GENDER AND DIGITAL DEVELOPMENT IN THAILAND

Introduction

The wave of digital transformation has swept across the globe, with its pace significantly accelerated by the COVID-19 pandemic, which expedited the adoption of digital technologies by several years. However, this rapid digital metamorphosis is not without the risk of escalating gender inequality. The digital divide, defined as “the distinction between those who have access to and can utilize digital communication services and those who are excluded from these services”, exhibits a gendered aspect. This gender digital divide “reflects the inequalities between men and women in terms of access to and usage of digital technology”. This document offers an overview of the gender equality issues in digital development in Thailand, drawing on a literature review, initial findings from research conducted in Udon Thani province in 2022, and findings and recommendations from the 2023 Adult Skills Assessment in Thailand (ASAT).

Gender and Digital Development

Worldwide, gender gaps in the digital domain persist across various fronts. The recent World Bank Digital Development Note on Gender Equality pinpoints the following key issues: (i) Digital Infrastructure, which includes physical, social, and economic factors influencing digital access, such as affordability, usage, literacy, and social norms; (ii) Digital Public Platforms, where many women across different countries still face obstacles in obtaining digital national identification, leading to restricted access to public platforms and services; (iii) Digital Financial Services; (iv) Digital Business, where female digital entrepreneurs often encounter barriers and constraints similar to those in other sectors, such as difficulties in fundraising, restrictive social norms, and challenges in balancing business, family, and well-being; (v) Digital Skills, encompassing gender gaps in ICT skills and women’s participation in STEM education and careers; (vi) Online Safety and Security, which exposes women and girls with low levels of digital literacy to a range of online gender-based violence; (vii) Social Norms, referring to restrictive social norms and biases that affect the digital skills and participation of women and girls.

Algorithmic Bias, which can inadvertently perpetuate existing human biases in data if not properly addressed; (ix) Lack of Sex-Disaggregated data and research on the gender digital divide in numerous countries.

### Thailand Digital Policy

Thailand harbors ambitious plans for digital development. In 2016, the Thailand 4.0 initiative was launched with the goal of fostering a ‘digital economy and society’, aiming to transition the economy to a technology-driven and value-based model. The 20-Year Digital Economy and Society Development Plan (2017-2036) was established to steer the country’s long-term digitalization efforts, focusing on six strategies: (i) constructing a country-wide high-capacity digital infrastructure; (ii) invigorating the economy with digital technology; (iii) cultivating a high-quality and equitable society through digital technology; (iv) transitioning into a digital government; (v) developing a workforce for the digital era; (vi) establishing trust and confidence in the usage of digital technology, which includes the development of standards, rules, regulations, and laws. The establishment of the Ministry of Digital Economy and Society in 2016 further emphasized Thailand’s commitment to digital development, supporting the growth of the digital economy and formulating policies to attract digital businesses.

Despite robust efforts in digital development, Thailand has encountered challenges related to digital inequalities, such as the urban-rural divide in digital infrastructure, where most investments, such as smart cities and digital parks, remain concentrated in urban areas. Additionally, a pronounced digital divide exists across different age groups, mirroring a global trend.

### Gender and Digital in Thailand

#### Access and Use.

A household survey conducted in 2020 on the use of Information and Communications Technology (ICT) in Thailand revealed that ICT usage for women was marginally lower than for men, barring the use of computers (desktops, laptops, and tablets).

<table>
<thead>
<tr>
<th>ICT Usage</th>
<th>Urban Male</th>
<th>Urban Female</th>
<th>Rural Male</th>
<th>Rural Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile Phone</td>
<td>96%</td>
<td>95.5%</td>
<td>94.3%</td>
<td>93.7%</td>
</tr>
<tr>
<td>Internet</td>
<td>84.7%</td>
<td>82.5%</td>
<td>74.3%</td>
<td>72.0%</td>
</tr>
<tr>
<td>Computer</td>
<td>31.9%</td>
<td>33.5%</td>
<td>20.0%</td>
<td>22.3%</td>
</tr>
</tbody>
</table>

Field research carried out in nine rural villages of Udon Thani province by Rajabhat University in 2022 yielded initial findings indicating adequate access to mobile phones and internet services for both men and women. However, these findings also pointed out a deficiency in digital skills, which hampers the full utilization of income-enhancing opportunities and other potential benefits of the digital economy. Key initial findings include:

- While over 85% of adult women own a mobile phone, only about 10% of women own or use a computer. The use of computers among women is primarily limited to students or government workers.
- The government’s Village Broadband Internet (Net Pracharat) was installed in seven out of the nine surveyed villages. However, usage remains limited due to unstable signals and limited reach. A majority of villagers (90%) opt for home Wi-Fi or mobile internet.
- Most villagers can use basic applications on mobile phones, including LINE, YouTube, Facebook, and online shopping applications like Lazada and Shopee. However, there is a noticeable lack of digital skills training, which restricts villagers from harnessing the potential of digital technology for economic opportunities, such as participating in e-commerce or online skill training.
- The custom application from the Ministry of Public Health (MOPH), used by village health volunteers, serves as a good practice example of rural digital implementation programs. Predominantly female volunteers can effectively

4 Bukht, R., & Heeks, R. (2018). Development Implications of Digital Economies. Centre for Development Informatics, Global Development Institute, SEED.
(i) receive updated health-related information; (ii) send village-level health data to the Ministry; (iii) communicate with other volunteers, doctors, local hospitals, and relevant health agencies. The MOPH implemented extensive coaching to ensure all volunteers can use the application.

Women in ICT. In the ICT profession, among the 473,462 ICT workforce in Thailand in 2020, men represented a higher percentage (64.7%) than women (35.3%). The nature of participation in ICT work varies by gender: men predominantly engage in sales and technical roles, while women are concentrated in sales and services (see Table 2).

The existing gender gap in STEM education may contribute to the lower participation of women in the technology industry. The enrollment of female students in STEM education has consistently been lower than that of male students, with women accounting for only around 30.1% of STEM graduates at the university level.\(^7\)

Gender and Digital in the Informal Sector

Over half of Thailand’s workforce is engaged in the informal sector\(^8,9\). The distribution of male and female informal workers shows little difference (men at 52.7%, women at 51.2%); however, the wage gap in informal employment is at 10%, which is significantly larger than in formal employment where the average wage gap is approximately 4%.

According to the 2019 ICT survey, despite men and women having roughly equal access to mobile devices and the internet, internet usage was notably higher for women in formal employment (88%) compared to women in informal employment (69%)\(^11\). The largest group of informal workers consists of home-based workers who subcontract work to be done at home. Home-based work is a more significant source of employment for women than men. While digital technology offers potential for economic empowerment, the following concerns were outlined in a study titled ‘Women Homeworkers in Thailand’s Digital Economy’\(^12\):

- **Invisibility of women**: Home-workers, such as subcontractors or waged-homeworkers, are largely ‘invisible’ in the production process. They are often not seen as primary users of technology and thus have limited opportunities to acquire or enhance digital skills.

- **Masculine culture of technology**: There are factors that hinder women from using and mastering technology. However, the situation in Thailand has significantly improved, particularly in terms of women gaining access to ICT.

- **Domestic work burden**: The division of labor within households primarily falls on women. Unless domestic work responsibilities are shared, women will continue to bear the double burden of domestic work and economic activities. Introducing ICT usage without addressing this issue may increase, rather than reduce, the burdens and responsibilities of homeworkers.


\(^{11}\) Sasivimon Paweenawat (2002). Gender and Informal Employment.

Adults Skills Assessment

As Thailand strives towards its strategic vision, Thailand 4.0, it faces a significant challenge in digital skills development. Despite the government’s commitment to prioritize foundational skills as an essential aspect of economic and social development, a considerable deficit in these skills, particularly digital skills, is evident among a large segment of the population. The first large-scale assessment of adult skills in Thailand conducted in 2022, ASAT, focused on six demographic groups to evaluate the digital and other foundational skills necessary for success in the labor market. The findings, regrettably, highlight a pronounced skills deficit. This shortfall is mainly concentrated among individuals over 40, those lacking higher education, residents of rural areas, and inhabitants from the Northern and Southern regions of Thailand. In economic terms, this deficit accounted for 1.4% of Thailand’s GDP in 2022\(^\text{13}\), emphasizing the urgent need to address this issue.


The report identified four population subgroups particularly lacking in foundational skills, leading to sub-optimal labor market outcomes: young women without tertiary education, young men without tertiary education, older women, and older men.

The assessment revealed that those deficient in foundational literacy and digital skills are primarily young adults without tertiary education and older adults. 84.5% of older women and 85.8% of older men had proportions of adults below the threshold levels of digital skills. Similarly, young women and men without tertiary education displayed high proportions of individuals below the threshold levels of digital skills, at 63.1% and 68.9%, respectively.
Moving forward in closing the digital gender divide

Digital progress should be coupled with efforts to reduce digital inequality gaps. In Thailand, gender gaps persist in digital development. Although the gender divide in access to digital technology is relatively narrow, challenges remain for women to fully participate in the potentials of the digital economy.

To address these gender gaps in digital development, potential areas of focus might include:

- **Addressing gender in national digital policies and strategies:** Implementing digital policies could help bridge remaining and emerging gender digital divides in areas such as women’s STEM education, women’s participation in the technological side of digital development, and online safety.

- **Enhancing digital empowerment for women:** Digital technologies present opportunities for women to increase employment and income. Support for capacity building, digital upskilling, and the use of digital tools to enhance earnings and business development will be necessary, particularly among women in the informal economy.

- **Addressing remaining gender bias and raising awareness:** Deep-rooted gender bias and stereotypes still exist, preventing women and girls from benefiting equally and fully from digital development. Special support programs, such as funding and networking for women in digital technology and women tech startups, can strengthen women’s participation. Additionally, promoting fair redistribution of unpaid childcare and housework among male and female household members would allow women to participate more fully in economic activities enhanced by the digital economy.

- **Collecting sex-disaggregated data and monitoring progress:** Sex-disaggregated and evidence-based data will offer clearer insights into remaining gaps and trends, benefiting policies, strategies, and actions aimed at closing the gender gaps in digital development.

Specific recommendations for Women Homeworkers in Lampang, Chiangrai, and Srisakate, focusing on the challenges in ICT usage:

- **The need for digital skills training:** While homeworkers have some access to online ICT resources, there is still a need for training, particularly with a curriculum tailored to home-based learners. Incorporating gender considerations into the content and delivery of training, and providing flexible scheduling for women home-based workers, is encouraged.

- **Peer training and networking at the community level:** Establishing peer training and networking opportunities within the community can support ongoing learning and the application of ICT skills.

- **ICT training for business development:** Enhancing understanding of ICT usage for community and business advancement through training programs focused on business development would be beneficial.

Recommendations from the Adult Skills Assessment:

- **Developing digital skills programs for target groups:** To improve market outcomes, develop digital skills programs specifically designed for the target groups identified in the Adult Skills Assessment, such as young women and men without tertiary education, and older women and men.

- **Mobile training units for rural areas:** Deploying mobile training units to provide digital literacy training and resources in remote regions can help bridge the digital divide for those living in rural areas.

- **Region-specific digital training programs:** Collaborating with local communities and institutions to develop region-specific digital training programs that cater to unique needs and cultural nuances of the Northern and Southern regions would be beneficial in closing the skills gap.