Research Article

Closing The Digital Gender Gap In Indonesia Through The Roles And Initiatives Of Civil Society Organizations

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Abstract

The digital gender gap is still a big, unseen problem in Indonesia. The government alone will not be able to close this gap, and it needs support from the private sector and the role of civil society. This study aims to explore and determine Civil Society Organizations' (CSOs) role in closing the digital gender gap in Indonesia. Using a qualitative approach, this research collected data and information through interviews and focus group discussions with CSO representatives who have long been advocating for various vulnerable groups of women in Indonesia. Multiple literatures and reports related to the digital gender divide were also reviewed. An important finding in this study is the description and exploration of the various roles of CSOs in digital assistance to women and vulnerable groups through a wide range of programs such as (1) advocating for women's rights, (2) promoting digital literacy, (3) fulfilling the Rights to Sexual and Reproductive Health, (4) protecting women victims of violence, (5) public policy oversight, (6) encouraging women's public/political participation, (7) securing recognition of marginalized groups, (8) women's economic empowerment, and (9) environmental sustainability campaigns. The results of this research indicate that CSOs have directly or indirectly contributed to increasing the capacity of individual women and groups they engage with. The various digital mentoring roles performed by CSOs have helped women and other vulnerable groups to become more confident, thereby increasing their participation in the public sphere, mainly through the use of ICT/the internet.

Keywords*: Digital gender gap; Civil society organizations; ICT; Women's empowerment; Indonesia*

INTRODUCTION

In the 2018 Human Development Report, it was revealed that Indonesia's Gender Inequality Index (GII) was recorded at 0.453 points, which was above the ASEAN average of 0.356 points. Indonesia is ranked the fourth highest after Cambodia (0.473 points), Laos (0.461 points), and Myanmar (0.456 points). Globally, Indonesia is still ranked 85th out of 153 countries with a score of 0.70 based on The Global Gender Gap Index 2020 report released by the World Economic Forum (WEF). This figure has not changed since 2018. It means that the country needs to make a serious effort to improve Indonesia's gender inequality index. One of the most important is women's low participation in the economic and political spheres.

For example, in the economic field, the Central Statistics Agency noted that the wage gap between men and women remains fairly wide (BPS, 2019). Between February 2015 and February 2019, the difference in wages reached IDR 492,200. In detail, the pay gap in 2015 was IDR 269,000, IDR 458,400 (2016), IDR 554,000 (2017), and IDR 560,600 (2018). Meanwhile, until February 2019, the gap has widened to IDR 618,800. BPS stated that the wage gap arose as a result of an assumption that women are less likely to contribute to work. In addition, women also tend to be placed in low-value positions. This problem is a challenge for women in the workforce to get equal jobs, incomes, and leadership positions.

BPS also noted that men still dominate the position of managers in Indonesian companies. From 2016 to 2018, the highest share was in 2016 at 75.83%. In contrast, only 24.17% of managerial positions are filled by women. Although men continue to dominate managerial positions, the numbers have gradually decreased in 2017 and 2018 at 73.37% and 71.03%, respectively. Trust in women to occupy manager-level positions on the other hand has increased slightly. In 2017, 26.63% of women served as managers. The following year, the share rose to 28.97%.

The Indonesian government needs to work on policies and programs that are more gender-inclusive to ensure that all women and girls have equal access to advanced digital technology in order to achieve full development. According to OECD (2018) and the Gender Digital Divide Index Report (2022), the digital gender gap is the difference between groups (men and women) accessing digital technology and the internet. Girls and women often have less access to technol-

ogy and the internet, especially in developing countries, compared to boys and men. Such digital exclusion can prevent individual women and girls from realizing the benefits of digital technologies.

The UN also underlined that the lack of access and adequate use of the internet would slow down the achievement of the SDGs targets (Kerras et al., 2020). Of all the existing SDGs targets, access to and mastery and involvement in Information and Communications Technology (ICT) have helped accelerate the fulfillment of SDG 4, 5, and 9. In SDG 4 (equitable and inclusive education), women's involvement in online-based education will empower and help them adapt to changes in the labor market. Internet access in education has provided opportunities for different groups to be involved in the educational process.

At both the global and national levels, several studies show a close correlation between women's empowerment in ICT and a country's improved general welfare. The ideals of sustainable development can only be achieved by ensuring the inclusive involvement of community groups. These ideals will not be achieved if women are left behind and are not fully involved in offline and online public life since these two aspects are interrelated and inseparable (Van Dijk, 2003).

Civil Society Organizations (CSOs) play a vital role in the context of digital empowerment, especially in ensuring that women from vulnerable groups can access ICT to improve their social status, economy and increase their participation in other aspects of public life. ICTs can promote inclusive democracy, and have great potential to promote equal citizenship. Women are encouraged to be connected to ICT and need to be ensured that they can make meaningful use of it. CSOs' digital advocacy role in empowering women in the ICT era is very important. CSOs play an essential role in civic life as they advocate women's interests. CSOs are agents of social change, and this group has an emancipatory spirit to transform society (Kang, 2014).

Unfortunately, research related to CSOs' contribution to digital literacy for women and vulnerable groups is still rare (Rauf, 2020). Previous studies have observed how some CSOs, such as Indonesia Women IT Awareness (IWITA), FemaleDev, and SafeNet, are helping to improve digital literacy in women. Good practices on digital literacy that would benefit women were also identified from the experiences of several CSOs, including IWITA, FemaleDev, and SafeNet. Other good practices on ICT-based networking and campaigning were also drawn from CSOs, such as SafeNet, *Srikandi Sungai Indonesia* (SSI), New Men's Alliance (ALB), Samsara, Yasanti, *Mitra Wacana*, and *Solidaritas Perempuan Untuk Kemanusiaan dan Hak Asasi Manusia* (SPEK HAM) (Habsari, 2021; Karolus & Afiyani, 2016; Maryani et al., 2018).

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A study by Sukmi (2016) highlights the role of new media. Social media is considered a tool that can help the process of social movements. The study examines CSOs focusing on women's empowerment issues that have been using the internet to create web-based audio-visual products (YouTube), social media, fan pages, and other forms of online campaigns. The internet helps facilitate interaction between activists and target groups. However, offline advocacy strategies remain essential as certain vulnerable groups are more likely to need face-to-face rather than online assistance.

Suwana and Lily (2017) found that Indonesian women are more likely to use the internet for social interaction than for business and political purposes. Although digital literacy is vital to empowering women, the research showed that women need to be more digitally empowered. IWITA, for example, empowers homemakers to use the internet for income-generating activities and to engage in public life. Meanwhile, FemaleDev focuses on young girls to get them interested in coding so they can develop applications. It encourages the use of technology and involvement in knowledge and technology production.

Another research by Maryani et al. (2018) shows the importance of social media in engaging men in promoting gender equality in Indonesia. The Alliance of New Men (ALB) has been actively campaigning for equal relations between men and women through social media. Based on the case study, it was clearly established that the media provides space for freedom of thought and participation to promote social change. Ratnasari et al. (2021) also discussed the campaigns that SAFEnet has launched to promote digital literacy at the community level, especially among women on gender-based violence (GBV). SAFEnet provides assistance to GBV cases and builds awareness about data security as a means for women to go online safely.

A study by Parahita (2019) shows that digital feminist activism in Indonesia has helped create digital safe spaces and online discussion forums, mobilized women's rights movements, and encouraged research publications. The study looked at 17 Instagram accounts dedicated to the Indonesian feminist movement. It found that basic literacy and digital literacy are factors that have enabled activists to articulate and share their ideas. The three main themes proposed: combating sexual harassment in offline and online spaces, ensuring that feminism and Islam are not in conflict, and raising the issue of intersectionality such as the struggle for labor rights, ecofeminism, and acceptance of LGBTQ and other diverse identities.

Related to the environmental issue, a study from Habsari et al. (2021) shows how SSI members use social media to communicate their environmental values to their community. However, the use of social media was considered ineffective as it was only limited to information on

SSI activities. The study criticizes how SSI members have not used social media for broader civ-ic engagement. Social media was only used for sharing activity documentation. There are in fact many other key facts and information that needed to be conveyed to send the message that river conservation is no easy task.

The aforementioned previous studies show CSOs' significant contribution as they re-spond to social problems that occur in a community (MacPherson and Wong, 1998). CSOs are critical actors who need to advocate for the right to equal access in ICT. CSOs need to ensure that ICTs are genuinely used and enjoyed by all groups, particularly the most vulnerable and marginalized. This study investigates the various roles of CSOs that promote not only vertical social patterns and changes (from individual/group changes to broader/systemic institutional changes) but also horizontal changes (from awareness-raising, participation, and changing habits to more formal changes in the form of policies and other expansions of access) all at once using the quadrants of the social change process in Figure 1.
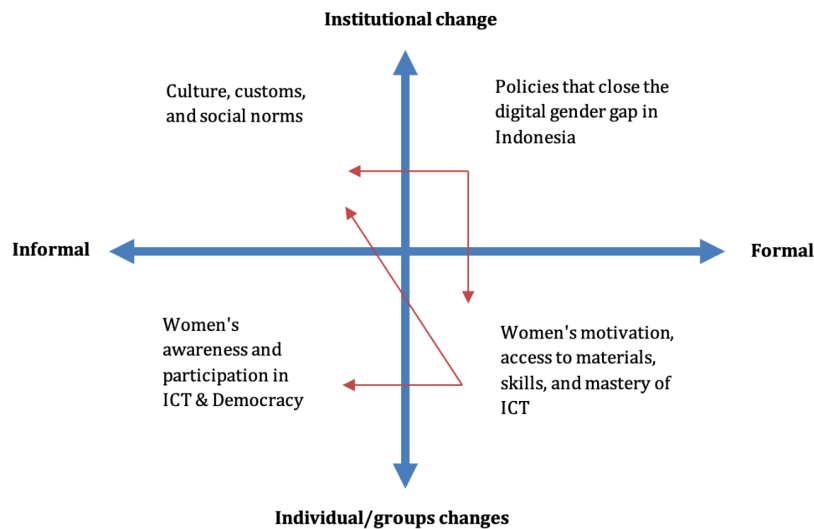

Figure 1. Quadrants of The Social Change Process (Individual and Institutional) Initiated by CSOs To Promote Digital Gender Equality

Source: Modified from Kafka et al. (2020)

The quadrants of social change above were adopted and modified from the strength of institutions and culture framework developed by Kafka et al. (2020). The original framework illustrates the relationship between cultural and institutional backgrounds and economic develop-ment. In regard to the digital gender gap and the roles of CSOs, we can use this framework or quadrant to see how women's awareness and participation in ICT and democracy depends on their motivation, access to materials, skills, and mastery of ICT. If CSOs could improve and

strengthen individual/group awareness, skills, and motivation, then the cultural customs and so-cial norms – including gender inequality – would also gradually become more inclusive (see the arrow). However, these institutional changes would change faster if the government could sup-port by producing more policies that close the digital divide in Indonesia, such as building more infrastructure, supporting CSO roles, and mainstreaming gender equality across all government programs and policies.

However, CSOs also face a host of challenges, including in regard to their financial abil-ity and sustainability in providing more digital assistance programs for women. As we know, many CSOs are highly dependent on international donors or national funding institutions. It has not been easy for CSOs, particularly during the pandemic, as many programs and contracts were terminated or rendered idle due to the economic crisis and social restriction policies. To over-come this, CSOs must continue to strengthen their partnerships with various stakeholders, in-cluding the central and local governments. CSOs need to explore opportunities to access Corpo-rate Social Responsibility (CSR) funds from the private sector to accelerate its gender equality goals and activism.

This research aims to explore the extent of CSOs' contribution in closing the digital gen-der gap in Indonesia. It focuses on the roles of Indonesian CSOs working on the promotion of social transformation and closing the digital gender gap. While previous research focused more on exploring the activities of an organization, this research emphasizes on meta-initiatives to see the bigger picture. Therefore, the novelty of this research lies in the documentation of the differ-ent roles and contributions of CSOs in closing the digital gender gap in Indonesia. This type of collective mapping and categorization have never been done by previous research in Indonesia. CSOs have not only helped reduce gender inequality but also have effectively used ICT to ex-pand their advocacy for women and other vulnerable groups in the digital era.

RESEARCH METHOD

Semi-structured interviews were conducted to obtain further information regarding the obstacles, challenges, and opportunities faced by women and CSOs in carrying out their role in promoting gender equality in today's digital era. A total of 26 key informants selected purposive-ly took part in the in-depth interviews. In addition to CSO leaders, women technology practition-ers and women activists or politicians were also interviewed to probe further the gender inequali-ty situation in work and politics. The interview questions were about (a) knowledge of and ac-cess to ICT, (b) ownership and control of digital devices, (c) obstacles and barriers faced by

women in accessing the internet, and (d) informants' suggestions to close the digital gender gap in Indonesia.

In addition to in-depth interviews, this research was enriched with Focus Group Discussions (FGDs) with eleven (11) representatives of CSOs working to empower women through ICT and those advocating gender equality through ICT. The CSOs were selected purposively in order to represent the experiences of various groups of women from diverse occupational identities, as well as demographic and economic backgrounds. The topics discussed in the FGDs included (a) the use of ICT by women, (b) barriers and challenges to the use of ICT, (c) the positive and negative impacts of ICT on women, (d) ICT for women in the work environment and politics, and (e) the role of CSOs in promoting gender equality in digital democracy in Indonesia. The Research Team acted as facilitator and observer in each FGD or data collection in Table 1.

Table 1. Summary of Data Collection Techniques and Sources

No.	Data collection techniques	Data and information obtained	Data dan information sources
1	In-depth interview	Personal experiences of women working in the digital world, politics, and CSOs related to gender equality in ICT use and the obstacles that accompany it.	• Perempuan AMAN, Yayasan Kesehatan Perempuan, Yayasan Pulih, Lentera Anak, KOMPAK, KPI, RUMPUN, KAPAL Perempuan, Flower Aceh, Konde.co, WALHI, AJI. • Women practitioners • Women activists/politicians
2	Focus group discussion	Digital advocacy has been carried out by CSOs to encourage women's involvement in ICT to promote inclusive democracy (challenges and achievement)	Rahima, GIZ, Migrant Care, Gita Pertiwi, Kiara, HWDI, PPNI, KPI, TIKI Papua, Perempuan AMAN, LAPPAN Maluku.
3	Document analysis	An overview of digital gender gap and inequality in Indonesia	• Care work and care jobs for the future of decent work (ILO, 2018) • The Mobile Gender GAP Report 2019 (GSMA 2019) & GSMA 2020 • Women's Rights Online: Report Card Index (Web Foundation 2020) • Gender Digital Divide Index Report 2022 (GDDI 2022) • ITelecommunications Statistics 2019 & 2020 (BPS)

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No.	Data collection techniques	Data and information obtained	Data dan information sources
4	Literature review	Data and information on digital empowerment for women and digital activism carried out by CSOs to promote gender equality and democracy in Indonesia.	Scientific journals in English and Indonesian from Google Scholar Advanced Search from 2016 to March 2021.

Source: Compiled and created by the author

Each recording from the interview was transcribed verbatim, then stored, organized, and further processed into the Nvivo 12 program as an analysis tool. Nvivo has helped the author conduct thematic analyses by selecting interesting codes and speeding up the coding process. It has also facilitated the development of emerging codes, and allowed the author to see the connections across themes for comparison and analytical insight.

RESULTS AND DISCUSSION

In responding to gender inequality in Indonesia, Civil Society Organizations (CSOs) have taken initiatives to close or reduce the digital gender divide through various empowerment and mentoring programs. CSOs' women's empowerment programs are primarily aimed at fulfilling civil, economic, social, and cultural rights. Some CSOs also promote women's participation in the labor market, political participation, fairness in the workplace, and public policy. Digital assistance and empowerment initiated by CSOs aim to ensure that everyone can benefit from the development process.

Empowerment is defined as increasing the capacity of vulnerable communities to influence state institutions that affect their lives (World Bank, 2000). Empowerment is done by strengthening the participation of these groups in the political process and decision-making at the local level. Empowerment needs to be interpreted as a condition where vulnerable groups have more control over their lives. CSOs play an important role in offering many opportunities for marginalized groups, who often escape policy attention. At the implementation level, marginalized groups are often excluded and are even victims of development. CSOs also play a supervisory role, ensuring that no one is left behind.

Institutionally, CSOs serve as catalysts for development and encouraging improvements. A CSO is a non-governmental organization that is not-for-profit but to serve the public interest.

In general, CSOs promote social justice, development, and the fulfillment of human rights. CSOs have a vital role in human development and development in general. Their role touches on all development issues, including the promotion of democratic governance. Such role becomes vital in organizing social capital, reducing poverty, and examining the role of culture in development. In general, CSOs' work and role offer a practical framework for alternative solutions to economic, social, and political problems.

CSOs also have a role to play in promoting social change. Besides being a development partner, CSOs also act as an intermediary between the government and other community stakeholders to provide space for dialogue on various issues. In terms of governance, CSOs play an essential role in promoting democratic principles such as participation, equality, transparency, and accountability. In addition, CSOs also carry out the function of capacity building for community groups to participate and become development partners for the government. Given these functions and roles, CSOs contribute significantly to determining the success of development through fair trial monitoring, responsive government and freedom of the press, and by encouraging and ensuring traditions of transparency, accountability, and fair rules (UNDP, 1993).

Most of the literatures describe how CSOs are leveraging ICT advances for broader gender equality advocacy purposes. Advances in ICT such as networked computers, mobile phones, the internet, email, and social media platforms have made CSOs realize their potential and take advantage of these advances. Many researchers explain that CSOs feel the benefits of the internet for their advocacy work, such as the ease of connecting without boundaries, lower costs, and time efficiency. In addition to encouraging equal access to ICT for marginalized groups of women. CSOs also take advantage of ICT access to promote gender equality issues more broadly among women. CSOs are one of the drivers of social transformation.

Table 2. Summary of Nine CSO Roles and Strategies in Promoting Gender Equality

and Closing the Digital Gender Gap

No	Role	Strategy
1	Women's rights advocacy	• Conduct campaigns and disseminate information related to women's rights • Provide infographics related to women's rights • Counter-narratives regarding discrimination against women • Actively voice the rights of women migrant workers • Show their political stance and appeal on various issues related to women's human rights violations in Indonesia.

No	Role	Strategy
2	Promoting digital literacy	• Raise awareness of using ICT appropriately and meaningfully • Improve mentoring capacity and the effectiveness of the mentoring content they provide to groups they engage with
3	Women's economic empowerment	• Provide training and assistance related to online marketing • Digital entrepreneurship program
4	Encouraging women's public/political participation	• Build and strength networks of women's organizations • Increase women's representation in political parties • Advocate women's leadership in political parties • Establish access to media • Increase women's understanding and awareness through education and training and improve the quality of women in politics.
5	Promoting the recognition of the identity of marginalized groups	• Documentation and media strategies (websites, blogs, videos, etc.) in recognition of indigenous women. • Launch campaigns and policy advocacy through social media and build public awareness
6	Protecting women victims of violence	• Digital-based efforts to eliminate violence against women (a digital safe room for victims) • Report and handle cases of sexual violence and other violations of women's human rights • Mobilize an anti-violence against women movement and support the Law on the Crime of Sexual Violence (UU TPKS)
7	Public policy oversight	• Bridge the gap between supply from the state and demand from citizens and civil society groups • Ensure that the community's specific needs for technology become a priority for the government or policymakers.
8	Fulfilling the rights to sexual and reproductive health	• Create a viral narrative (campaign) on women's vulnerability through social media and get a response from the local government.
9	Environmental sustainability campaigns	• Gather and involve more women as the backbone of social movements in the virtual and real world.

Source: Compiled and created by the author

This study found that at least nine CSO roles in promoting digital gender equality were quite prominent in Indonesia. Below provides further explanation of each role and strategy listed in Table 2:

1. Women's rights advocacy

The role of CSOs is critical in promoting gender equality and more inclusive democracy. Some CSOs empower women by conducting campaigns and disseminating information related to women's rights. Rahima, for example, provides infographics related to women's rights in Islam. Rahima has also developed a counter-narrative regarding discrimination against women from an Islamic lens. The alternative narrative offered by Rahima is widely referenced, including in the

da'wah carried out by female clerics in Indonesia. Rahima raised the discourse on women's rights and the idea of gender equality based on religion and disseminated it digitally.

Other forms of gender equality advocacy can be found in the work of CSOs such as Migrant Care through social media channels to actively voice the rights of women migrant workers. The Indonesian Women's Coalition (KPI) in their social media accounts and blogs also show their political stance and appeal to the government regarding issues of child marriage, human trafficking, virginity testing, and other issues of violations of women's human rights in Indonesia.

In advocating women's rights through ICT, CSOs continue to face many challenges. In general, a major challenge in today's digital era is digital gender inequality. Infrastructure issues and inequality in ICT proficiency are problems that almost all CSOs face. Inequality in infrastructure and lack of ICT skills are hampering the flow of information. CSOs are prevented from getting up-to-date information from their target groups, which further hampers the advocacy process. Barriers to the distribution of information also lead to ineffective public education and campaigns carried out by CSOs. *Lingkar Pemberdayaan Perempuan dan Anak* (LAPPAN) Maluku is one of the CSOs that encountered obstacles in advocating victims' rights due to the disparity in ICT adoption in rural areas/islands in Eastern Indonesia. Barriers to the use of technology are closely related to inadequate infrastructure. Many regions are still isolated, blocking access to online information. This infrastructure inequality limits the ability to communicate remotely. If the data and information cannot be disseminated, it would be difficult make their problems visible.

This infrastructure issue also affects the advocacy work carried out by *Jaringan HAM Perempuan* (TIKI) PAPUA, especially during the pandemic. In the pre-pandemic period, advocacy work in dealing with cases of women's human rights violations in Papua was mostly done face-to-face (offline). According to TIKI Papua, the pandemic has created multiple challenges to advocacy in handling cases of women's human rights violations in Papua. Communication costs increase during the pandemic; seminars, networking, and other activities drain a large amount of internet data. Furthermore, the victims/partners that TIKI Papua assists generally lack ICT skills. Even if they do have the skills, they are constrained by the cost of internet data. The money that they have will be prioritized for daily living expenses.

KPI also highlighted the challenges to advocacy during the pandemic. One of KPI's advocacy strategies is provide online training on the development of micro, small, and medium-sized enterprises (MSMEs) for vulnerable groups, including female heads of households. How-

ever, KPI cannot confirm whether all target groups benefited from the initiative as internet connectivity among members vary widely. In response to this, KPI conducted briefings for facilitators and members. One of the challenges to advocacy in women's empowerment for vulnerable groups experienced by *Himpunan Wanita Disabilitas Indonesia* (HWDI) is to ensure that people with disabilities are fully involved in public life. According to HWDI, public awareness about the challenges of people of disabilities in participating in society is still lacking. HWDI continues to work towards building public awareness.

For persons with disabilities, the availability of key applications or tools to ensure full participation remains a challenge. Meetings held by the government or civil society organizations often fail to provide the technological tools to ensure the full participation of women with disabilities. For example, the availability of running texts for presentations that can help hearing-impaired people participate fully and meaningfully.

2. Promoting digital literacy

Physical infrastructure development may be relatively more manageable for the government to do. However, increasing ICT awareness and adoption appropriately and meaningfully is not an easy task. The government and CSOs that run community-level ICT assistance programs often assume that providing access to ICT is the ultimate goal. This has resulted in many ICT infrastructure development programs to not result in community development (Ghaus-Pasha, 2004). Some of these programs only benefit certain groups in the community due to inaccurate targeting. Some are even unsustainable, and the community does not feel the benefits of the activity or program. In view of this, several CSOs continue to improve their mentoring capacity and the effectiveness of the mentoring content they provide to their target groups, especially in terms of digital literacy.

Digital literacy can be defined as the ability to understand and use information in various forms and from various sources accessed through computer devices. Digital literacy is also widely associated with technical skills in accessing, compiling, understanding, and disseminating information. In the UNESCO roadmap (2015-2020), digital literacy is an important pillar for the future of education. Digital literacy becomes a knowledge base, which is supported by integrated information technology. Building a culture of digital literacy requires the active role of the community. In the case of housewives, women hold a vital position in technology education within the family environment. As such, a mother needs to make herself knowledgeable, especially related to technology, in order to guide other family members, children in particular, in the use of technology (Sulistyowati et al., 2019)

3. Women's economic empowerment

E-commerce is one of the main components driving the digital economy, especially during the Covid-19 pandemic (Tobing, 2021). The electronic trading system has become a new source of employment and income for many people. In 2019, as many as 13.2 million of the 127 million workers were involved in these trading activities. E-commerce jobs will increasingly become common as more people seek additional income. The middle to lower class is currently engaged in the MSME sector. However, only 13% of the 65 million MSME players have utilized digital technology. Currently, the contribution of the digital economy to the national economy (GDP) is still relatively low (3.7%) (Burhan, 2020).

Most MSMEs claim to have used internet-connected devices to run their businesses. In a Katadata Insight Center (KIC) survey, 42.7% of respondents reported using a PC/laptop connected to the internet to sell their wares. Around 84% of respondents who are MSME actors rely on smartphones to run their business with the help of the internet. According to MSME players who use the internet, around 60.2% use it to sell their products through social media. Meanwhile, their internet-connected devices were least used for sending short messages to customers. This was only carried out by 27.7% of the respondents.

Almost all CSOs in this study see economic empowerment as important for empowering vulnerable women. Rahima, Migrant Care, *Deutsche Gesellschaft für Internationale Zusammenarbeit* (GIZ), Gita Pertiwi, Kiara, *Persaudaraan Perempuan Nelayan Indonesia* (PPNI), HWDI, and LAPPAN Maluku provided online marketing training and assistance. For example, Kiara initiated a digital literacy program for fisherwomen who have benefited economically as they now know the best price to sell their products by using the appropriate applications. With digital literacy, fisherwomen are no longer trapped in the snares of middlemen. HWDI conducted a digital entrepreneurship program for 1,000 women with disabilities in East Java, while LAPPAN Maluku initiated the digitization of MSME products to help access and disseminate information, especially for women business owners.

The digital empowerment of MSMEs also extends to fisherwomen, especially during the pandemic. Online marketing and businesses help improve the economic situation of fishing families who are greatly affected by the pandemic. CSO Gita Pertiwi also had a similar experience. According to Gita Pertiwi, ICT facilities have empowered its targeted group of women to own businesses. Gita Pertiwi also stated that digital technology is extremely beneficial for maximizing promotion, building cooperation networks, and business development.

4. Encouraging women's public/political participation

In a patriarchal society like in Indonesia, women's opportunities to become politicians are relatively limited due to public perceptions of the division of roles between men and women, which tend to be biased towards confining women to traditional roles in the domestic sphere (Parawansa, 2002). Looking back at history during Indonesia's struggle for independence, society at the time accepted and appreciated the role of women who fought on the battlefield, and those who worked in the education sector and logistics management, who provided medical care and many more. These opportunities have made it easier for women to fight for issues that matter to them. As a result, following the 1955 general election, a total of 17 women occupied seats in parliament. It was considered the most democratic election, where women's political participation was based on their political leadership qualities.

In contrast to the Old Order period (Soekarno's era), under the New Order regime (Soeharto's era) that adopted the single majority party mechanism, women's representation in legislature and state institutions was determined by party leaders at the central level, which comprised the elite few. This meant that women who hold important positions have family ties with officials and power holders at the central level (nepotism). They need not go through the nomination/election process, and as a consequence may not have the ability to articulate the interests of their constituents.

In the 1999 general election, the electoral process underwent significant changes. The recruitment of a political party's legislative candidates, including women, had to be approved local-level party leaders. Most of the elected female representatives participated in the electoral process, including public debates, discussions, lectures, and other party activities related to the election campaign. The distribution of women legislators in parliamentary commissions also reflects traditional gender roles (gender biases in delegation) where they mostly oversee community welfare, women's empowerment, religious affairs, education, and cultural affairs.

In addition, female political candidates are usually selected by a small group of party officials or leaders, who are almost always men. In some countries, including Indonesia, where awareness of gender equality and justice is still low, male political party leaders have disproportionate influence over party politics, particularly in terms of gender. Women do not get much support from political parties as the leadership structure is male-dominated. The absence of networks between mass organizations, NGOs, and political parties in that era also weakened women's representation in parliament. In addition, other factors such as poverty, women's low levels

of education, family-related factors, and the multiparty system were also considered barriers to women's political participation in politics in that era (Parawansa, 2002).

Strategies are needed to promote women's involvement in public life, politics, and the democratic processes in Indonesia. Some of the strategies that CSOs can apply include building and strengthening networks of women's organizations; increasing women's representation in political parties; advocating female leadership in political parties; opening access to media; increasing women's understanding and awareness through education and training; and improving the quality of women in politics. In today's digital era, the potential is relatively huge as access to the internet is easier.

5. Promoting the recognition of the identity of marginalized groups

National identity is the identity of a nation as the manifestation of values that the people abide by in their lives. This includes ethnicity, race, religion, language, and other forms of differences that shape Indonesia's diverse society. This means that the reality of diversity in Indonesia is not seen as an issue or impediment, but where all local identities can merge into a united entity (*Bhineka Tunggal Ika* or Unity in Diversity). However, in practice, such differences have given rise to various problems.

In the context of a multicultural society, national identity must be understood differently to a monocultural state. Multiculturalism as a form of integration should accept, acknowledge, and maintain the diversity of identity itself, especially that of minorities. In the current era of digital democracy, identity friction can easily occur, leading to social polarization. Therefore, recognizing the identity of marginalized groups – such as indigenous peoples, local religions, and other minorities – has become an increasingly challenging unfinished business.

Some CSOs advocate the recognition of the identity of women's groups through media strategies. Kiara, PPNI, and *Jurnal Perempuan* brought attention to the existence of fisherwomen, urging for their professional recognition, through blogs on their websites and documentary videos on their YouTube channels. Such documentation serves as a tool to push the government to grant recognition of their identity. Through digital documentation, Kiara shows women's involvement in the fishing profession. The documentary videos published online depict fisherwomen's uphill struggle to gain formal recognition from the state, which should be indicated in their ID card by changing the occupation field from housewife to fisherwoman. Apart from Kiara and PPNI, the Association of Indigenous Women of the Archipelago (*Perempuan AMAN)* also uses social media to promote the recognition of indigenous women.

Perempuan AMAN are mainstreaming indigenous peoples and indigenous women. *Perempuan AMAN* publish activities carried out by indigenous women through social media to make the wider community aware and acknowledge their existence. Through various social media platforms, *Perempuan AMAN* urges the state to recognize indigenous women by ratifying the Bill on Indigenous Peoples because, with the existence of this law, the collective rights of indigenous women can be protected. These two CSOs strengthen women's groups through training, building public awareness through narratives in blogs about the concrete experiences of women's groups being assisted. They were also conducting campaigns and policy advocacy through social media and encouraging public awareness about the identity of women's fishing groups and indigenous women.

6. Protecting women victims of violence

The issue of violence against women is one of the problems that make women's position vulnerable in the family and the community. Gender-Based Violence (KBG) occurs because of an unequal relationship and shows discrimination against a specific gender. Violence against women can also be referred to as gender-based violence (Rahminita, 2017). The high number of violence cases against women in Indonesia recorded in the Annual Records (CATAHU) of the Indonesian National Women's Commission (Komnas Perempuan) shows that protection and guarantees are needed for women to reduce the number of cases of violence in Indonesia.

Responding to the high level of violence, several CSOs have made digital-based efforts to eliminate violence against women. For example, Rahima builds a digital safe room for victims of KS. The female ulama community uses digital media as a safe space to share their experiences of domestic violence. Based on this experience, a video campaign against violence against women was made, which was shared on Rahima's social media channels. Rahima, through the Whatsapp Group application, has also built a mental support system for fellow community members who are facing multiple pressures during the Covid-19 pandemic. In addition, Rahima also mobilized an anti-violence movement against women and supported the Law on Sexual Violence Crimes Bill (UU TPKS). In the 16 HKTP or Days of Activism Against Gender Violence campaign conducted through Rahima's various media platforms, the CSOs raised the experiences and voices of female clerics related to the Bill on the Elimination of Sexual Violence.

The advancement of ICT should be able to assist the process of fulfilling the rights of victims. Suppose the infrastructure is good and available and women have ICT skills. In that case, the reporting and handling of cases of sexual violence and various violations of women's human rights can be processed more quickly. The results of the International NGO Forum on Indonesian

Development (INFID) survey of 2,210 respondents throughout Indonesia in May-July 2020 noted that around 71.8% of people in Indonesia had experienced sexual violence, either on themselves, their families, or other people they know. Of these, 65.1% of respondents admitted to having experienced sexual harassment. A total of 27.4% of respondents have experienced forced marriages. 12.3% of respondents had been forced to use contraception. The experience of CSO LAPPAN Maluku shows that due to digital inequality, women victims experience increasingly layered vulnerabilities. In line with LAPPAN Maluku, PPNI also feels a challenge in advocating for victims' rights in the fishing community. The challenge is due to infrastructure problems, such as no signal available and many do not have cellphones.

7. Public policy oversight

The advancement of ICT and the internet is expected to encourage social transformation where all public activities are more transparent and accountable. Broad and easy connectivity and the disclosure of digital information make monitoring can be carried out better. From the study results, there are two examples of CSOs that carry out a supervisory function on violations of the rights of vulnerable women: HWDI and *Perempuan* AMAN. HWDI supervise aid funds for disabled groups. According to HWDI, they carry out digital surveillance regarding the type of assistance, the effectiveness of assistance, and the quality of assistance provided by the government to groups with disabilities. Mastery of ICT in vulnerable groups is related to the world movement, namely the right to information—transparency. Transparency itself can be interpreted as all kinds of efforts made by citizens to obtain information in the public domain that was previously opaque to become clear (Joshi, 2010). Information that was previously inaccessible or difficult to access becomes accessible to all parties. This means access to and control over ICT is closely related to the transparency process.

Perempuan AMAN empower indigenous women to do digital documentation related to violations of indigenous peoples' rights. Indigenous women can now take photos and videos related to events around them and then inform *Perempuan AMAN* center (Bogor). One form of supervision carried out by indigenous women is the issue of land concessions, namely PTPN II. Indigenous women, there often take photos, showing the conditions they face. Based on reports and information from indigenous women, *Perempuan AMAN* then processed it into a video used as campaign material.

LAPPAN Maluku is a CSO that provides grassroots assistance to women living in rural and islands in the Maluku region. They found that the quality of the network infrastructure in the region was woefully inadequate. Based on the observations of LAPPAN Maluku, the poor quali-

ty of infrastructure makes rural women more vulnerable. Problems experienced include the difficulty of reporting to the police in sexual violence against women in rural areas. LAPPAN Maluku encourages village governments through village funds to provide network infrastructure for village communities. In this case, LAPPAN Maluku takes on the role of public education for the community on how important it is to monitor how public funds are used. The role of CSOs in this process is to bridge the gap between supply from the state and demand from citizens and civil society groups (Wittemyer. et al, 2014), ensuring that the community's specific needs for technology become a priority for the government or policymakers.

8. Fulfilling the Rights of Sexual and Reproductive Health

The discourse on Sexual and Reproductive Health and Rights (SRHR) is not new. This idea has emerged since it was discussed at the International Conference on Population and Development (ICPD) in 1994 and the Fourth World Conference on Women in 1995. SRHR itself includes the right of all individuals to make decisions regarding their sexual and reproductive activities that are free from discrimination, coercion, and violence (Dhewy, 2017). Access to SRHR ensures that individuals can choose whether, when, and with whom to engage in sexual activity, choose whether and when to have children, and access information and the means to do so. Although more than 20 years have passed since the conference that first explicitly recognized reproductive rights as a human right and marked a change in the world's perspective on population issues, the available data shows that many people, especially those most marginalized, are still struggling to gain access to SRHR.

At the regional and global levels, statistics related to the maternal mortality ratio, adolescent birth rate, the number of unmet needs for family planning (KB) or contraception, and other indicators of SRHR are still a serious concern. In some countries, including Indonesia, voluntary sterilization, emergency contraception, and safe abortion are often prohibited or difficult to access. Based on World Bank data, the Maternal Mortality Rate (MMR) is still high in Indonesia. (MMR) in Indonesia was recorded at 177 deaths per 100 thousand live births in 2017. Even though the ratio is better than a dozen years earlier, Indonesia's MMR is still the third highest in Southeast Asia. Countries with an MMR greater than Indonesia are Myanmar (250 deaths per 100,000 live births) and Laos (185 deaths per 100,000 live births). MMR in Cambodia, Timor Leste, and the Philippines are still above 100 deaths per 100,000 live births. Meanwhile, five other Southeast Asia have better MMR because they are below 100 deaths per 100,000 live births. The five countries are Vietnam, Thailand, Brunei Darussalam, Malaysia, and Singapore.

These data are certainly not good news. SRHR is fundamental for women and girls to have a productive, healthy, and prosperous life. In this SRHR advocacy, several other issues are also closely related, such as access and universal sexual and reproductive health services, sexual education, and the elimination of gender-based violence, forced marriage, child marriage, and female circumcision. SRHR also allows women and girls to complete education and enter the world of work, which will help women become more empowered and live more prosperous lives. Therefore, access to SRHR will promote gender equality. On the other hand, neglecting the fulfillment of SRHR will create inequality, widen inequality, and perpetuate injustice.

SRHR is a crucial development issue. At the global level, the initiative to include SRHR in the development agenda has been carried out since 2012, and several SRHR agendas have been adopted in the Sustainable Development Goals (SDGs), especially the third and fifth goals. Several CSOs are trying to include SRHR as a significant concern in their programs in this digital era in response to these developments. CSO LAPPAN Maluku, for example, advocates for the fulfillment of women's SRHR with a digital strategy. In Maluku, women are in poor condition because they are not connected to the internet, and SRHR information and services are neglected. LAPPAN Maluku took the initiative to make a viral narrative of women's vulnerability. Because of the campaign, the issue of the difficulty of accessing women's SRHR services in Maluku has received the attention of the local government. Problems include lack of clean water, difficulty reaching health facilities (pregnant women must be carried on a bamboo stretcher), rape of girls. The narrative is displayed on social media to be widely known and responded to by the government.

9. Environmental sustainability campaigns

Social media is the most widely used platform by the Indonesian people. Social media itself is online media where users can easily participate, share, and create various content. A contemporary phenomenon in social media that appears is the use of social media to gather members in a particular social movement. The formation of social movements begins with forming a virtual community based on shared interests and goals. Uniquely, the effectiveness of social media in social movements, including the environmental movement, has proven to be quite time effective. In a relatively short time, social media can gather much support from users, and these social movements can even gather offline actions (Kapriani & Lubis, 2014). This opportunity is what CSOs try to take advantage of in carrying out social movements on the internet, especially in conducting campaigns for environmental sustainability. CSO Gita Pertiwi, for example, has car-

ried out various activities oriented towards empowerment and developing critical attitudes of the community (especially women) through environmental issues and social justice.

Environmental sustainability has become a major discourse for world leaders, especially when it comes to climate change. This indeed cannot be separated from thanks to the activists calling for the environmental crisis that is happening all over the world. Many local, national, and international CSOs use the internet as a weapon to build solidarity and networks in other countries. A local environmental issue can instantly become a global conversation due to an active CSO campaign on the internet or other social media. Environmental campaigns are no longer carried out conventionally in front of parliament but can be done through websites, mailing lists, and social media accounts. Governments that ignore these environmental issues can get "air attacks" barrage in cyberspace. The public and the public can show support through donations which can also be made online. This method is very strategic in strengthening contemporary environmental campaigns.

Environmental problems are not problems that can be handled alone. Environmental issues must continue to be brought to the surface and discussed so that more people are aware of the dangers of the current environmental crisis and are involved in overcoming them. Important issues such as the climate crisis, renewable energy, clean water can become a discourse understood through education on the internet. One strategy to raise environmental awareness in this era of e-democracy is to involve the public in related policymaking, especially women. Because when crises and disasters occur due to mistakes in managing the environment, women and children are usually the first victims and the most vulnerable groups.

A survey of 400 female respondents in Greater Jakarta, Surabaya, Bandung, Medan, and Makassar conducted by the Indonesian Public Opinion Study and Discussion Group (KedaiKOPI) shows that as many as 25.1% of women think that climate change will have a direct impact on themselves. Of this number, 27% of respondents assessed the direct impact of climate change in flooding due to high rainfall. As many as 24% of respondents think that climate change is hampering their daily activities. Therefore, the role of CSOs in utilizing ICT and the internet to conduct environmental campaigns should involve more women as the backbone of social movements in both the virtual and real worlds.

In general, this qualitative study of the role of CSOs strengthens the findings of previous research (Habsari, 2021; Karolus & Afiyani, 2016; Maryani et al., 2018). Amid the COVID-19 pandemic that has hit the world, the role of digital technology (internet) is getting bigger, including for women. The results of this study provide progress from what was produced by Suwana &

Lily (2017) because women no longer only use the internet for social interaction. More and more women are using it to open businesses and enter the political arena. This signal is also marked by various programs from CSOs themselves, which encourage digital literacy in Indonesia and digital-based economic empowerment for women and other vulnerable groups.

CONCLUSION

The study results show some barriers for women to access the internet fairly and equally. Some of these obstacles include barriers to motivation/mental aspects, access to materials related to ownership of devices and the internet, and barriers to skills/mastery. Most of the CSOs in this study have provided digital literacy to vulnerable groups and marginalized women. Besides providing technical training to use tools and applications, CSOs also empower women to use the internet for other productive social and economic activities. Through skills in using the internet and other social media, women are encouraged to be more involved in digital public life.

CSOs have an important role in promoting inclusive democracy because they can recognize and identify conditions of social inequality on the ground. CSOs can play a role in intermediation between community groups and the government. CSOs carry out this function to ensure that democracy is carried out inclusively because democracy can only be lived by ensuring that the participation of its members is carried out consciously, freely, and empowered. CSOs strengthen democracy by ensuring that the state is responsive to the needs of its people. CSOs promote democracy by ensuring that political and economic practices ensure the involvement and strengthening of groups at the grassroots.

Thus, the role of CSOs in promoting gender equality in today's democratic and digital era can be divided into three roles. The first is the role of CSOs in increasing the capacity of individuals and groups, which is carried out through various training, education, and mentoring. Second, CSOs play a role in expanding advocacy and protection of women's rights through ICT and the internet. Third, CSOs also play a direct or indirect role in implementing democratic values and principles such as participation, equality, transparency, and accountability using ICT.

These three roles require support from other civil society movements and broader public support so that CSOs can continue to ensure that these three roles are sustainable. However, as we already know, CSOs have a problem with their institutional and technical sustainability. Many CSOs relies on Donor or funding agency for running their program. This financial support was limited or even decreased, especially during the pandemic. The future study should involve this issue and the other challenges CSOs face at the national or local level.

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