hup Nutmeg Oil Factory – (Proprietor) – sub-contracted out packing

**Ipoh**
Front Page Advertising Sdn Bhd – (Marketing Executive)
Provides Freelance work e.g. designing, translation, copywriting to homeworkers
Summit Imaging Technologies Sdn Bhd – (Manager) sub-contracted out easy manual assembly works e.g fitting ribbons/ tapes into cartridges
City Plast Sdn Bhd – (Operations Manager) - sub-contracted out easy manual assembly sewing works
Polyware Sdn Bhd – (Operation Manager) – manual fittings for pipes
Kinta Cyber Café Association – (President)

**Klang Valley**
Mobile World – (Editor) – an ICT magazine
HF Garments Sdn Bhd – (Executive officer) – sub-contracted out sewing
FW Manufacturing - (Marketing Officer) – sub-contracted out embroidery work
A W Manufacturing – (Business Development Executive) - sub-contracted out sewing
O Garment – (Executive Officer) – sub-contracted out sewing/packaging
T Weaving – (Director) – sub-contracted out packing of labels
**Homeworkers Interviewed**

*The names of Homeworkers have been changed to preserve their privacy*

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Location</th>
<th>Type of product</th>
<th>Special characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Zarina</td>
<td>Penang</td>
<td>Massage</td>
<td>Single mother, chronically ill; irregular income</td>
</tr>
<tr>
<td>2.</td>
<td>Siti</td>
<td>Penang</td>
<td>Catering</td>
<td>Single mother, informal leader, coordinates catering among village women</td>
</tr>
<tr>
<td>3.</td>
<td>Noraini</td>
<td>Penang</td>
<td>Seashell handicraft, breadfruit crackers, salted fish</td>
<td>Poor, unhealthy, uses mobile phone belonging to her husband</td>
</tr>
<tr>
<td>4.</td>
<td>Fauziah</td>
<td>Penang</td>
<td>Sewing</td>
<td>Poor, informal leader, little education, limited use of ICT</td>
</tr>
<tr>
<td>5.</td>
<td>Sarimah</td>
<td>Penang</td>
<td>Fish crackers</td>
<td>Single mother, goes out fishing with her husband</td>
</tr>
<tr>
<td>6.</td>
<td>Haslinah</td>
<td>Penang</td>
<td>Sewing, fish crackers</td>
<td>Single mother, little education, sometimes goes out fishing with her husband</td>
</tr>
<tr>
<td>7.</td>
<td>Putri</td>
<td>Penang</td>
<td>Baking</td>
<td>Single mother, very poor</td>
</tr>
<tr>
<td>8.</td>
<td>Rashidah</td>
<td>Penang</td>
<td>Sea cucumber oil (gamat)</td>
<td>Single mother, learnt making of gamat oil from grandmother, father uses house of religious education</td>
</tr>
<tr>
<td>9.</td>
<td>Roslina</td>
<td>Penang</td>
<td>Shrimp paste</td>
<td>Very poor, little education</td>
</tr>
<tr>
<td>10.</td>
<td>Nahida</td>
<td>Penang</td>
<td>Cakes, bread fruit crackers</td>
<td>Very poor, little education</td>
</tr>
<tr>
<td>11.</td>
<td>Salima</td>
<td>Penang</td>
<td>Shrimp paste, salted fish</td>
<td>Very poor, little education</td>
</tr>
<tr>
<td>12.</td>
<td>Zuraidah</td>
<td>Penang</td>
<td>Catering</td>
<td>Single mother, uses house for home-stay for tourist</td>
</tr>
<tr>
<td>13.</td>
<td>Sau Hong</td>
<td>Penang</td>
<td>Sewing, cross-stitch</td>
<td>Disabled with polio makes cloth pencil cases, limited use of ICT</td>
</tr>
<tr>
<td>14.</td>
<td>Mai Lin</td>
<td>Penang</td>
<td>Type-setting</td>
<td>Disabled-in wheel chair, ICT literate</td>
</tr>
<tr>
<td>15.</td>
<td>Lina Lee</td>
<td>Penang</td>
<td>Teaches tailoring</td>
<td>Disabled with polio, single mother, uses Internet to obtain fashion designs</td>
</tr>
<tr>
<td>16.</td>
<td>Su Ching</td>
<td>Penang</td>
<td>Direct sales, recycles diskettes</td>
<td>Irresponsible husband, pregnant</td>
</tr>
<tr>
<td>17.</td>
<td>Hasmah</td>
<td>Penang</td>
<td>Sewing, Malay cakes</td>
<td>Single mother, member of single mother network</td>
</tr>
<tr>
<td>18.</td>
<td>Ina</td>
<td>Penang</td>
<td>Sewing, childcare</td>
<td>Single mother, member of single mother network</td>
</tr>
<tr>
<td>19.</td>
<td>Azura</td>
<td>Penang</td>
<td>Malay cakes</td>
<td>Very poor, irregular income</td>
</tr>
<tr>
<td>20.</td>
<td>Aminah</td>
<td>Penang</td>
<td>Malay cakes</td>
<td>Very poor with 7 dependants, irregular income</td>
</tr>
<tr>
<td>21.</td>
<td>Fatimah</td>
<td>Penang</td>
<td>Childcare</td>
<td>Single mother, member of single mother network</td>
</tr>
<tr>
<td>22.</td>
<td>Rosni</td>
<td>Penang</td>
<td>Bridal gifts</td>
<td>Single mother, talented and skilled, irregular income</td>
</tr>
<tr>
<td>23.</td>
<td>Nor Alaidah</td>
<td>Penang</td>
<td>Malay cakes</td>
<td>Single mother with 5 children, very poor</td>
</tr>
<tr>
<td>No.</td>
<td>Name</td>
<td>Location</td>
<td>Type of product</td>
<td>Special characteristics</td>
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</tr>
<tr>
<td>24.</td>
<td>Azizah</td>
<td>Penang</td>
<td>Retail sale</td>
<td>Single mother, inherited business from her mother</td>
</tr>
<tr>
<td>25.</td>
<td>Mina</td>
<td>Penang</td>
<td>Handicrafts from seashells and corals; Malay cakes</td>
<td>Very poor with 10 children, irregular income</td>
</tr>
<tr>
<td>26.</td>
<td>Maimunah</td>
<td>Penang</td>
<td>Instant roti canai, roti jala, satay; massage</td>
<td>Very poor, husband unemployed, primary earner</td>
</tr>
<tr>
<td>27.</td>
<td>Suhaila</td>
<td>Penang</td>
<td>Handicrafts from seashells and corals</td>
<td>Informal leader, ICT literate but does not use it very much</td>
</tr>
<tr>
<td>28.</td>
<td>Seow Fen</td>
<td>Penang</td>
<td>Baking</td>
<td>Unmarried with aged parents; works of with her sister, Ee Leen</td>
</tr>
<tr>
<td>29.</td>
<td>Ee Leen</td>
<td>Penang</td>
<td>Baking</td>
<td>Unmarried with aged parents; works with her sister, Seow Fen</td>
</tr>
<tr>
<td>30.</td>
<td>Mei Hwa</td>
<td>Penang</td>
<td>Baking</td>
<td>Husband unhealthy but supportive, he is ICT literate but does not use it very much</td>
</tr>
<tr>
<td>31.</td>
<td>Marilyn Dawson</td>
<td>Ipoh</td>
<td>Making “rolls” for basket weaving; data entry, translation and typing</td>
<td>Has a disabled son; has skills for computer work but no job offers; ICT literate</td>
</tr>
<tr>
<td>32.</td>
<td>Tan Siewlan</td>
<td>Ipoh</td>
<td>Typing/translation</td>
<td>Has skills but jobs are limited; ICT literate</td>
</tr>
<tr>
<td>33.</td>
<td>Radha</td>
<td>Ipoh</td>
<td>Basket-weaving</td>
<td>With disabled dependant; skilled at basket weaving; Salaam Wanita member</td>
</tr>
<tr>
<td>34.</td>
<td>Rafidah</td>
<td>Ipoh</td>
<td>Basket-weaving</td>
<td>With disabled son; Salaam Wanita member</td>
</tr>
<tr>
<td>35.</td>
<td>Jamilah</td>
<td>Ipoh</td>
<td>Basket-weaving</td>
<td>With disabled son; husband very supportive; has a computer but does not know how to use the Internet; Salaam Wanita member</td>
</tr>
<tr>
<td>36.</td>
<td>Linda</td>
<td>Ipoh</td>
<td>Basket-weaving</td>
<td>Has a disabled daughter; Salaam Wanita member</td>
</tr>
<tr>
<td>37.</td>
<td>Savitri</td>
<td>Ipoh</td>
<td>Freelance bridal makeup; sewing including bridal gowns; embroidery work</td>
<td>With disabled son, completed high school, not ICT savvy, can really benefit from internet use</td>
</tr>
<tr>
<td>38.</td>
<td>Ramlah</td>
<td>Ipoh</td>
<td>Basket-weaving; direct selling of health foods</td>
<td>Also works as a therapist for the disabled</td>
</tr>
<tr>
<td>39.</td>
<td>Ping Lee</td>
<td>Ipoh</td>
<td>Basket-weaving; translation and typing work; insurance selling</td>
<td>With disabled dependant; can use ICT</td>
</tr>
<tr>
<td>40.</td>
<td>Mary</td>
<td>Ipoh</td>
<td>Basket-weaving; selling clothes from home</td>
<td>With disabled dependant; Salaam Wanita member</td>
</tr>
<tr>
<td>41.</td>
<td>Wong</td>
<td>Ipoh</td>
<td>Basket-weaving; cooking for her husband to sell</td>
<td>Has two ill children; supportive husband; mother of Fong Shi May; Salaam Wanita member</td>
</tr>
<tr>
<td>No.</td>
<td>Name</td>
<td>Location</td>
<td>Type of product</td>
<td>Special characteristics</td>
</tr>
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</tr>
<tr>
<td>42.</td>
<td>Fong Shi May</td>
<td>Ipoh</td>
<td>Rolling paper for basket-weaving</td>
<td>Physically impaired; brain degeneration; poor eyesight; slow speech; well educated; keen to have a computer to aid communication; Salaam Wanita member</td>
</tr>
<tr>
<td>43.</td>
<td>Rebecca</td>
<td>Ipoh</td>
<td>Direct-selling; insurance selling</td>
<td>Single mother; sometimes helps part-time at kindergarten to supplement income</td>
</tr>
<tr>
<td>44.</td>
<td>Amy</td>
<td>Ipoh</td>
<td>Sewing clothes</td>
<td>Disabled from polio</td>
</tr>
<tr>
<td>45.</td>
<td>May</td>
<td>Ipoh</td>
<td>Freelance home-based accounting</td>
<td>Retrenched 3 years ago; could not obtain another job; irregular income</td>
</tr>
<tr>
<td>46.</td>
<td>Lee Tan</td>
<td>Ipoh</td>
<td>Sews shoe linings</td>
<td>Poor; learnt from factory</td>
</tr>
<tr>
<td>47.</td>
<td>Ti Mah</td>
<td>Ipoh</td>
<td>Freelance home-based accounting</td>
<td>Not many clients; uses computer for work</td>
</tr>
<tr>
<td>48.</td>
<td>Su Lin</td>
<td>Ipoh</td>
<td>Sews shoe linings</td>
<td>Subcontracting from factory; has previously worked in a factory</td>
</tr>
<tr>
<td>49.</td>
<td>Ahlian</td>
<td>Ipoh</td>
<td>Typing documents</td>
<td>Irregular income; supplements by waitressing</td>
</tr>
<tr>
<td>50.</td>
<td>Sharifah</td>
<td>Ipoh</td>
<td>Accounting/typing</td>
<td>Disabled from polio; uses computer for work</td>
</tr>
<tr>
<td>51.</td>
<td>Christine</td>
<td>Ipoh</td>
<td>Direct selling; insurance selling</td>
<td>Unmarried; living with mother and sister, ICT literate</td>
</tr>
<tr>
<td>52.</td>
<td>Li Hua</td>
<td>Ipoh</td>
<td>Soldering electronic parts</td>
<td>Single mother; poor</td>
</tr>
<tr>
<td>53.</td>
<td>Mei Ling</td>
<td>Ipoh</td>
<td>Packing of agar-agar</td>
<td>Poor, irregular income</td>
</tr>
<tr>
<td>54.</td>
<td>Lim</td>
<td>Ipoh</td>
<td>Hairdressing</td>
<td>Learnt through working in a hair salon; tried many home based jobs</td>
</tr>
<tr>
<td>55.</td>
<td>Devi</td>
<td>Ipoh</td>
<td>Handcrafted decorative pieces</td>
<td>Chronically ill; epileptic; irregular income</td>
</tr>
<tr>
<td>56.</td>
<td>Mrs Wong</td>
<td>Ipoh</td>
<td>Folding boxes for packaging</td>
<td>With disabled son, also works as an assistant trainer to help others perform therapy on the disabled; tried many home based work to supplement income</td>
</tr>
<tr>
<td>57.</td>
<td>Sharon</td>
<td>Ipoh</td>
<td>Retail sale</td>
<td>Asli. very poor; no formal schooling</td>
</tr>
<tr>
<td>58.</td>
<td>Marina</td>
<td>Ipoh</td>
<td>Hairdressing</td>
<td>Asli. Learnt through salon; only 1 year of formal schooling</td>
</tr>
<tr>
<td>59.</td>
<td>Safa</td>
<td>Ipoh</td>
<td>Baking/sewing</td>
<td>Asli. Subcontracts from a factory and gives jobs to other Asli women in the village</td>
</tr>
<tr>
<td>60.</td>
<td>Lydia</td>
<td>Ipoh</td>
<td>Data processing</td>
<td>Irregular income; earns 5 sen per data entry; uses computer; limited jobs</td>
</tr>
<tr>
<td>61.</td>
<td>Ming Fa</td>
<td>Klang Vale</td>
<td>Sewing</td>
<td>Subcontracts from a factory; since she has no land, she does not have access to the Internet</td>
</tr>
<tr>
<td>No.</td>
<td>Name</td>
<td>Location</td>
<td>Type of product</td>
<td>Special characteristics</td>
</tr>
<tr>
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</tr>
<tr>
<td>62</td>
<td>Li mei</td>
<td>Klang Valley</td>
<td>Sewing – dresses and shoes</td>
<td>Subcontracts from a factory; irregular work</td>
</tr>
<tr>
<td>63</td>
<td>Su Hua</td>
<td>Klang Valley</td>
<td>Sewing</td>
<td>Subcontracts from a factory; irregular work</td>
</tr>
<tr>
<td>64</td>
<td>Lin Yao</td>
<td>Klang Valley</td>
<td>Babysitting</td>
<td>Lives with her mother-in-law; 5 dependants</td>
</tr>
<tr>
<td>65</td>
<td>Yu Ying</td>
<td>Klang Valley</td>
<td>Babysitting</td>
<td>Poor with 5 dependants</td>
</tr>
<tr>
<td>66</td>
<td>Jia Li</td>
<td>Klang Valley</td>
<td>Sewing</td>
<td>Subcontracts from a factory</td>
</tr>
<tr>
<td>67</td>
<td>Yan Yan</td>
<td>Klang Valley</td>
<td>Sewing</td>
<td>Previously worked in a factory; subcontracts</td>
</tr>
<tr>
<td>68</td>
<td>Yu Wan</td>
<td>Klang Valley</td>
<td>Food preparation</td>
<td>Self-taught; husband distributes food to shops</td>
</tr>
<tr>
<td>69</td>
<td>Ai Meng</td>
<td>Klang Valley</td>
<td>Sewing</td>
<td>Learnt through a factory; subcontracts; no land line; no Internet</td>
</tr>
<tr>
<td>70</td>
<td>Li Peng</td>
<td>Klang Valley</td>
<td>Baking</td>
<td>Irregular income; based on orders for the festive seasons</td>
</tr>
<tr>
<td>71</td>
<td>Anusha</td>
<td>Klang Valley</td>
<td>Sewing sari blouses</td>
<td>Obtains orders from customers; has a live-in partner who tailors men’s clothes</td>
</tr>
<tr>
<td>72</td>
<td>Ho Ming</td>
<td>Klang Valley</td>
<td>Sewing clothes</td>
<td>Supportive husband; tailors for customers; household member uses ICT but does not know how to use it for work</td>
</tr>
<tr>
<td>73</td>
<td>Amutha</td>
<td>Klang Valley</td>
<td>Tailoring; babysitting</td>
<td>Sewing for 24 years but not much business now; supplements by babysitting</td>
</tr>
<tr>
<td>74</td>
<td>Seetha</td>
<td>Klang Valley</td>
<td>Making gloves</td>
<td>No formal schooling; subcontracting from a factory; poor</td>
</tr>
<tr>
<td>75</td>
<td>Pushpa</td>
<td>Klang Valley</td>
<td>Making gloves</td>
<td>Subcontracts from a factory; working for 3 years; primary earner</td>
</tr>
<tr>
<td>76</td>
<td>Gowri</td>
<td>Klang Valley</td>
<td>Making gloves</td>
<td>No formal schooling; household members use ICT but she cannot</td>
</tr>
<tr>
<td>77</td>
<td>Latha</td>
<td>Klang Valley</td>
<td>Making gloves</td>
<td>70 years old; learned from neighbours who are making gloves</td>
</tr>
<tr>
<td>78</td>
<td>Saras</td>
<td>Klang Valley</td>
<td>Sewing</td>
<td>Poor; subcontracts from a factory</td>
</tr>
<tr>
<td>79</td>
<td>Jayamani</td>
<td>Klang Valley</td>
<td>Babysitting/sewing</td>
<td>Poor; has to do many jobs; no steady income; member of the YSS group</td>
</tr>
<tr>
<td>80</td>
<td>Rani</td>
<td>Klang Valley</td>
<td>Cooking/baking</td>
<td>Single mother; household members use ICT; ICT literate but not for work; member of the YSS group</td>
</tr>
<tr>
<td>No.</td>
<td>Name</td>
<td>Location</td>
<td>Type of product</td>
<td>Special characteristics</td>
</tr>
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</tr>
<tr>
<td>81</td>
<td>Shamala</td>
<td>Klang</td>
<td>Sewing/babysitting/handicraft</td>
<td>No regular income; household members use ICT—she does not; member of the YSS group</td>
</tr>
<tr>
<td>82</td>
<td>Nanda</td>
<td>Klang</td>
<td>Home-tuition</td>
<td>ICT literate and uses much for work; member of the YSS group</td>
</tr>
<tr>
<td>83</td>
<td>Kala</td>
<td>Klang</td>
<td>Baking</td>
<td>Has community ICT facilities; member of the YSS group</td>
</tr>
<tr>
<td>84</td>
<td>Meena</td>
<td>Klang</td>
<td>Sewing/baking</td>
<td>Has community ICT facilities; has not used ICT for work; member of the YSS group</td>
</tr>
<tr>
<td>85</td>
<td>Susila</td>
<td>Klang</td>
<td>Sewing/selling clothes</td>
<td>Has community ICT facilities; does not use ICT for work; member of the YSS group</td>
</tr>
<tr>
<td>86</td>
<td>Ambiga</td>
<td>Klang</td>
<td>Babysitting</td>
<td>Has community ICT facilities; member of the YSS group</td>
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<tr>
<td>87</td>
<td>Jothy</td>
<td>Klang</td>
<td>Teaching classical dance</td>
<td>Has community ICT facilities; member of the YSS group</td>
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<tr>
<td>88</td>
<td>Barbara</td>
<td>Klang</td>
<td>Home tuition</td>
<td>ICT literate; use for information for work</td>
</tr>
<tr>
<td>89</td>
<td>Usha</td>
<td>Klang</td>
<td>Sewing</td>
<td>Single parent; limited use of ICT for work</td>
</tr>
<tr>
<td>90</td>
<td>Tan</td>
<td>Klang</td>
<td>Home tuition</td>
<td>Single; uses ICT for work</td>
</tr>
</tbody>
</table>
ASSISTANCE
### Appendix A2

**Assistance Programmes Supporting ICT Usage by Women Homeworkers in Malaysia**

<table>
<thead>
<tr>
<th>Name of organization</th>
<th>Programme name</th>
<th>Promote ICT? Y/N</th>
<th>Programme brief/ Duration</th>
<th>Time period/ Duration</th>
<th>Programme partners</th>
<th>Beneficiaries</th>
<th>Type of Assistance provided</th>
<th>Progress to date</th>
<th>Contact person/ e-mail/ phone</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Government</strong></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Ministry of Technology</td>
<td>Demonstrator Application Grant Scheme (DAGS)</td>
<td>Y</td>
<td>Grant to organizations promoting ICT</td>
<td>Since 2000</td>
<td>NGO’s</td>
<td>Various groups</td>
<td>Capacity building</td>
<td>No report</td>
<td>Ministry of Technology</td>
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<tr>
<td>DBIpoh</td>
<td>Ipoh Virtual City</td>
<td>Y</td>
<td>ICT for all</td>
<td>2000-</td>
<td>Many</td>
<td>All in Ipoh</td>
<td>Setting up infrastructure and training</td>
<td>Good progress</td>
<td>DBIpoh 052-442249</td>
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<tr>
<td><strong>NGO</strong></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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<tr>
<td>NCWO</td>
<td>Networking women</td>
<td>Y</td>
<td>Networking NGO affiliates</td>
<td>2000-01</td>
<td>DAGS NITC</td>
<td>NGOs</td>
<td>Capacity building</td>
<td>achieved</td>
<td>Dr. Farida Habib</td>
</tr>
<tr>
<td>Yayasan Strategik Sosial</td>
<td>e-upcom</td>
<td>Y</td>
<td>Urban poor poverty upliftment</td>
<td>2002 -</td>
<td>MPPJ ICT consultant</td>
<td>Urban poor</td>
<td>Organizing and mobilizing through ICT</td>
<td>Good progress</td>
<td>Jasmine YSS 03-40415958</td>
</tr>
<tr>
<td><strong>International organizations</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Asia Community Service</td>
<td>First Step Centre</td>
<td>Y</td>
<td>Reaching out to people with learning disabilities</td>
<td>1997-</td>
<td>Those with learning disability</td>
<td>Living Skill training</td>
<td>Good progress</td>
<td>ACS First Step centre 04-6585396 <a href="mailto:acspen@po.jaring.my">acspen@po.jaring.my</a></td>
<td></td>
</tr>
</tbody>
</table>
PHOTO ESSAY
**Introduction**

The Research involved 90 homeworkers. The methodology includes Focus Group Discussion (FGD). This FGD is among Tamil speaking homeworkers in Petaling Utama, Klang Valley.

Jamilah, one of 13 poor homeworkers with a disabled child, high sense of religious and traditional duty and responsibility to her family, basket-weaver, member of eHomemaker’s Salaam Wanita Project.

Vulnerable groups of women homeworkers include single mothers and those with physical disabilities. Lina Lee, one of the 8 homeworkers with disability, a single mother, a skilled tailor of cheongsam and kebaya and a tailoring instructor, uses ICT for her work.
Enabling Environment

Women faced with the feminine dilemma, creatively choose homework so that small children are kept within eye view, often in front of TV while they do their productive work.

Spatially confined by her sense of religious duty and cultural responsibility, Jamilah chose homebased work as a creative alternative to be gainfully employed to supplement family income and uplift family wellbeing.

Hardest to combine with productive work is care of disabled and chronically ill dependants as they need constant attention. James has a small head and throat which causes him to choke and turn blue.
Bearing little or no responsibility for domestic chores, men relax and while away time with small talk and discussion while their wives bear the double burden of productive and reproductive work at home.

Few men are like Ho Ming’s husband who takes responsibility for cooking even after a hard day’s work at the office, leaving her more time for her homebased tailoring.

After the difficult birth, Jamilah’s son, Jalal, was born with respiratory problems and epilepsy. He is unable to control movements of his limbs and needs constant care.
Few husbands are like Radha’s husband who assists in taking care of his two disabled children. The parents have to support their 23 year daughter with cerebral palsy, to walk. They have only one wheel-chair which is used by their younger son who has the same disability.

Homeworking can help those with a physical disability, in a disable unfriendly environment which confines them to their home, to earn without having to go out to work. It helps them to overcome some of the obstacles which would otherwise prevent them from earning a living.

The women are spatially confined in Pulau Aman, Penang, with a population of 300 people living within 30% of 288 acres of land. The main occupation is fishing. It is a declining industry. Other new industries include agro-tourism.
In this neighbourhood of Menglembu, Ipoh, where many are involved in home based shoe-making, homeworkers do not share information about payment, or the name of the factory. Their reluctance is due to the perception that what they do is ‘illegal’ because of lack of registration or harassment by local authority officials restricting business in residential areas.

Some women on Pulau Aman use the by-products to make handicrafts. These crafts were taken to a Trade Fair on the Mainland but neither payment nor goods came back. They were told the goods were of low quality and are not sellable. Homeworkers felt cheated. An OTOP like programme will help them.
Government efforts for ICT infrastructure like making Ipoh city a virtual city, or an e-city does not necessarily narrow the digital divide between rich and poor, educated and less educated.

Shoe Factories subcontract to homeworkers to stitch the straps according to pattern and to stick them to the sole. She is paid 4-5 cents a pair for sticking soles and 8-10 cents a pair for stitching straps.

Many homeworkers who live in squatter houses do not have access to electricity, phone and Internet facilities.
Local government authorities, especially in the Klang Valley, have demolished many squatter homes.

The evicted squatters are relocated to flats with electricity, phone and Internet facilities, making ICT use possible.

Activities to Address Gender Equalities and Empowerment Issues
Challenges Facing Women Homeworkers

Factory van delivers and collects from home-based subcontractors, saving them the inconvenience and difficulties of leaving their home.
Homeworking equipment like soldering irons is a safety and health hazard to small children who cling and hover around their mothers at work.

Factories externalize costs by placing machines in the homes of subcontractors rent-free, thus reducing their own space and rent.

Homeworkers subcontracting from shoe factory earn US$4 -20 cents per pair. It is about 10% of cost price and 0.5% of selling price.
Making Kuih Siput for sale at $3 per kilogramme. The cost of flour increased by 10%. Supplied to middleman to sell at his own price, which is at least 50 cents more.

Haslinah learned to make gamat oil from her grandmother. It is used for soothing and healing sores, burns and wounds. It is sold directly to customers for $1.20 an ounce, which is then sold up to 1,000 kilometers away to others for $2 - $3. If she takes into account the costs of materials and labour, she probably earns zero net profit.

When homework is irregular and seasonal, Anusha has to supplement income with other work like selling newspapers in the morning.
While much of the earnings of home-workers supplement the family income, with husbands having access to payments collected, some goes to toys for the boys (and men).

Being more mobile, husbands buy raw materials and supplies and distribute products. Since payment is made when the product is sent, they also receive the payments, thus gaining control of the money their wives earn.
YSS focus on building the neighbourhood in Petaling Utama.
Translation:
Basic Information
Petaling Utama
Area: 10 Acre
Location: Jln PJS
Total Population: 3320 people
Malay 720 persons /21.7%
Chinese 200 persons/ 6%
Indians 2400 persons/ 72.3%
Occupation Sector
Civil Servant 10%
Retiree 5%
Private Sector 70%
Business 10%
Self Employed 5%

YSS set up a community centre as well as Communal ICT Centre, e-upcom supported by Petaling Jaya Municipal Council for residents relocated from demolished squatter areas.
Waiting to use the Internet at E-upcom’s community ICT Centre set up by YSS and Petaling Jaya Municipal Council for Petaling Utama. There was no phone line to facilitate Internet connection. The Centre remained closed for many months.

Use of ICT is not just a question of affordability. While homeworkers claim that they cannot afford the computers and Internet, many families willingly pay $250 for cable TV (Astro) console and monthly subscription of $18, same as monthly broadband monthly charges. Often they submit to family preference for entertainment. Note the number of Astro dishes (red oval marking) these low cost flats have where many homeworkers live.

While Lina Lee like many single mothers, understands the utility of the computer and its importance to her work, she indulges her only son, by placing it in his room thus allowing him greater access for his studies.
Knowledge and skills empower many homeworkers. eHomemakers through Salaam Wanita project trains its members to turn recycled paper into beautiful baskets. It tries to establish a brand for the baskets and explain the significance of using recycled paper and help vulnerable groups. Buying these baskets supports vulnerable homeworkers and their families.
Salaam Wanita Basket Weavers earn more than subcontractors. The price of shellac has increased from $4.86 to $5.28 per tin and wire from $1 to $1.52. She earns about 40% of the price as her gross income, better than the 10-20% earned by most subcontractors.

Without their own income, many feel insecure and fear infidelity by their husbands. While she wears a headscarf in public, Jamilah uses her earnings to beautify herself and dresses for her husband, keenly aware that he is permitted by his religion to have up to 4 wives.

Rashid, like some husbands, is supportive of his wife’s homeworking. He believes that by using her creativity she will better cope with Jalal’s disability. He takes his share of caring for the children to give her personal time.
Time and labour saving electrical appliances are purchased on monthly installments to save time for homework. Semi-automatic washing machines with prices as low as $80 can be purchased on monthly installments of $5-10 a month over one or two years at high interest.

Aware of the value of his wife’s earning, Rashid, like some other husbands, is more supportive and helps her to paint and lacquer the baskets.
Preventing Marginalization of Women in the Labour Market

The relative poverty of home entrepreneurs and subcontractors is evident from their home décor.

KUNITA on Pulau Aman utilizes their financial provisions for one time event like holding feasts rather than sustained efforts such as promoting cage fishing for fisherwomen. It gives out contracts for catering and allocates different dishes to members to make on rotation basis. Some make dessert and others main dishes.
Commercial Fish farming in cages or cage fishing operated mainly by Chinese is more lucrative. KUNITA has not assisted the fisher folk (mainly Malay) to do the same. Women are marginalized and not assisted to have own fishing business. They are regarded as wives of fishermen.

The only school is the government primary school (red oval) where dedicated staff are few. The principal who stays on the mainland comes for only about 4 hours a day. Many drop out and stay on the island but jobs are few.

Those who do well in primary school, have to go to the Mainland to continue secondary education. Most continue to stay there due to jobs or marriage.
After a few years on the Mainland, it is hard to return to Pulau Aman where there is no shopping complex or cinemas. Some fed up of city life come home to find fishing life too hard or they lack skills. Many go periodically to sea and do odd jobs.

After becoming tired of being in the city, some return to Pulau Aman but there are few opportunities besides fishing and agro-tourism.

Because of the inconvenience of attending courses and training, homeworkers like Lina Lee can learn from newspaper, books and media the use of ICT for their work.
Lina Lee is able to use the computer and Internet to surf for designs and improve her cutting and sewing skills.

Homeworkers use ICT to earn extra cash. Advertisements like this help them to use mobile phones to earn extra cash.

Lina Lee specializes in stitching the cheongsam, a traditional Chinese figure-hugging attire with high collar which demands a high level of skill.
Organisations and networks like eHomemakers’ Salaam Wanita Project provide homemakers customized courses, marketing, branding and distribution which isolated homeworkers are not able to establish.

These baskets express through hands the power of the mind and make visible the beauty within. Homeworkers bring forth the products, so often invisible in the economy.
Jamilah, like other Salaam Wanita members, is free to teach others or make baskets for private sale. Very popular is the egg basket (*bunga telur* basket) used for Malay weddings. She sells for 25 cents each.

Mdm. Wong with her two children with brain degeneration, learnt basket weaving from recycled paper but due to their difficulties with limb coordination, the baskets they weaved were of lower quality and are often rejected by the Salaam Wanita coordinator. Now they focus on making rolls instead, earning $1.60 for 1,000 rolls. She prepares rice and dishes for her husband to sell to supplement income.
Sue, coordinator of the Salaam Wanita Project helps Jamilah to be systematic in record keeping and proper accounting which is not common in homeworking. This is a step closer to entrepreneurship and accessing loans from financial institutions.

Resolving “Women in Technology Question”

Many organizations offer women skill training sessions primarily conducted by professionals, often male. Note the worried faces hoping for confirmation of doing the right thing.

Websites are often in English and many homeworkers do not have the literacy to benefit from it. Many hope to learn from sites like this to become a homepreneur and be self reliant. Lina Lee, for example, hopes she can order home-delivery tailoring supplies or stitch for better paying clients globally and teach her tailoring course on-line.
Lina Lee’s computer, for example, is in her son’s room and he has greater access to it. He and his friends love to play games and Lina Lee has to cajole and persuade them to stop and let her use it for her work.

Many women are still overwhelmed by technology. Jamilah, for example, has access to a computer but believes that it is beyond her capability. Technology has to be demystified.

Institutions like banks and government offices do not target women homeworkers to use ICT like phone banking and e-banking.
Resolving the Technology Question

With training, even those initially overwhelmed by technology like Jamilah, learns to use SMS to take and confirm orders for baskets. Sue, Salaam Wanita’s coordinator use eHomemakers’s web to phone application to send out measurements and design of orders to members and whoever can fulfill these orders, replies.

Even at the fringes of Ipoh city where Sharon, an Asli (native) home worker, lives there are phone facilities.

Some, like Marilyn, learn to use ‘Google’ to access free translation services and get better words or sentences to facilitate their work.
After the initial meeting and measurements, Lina Lee is able to communicate with her clients by phone or email to take future orders. They send her the cloth or authorize her to buy the material, she finds a suitable design and emails it to them. Once confirmed, she stitches the dress and couriers the completed attire to the clients. She prefers her clients to bank the payments into her account directly instead of sending her a cheque as it saves her the inconvenience of going to the bank.

Lina Lee found websites offering fashion designs for cheongsam and learns better ways to cut and stitch them from chat rooms.
Bluetooth (wireless) for hands free answering of calls is available but expensive. Cheap ones made in China are available at night markets but the sound hurts the ear and causes headaches after prolonged use.

Homeworkers need their hands to make crafts or to cook. Answering a call takes their attention and time away.

Unfortunately many of the clients are still not ICT savvy. She prints out the design to show to clients as well as email to those further way for confirmations. She will be able to reach a wider market if more use ICT.
Fong Shi May, a homeworker who had a tertiary education but now suffers from brain degeneration disease, has failing eyesight and poor limb coordination. She wishes to own a computer so that she can use email for communication, networking, gaining knowledge, basically to connect to the world.

Each step towards resolving the technology question will advance homeworkers. In her determination to overcome her disability and immobility, Lina Lee modified the height of her furniture to accommodate her wheel chair, then she learned through ICT, ways to modify a car for her use. Similarly other homeworkers can master ICT to find ways to overcome barriers to improve their well-being.