Feminist Perspective on the Future of Work in the Philippines

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Foreword

Despite economic growth and declining poverty levels across Asia, inequality continues to grow, with large groups of society remaining marginalized in economic and social terms.

Women in Asia continue to experience massive structural disadvantages, from early childhood education through their retirement from work—if they wanted and were allowed to work—and into their older age. It is mainly women who are exploited as cheap labour in Asia's export industries and low-skill sectors, especially agriculture, textiles and the footwear and electronic industries. They are paid subsistence wages and experience increasing precariousness of their working as well as living conditions.

On the heels of all the economic progress now comes rapid technological transformation that is altering the present and future nature of work in ways that offer a multitude of opportunities but also add new levels of risks for social groups across the Global South.

Women are particularly vulnerable and disproportionally affected by these changes, both in the context of the Fourth Industrial Revolution and in the ever-expanding care work across the formal and informal sectors.

Unfortunately, the predicted productivity gains through automation and digitalization in many sectors possibly will not give women much hope for fundamental improvements of their prospects. Due to their poor access to education, skills development and professional knowhow, Asia's women are at risk of slipping deeper into unemployment or resorting to migration far from their home for jobs they can manage.

The goal for them and for us in development cooperation work is to find socially just and gender-equal responses to

these challenges. Solidarity and coalitions across a range of progressive movements in Asia are essential.

Through our regional networks, Friedrich-Ebert-Stiftung (FES) brings together diverse voices from social movements, civil society organizations, trade unions, political parties and academia to work together in developing progressive ideas and narratives for advancing social justice. Among the most innovative platforms is the newly established FES Asia project Women's Perspectives on the Future of Work. With insights from distinguished researchers in nine Asian countries, FES and its partners aim to further promote gender equality in the world of work, with emphasis on enhancing women's participation in public and political life and promoting decent work for all along with gender-just and human-centric economic models.

This study highlights role/s that females would play in the ongoing digitization and automation of most industrial work. It also explores what are the possible ramifications in terms of gender issues (gender wage gap, gender discrimination) the future of work will bring forward, and how these gender-specific issues can be addressed. We thank the author, Rowena A. Laguilles-Timog, for this great writing of looking at crucial gendered perspectives in modern labor issues.

We hope that this publication contributes to a fruitful discussion and provides valuable insights for future initiatives.

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Introduction

Debates on the future of work have recently gained momentum with the release of international reports from the International Labour Organization (ILO)ⁱ and the World Economic Forum, among others.ⁱⁱ Featuring the inevitable impact of the Fourth Industrial Revolution on workers around the globe, these reports are unified in claiming the need to prepare for the changing landscape of work. In the Philippines, conversations on the future of work only started a few years ago.

This paper captures the current debate over the future of work in the Philippines. It encapsulates feminist perspectives, especially in relation to the more mainstream arguments. While international reports weighing in on the case of the Philippines as part of Asia or the developing world were included as sources, greater space was allotted to local views.

The present of work in brief: The Philippine context

There are at least two major general trends in work in the Philippines that affect men and women alike: inadequate employment opportunities and increasing precariousness.

In looking first at inadequate opportunities, it's important to look at the number of unemployed Filipinos, which was officially pegged at 2.4 million in 2017.ⁱⁱⁱ But this number could be as much as 29.3 million, if taken as the total population of working-age Filipinos without jobs.^{iv} And yet, as the IBON Foundation, an alternative research organization, estimated, only an average of 81,000 jobs were created in the past two years, which was "far below the equivalent pace" of job creation of previous administrations since 1987.^v And while the majority of Filipino workers (at 62.5 per cent) are salaried workers, the largest portion of them (at 26 per cent) is found in elementary occupations or low-skill jobs.^{vi}

Workers even in the formal sector experience irregular or non-standard employment practices that affect their income, job security and benefits. An estimated seven million workers were in precarious employment, such as casual, seasonal, contractual or project-based jobs. Viii Notably, of the 25.2 million salaried workers, the majority (at 19.8 million) were employed by private establishments. Viii

Gender-specific trends further characterize women's experiences with work in the Philippines. The gender gap in labour force participation in 2017 was at 30 per cent, or 26.7 million men and 16.1 million women. Similarly, of the 40.3 million employed Filipinos, only 15.2 million were women and 25.1 million were men. Men also outnumbered women across all the major sectors: at 76.6 per cent of workers in agriculture, 57 per cent in manufacturing and 56.7 per cent in services. Particularly in the information and communication technology (ICT) subsector, men outnumbered women by 50 per cent. And yet, there were almost equal populations of men (at 35 million) and women (at 34.9 million) of working age. ix

Women are more likely than men to find themselves in precarious work—having lower pay, greater job insecurity and/or fewer employment benefits. Among formally employed women, for instance, 60 per cent were salaried workers in 2017, with almost a fourth found in elementary occupations.* Around 75 per cent of all employed women were in the service sector, which included 1.6 million women working for private households, mostly as domestic helpers.*i

Women workers have also begun to outnumber men as migrant workers. Of the 2.3 million overseas workers in 2017, 1.2 million were women, with 54 per cent employed as labourers and unskilled workers and 59 per cent found in elementary occupations (at 59 per cent), mostly as domestic helpers or caregivers.xii Many women

were also found in the informal sector, which the ILO describes as "those in self-employment and unpaid work constituting about 38 per cent of total employed." xiii Of the total employed women in 2017, 29 per cent were self-employed, and 9.2 per cent were unpaid workers in family enterprises. Women unpaid family workers were also found in almost every sector, with the largest proportions in agriculture and fishing, at 817,000, and trade, at 478,000.xiv

Much women's work remains "invisible." National accounts do not include statistics on sex work, for example, but for which alternative sources estimated 800,000 workers in the Philippines as of 2009. Official accounts of work also do not reflect unpaid care work, which women still mainly do, usually on top of their paid work. According to a 2019 study published by the Philippine Institute for Development Studies (PIDS), a government research institute, "While men spend a larger portion of their time on paid market work, women devote equal or more of their time on unpaid work at home."

Manifestations of and predictions for the future of work

In the context of assessing the impact of the Fourth Industrial Revolution on the achievement of the Agenda for Sustainable Development, the United Nations Development Programme (UNDP) emphasized a finding by the International Labour Organization in 2016 that more than 60 per cent of salaried workers in the Philippines occupied positions at high risk of automation by the next decade or two.^{xvii}

Certain sectors and occupations have been found to be at higher risk than others of automation. Almost half of all types of services in the Philippines, especially business process outsourcing or call centres and retail trade (at 90 per cent), and hotel and banking (at almost 80 per cent) are at risk. More than half of all manufacturing industries are also at risk, especially garments, computers and electronics (at more than 60 per cent), motor vehicles (at almost 60 per cent) and food and beverages (at almost 50 per cent).xviii Construction, household domestic work, transport and storage, and mining and quarrying are at high or medium risk of automation.xix

In terms of occupations, the following are at high risk of automation in the Philippines: farmhands and labourers, carpenters, office cleaners, shop salespersons, market and sidewalk vendors, food servers and bartenders, hand launderers and pressers, receptionists and information clerks.** Across these sectors and occupations, women are predicted to be 2.3 times more likely than men to be at risk of losing their job, which also reflects a regional trend.**

The textile and garment manufacturing industry is particularly singled out for gendered job displacement, given the over-representation of women in the industry as low-skilled workers. Valid Jose Ramon Alberto, Senior Research Fellow at PIDS, explained that 3D printing and similar technologies are now available to make production more cost-efficient. Valid According to the ILO, the gendered job loss in the textile and garment industry is a regional trend; in many countries in Asia, including the Philippines, women represent as much as four-fifths of the industry's workers. Valid Pipelines in Asia, workers valid Philippines in Asia, workers valid Philippines in Asia, workers valid Philippines valid Philipp

UNDP reported that displacement in the business process outsourcing industry is particularly gendered, given that women make up 59 per cent of the more than one million people employed in that sector and 89 per cent of salaried call centre staff. What used to be the Philippines' "comparative advantages," such as functional literacy in English language and cheap labour, may no longer hold up against automation. Almost half of all business process outsourcing workers are projected to become unemployed due to automation.xxxx

But not all jobs will disappear. In the Philippines, occupations at low-risk of automation are those of general managers in trade, manufacturing, business services, restaurant and hotels; teachers in elementary and secondary education; professional nurses, police officers and electricians.xxvi This is in clear contrast with the overwhelmingly low-skill jobs at high risk of automation. Interestingly, certain sectors, such as education, health care, social work and care work in general, are also at low risk for automation.xxvii

New jobs are being created and will continue to be created. In 2017, the Philippines was among the countries from which 45 million workers were registered on Western-based online platforms, representing an estimated 22 per cent of the registered and 2.2 per cent of the active workers.xxviii Such work in the gig economy includes crowd work, like data entry, tagging or interpretation of content, completion of surveys and finding information, and online freelancing, such as software development, web development, translation, transcription, data analytics, design, administrative support, and sales and marketing.xxix Also among these digital platform jobs are "content moderators," who screen digital content from social media, including YouTube, Facebook and Twitter, which the documentary The Cleaners^{xxx} revealed to be a shadow industry in which multinational corporations employ around 10,000 young men and women in the Philippine capital of Manila, alone.

Gear up to catch up

In view of the reality that the Fourth Industrial Revolution and its impact on work in the Philippines is already here and is only bound to intensify, the question is whether the country is ready to handle it. In the World Economic Forum study of 100 countries and their readiness "to capitalize on future production opportunities, mitigate

risks and challenges, and be resilient and agile in responding to unknown future shocks," xxxii the Philippines is categorized as a "legacy" country. This means it has a strong production base, ranking 28th, but is relatively weaker in terms of technology and innovation, human capital, global trade and investment, institutional framework, sustainable resources and demand environment, ranking 66th.xxxii

The government is consistent in its efforts to strengthen the country's ICT infrastructure, which is a necessity for service delivery, economic growth and human development. But the focus is mainly on e-government. Building on gains from the initial implementation of its national digital strategy, it is now set to realize "E-Government 2.0," which seeks improved "transparency and accountability in governance, efficiency and agility in government operations, and direct citizen engagement."

In its Medium-Term Development Plan 2017–2022, the government acknowledges digitalization as a global driver of change. The plan cites reports from the Organisation for Economic Co-operation and Development (OECD) and The Economist regarding the dawning impacts on national economies, including threats of unemployment. This perspective is not as pronounced, however, in the plan's assessment of industry and services, except to mention that people's access to ICT is essential for exploring and taking advantage of new avenues for income opportunity.xxxiv

On questions about the future of work, the plan is silent on the role of the Fourth Industrial Revolution. It mentions the promotion of foreign and local investments that will create labour demand, and it supports micro, small and medium-sized enterprises (MSMEs), cooperatives and overseas workers, mainly through a less restrictive business environment. The precariousness of work in the Philippines is recognized as an economic risk that determines workers' vulnerability. Improved social protection policies and programmes and increased regulation of the informal sector are part of the national strategy to address such risk. XXXX

The Medium-Term Development Plan emphasizes the need to ensure the "global competitiveness" of Filipino workers, starting with their education and training as students. It promotes knowledge production and innovation in general and science, technology, engineering and mathematics (STEM) careers in particular. This is consistent with the proposal of the government's Technical Education and Skills Development Authority regarding the upgrade of the overall approach to technical education and skills development, from policy and regulation to curriculum and facilities, to ensure their continued relevance in the context of changing technologies.

In 2018, PIDS released a report on the Fourth Industrial Revolution, followed by the launch of a conference on the same topic, with local and international technology and labour experts. The report and conference marked the government's recognition of the urgent link between the Fourth Industrial Revolution and work in the Philippines, albeit affirming earlier views, such as the Medium-Term Development Plan. In their report, PIDS featured ways on how to catch up technologically and benefit from Fourth Industrial Revolution. This included "openness to international trade and investment" and "better educated and more trainable workers and more flexible and less costly labour market regulatory environment" but also increased social protection, especially for workers and poor households.

How the labour force needs to catch up to the requirements of the Fourth Industrial Revolution is a concern shared mostly by the business sector. There is less data infrastructure and fewer data scientists in the Philippines than in its regional neighbours, for instance,

which could mean a loss of opportunities in the labour market.^{xl} Because businesses are affected by the lack of a capable workforce, they see the need to upgrade the education and skills of Filipinos for the sake of industry competitiveness.^{xli}

Additionally, representatives of the business sector and international consulting companies argue for the government to ensure and facilitate a smooth and efficient shift towards the demands of the Fourth Industrial Revolution. For them, the challenge for the government is harnessing the technology changes to enable higher-value jobs.xiii It should invest in promoting, as a matter of national policy, the adoption of new technologies, coupled with innovative entrepreneurial practices and the engagement of Filipinos—as entrepreneurs or as part of the labour force—to adapt to the changing character of the global economy.xiiii

Philippine economist Gerardo Sicat argued that the government should ease restrictions for foreign capital with regard to land use, natural resources and ownership of public utilities, educational institutions and media. This kind of liberalization, he noted, would help the country take advantage of the Fourth Industrial Revolution.

The political economy of the future of work

Jose Enrique Africa, Managing Director of the IBON Foundation, explains that while it is true that new and higher-value jobs can be created with the Fourth Industrial Revolution to benefit Filipino workers, it is not possible in the current economic context. Challenging the assumption that improved business will mean improved jobs, he raised the issues of business motives and technology control.xiv Rene Ofreneo, a professor at the School of Labor and Industrial Relations of the University of the Philippines, also emphasized re-shoring as an inevitable characteristic of the future of work for the Philippines.xivi As long as the economy hinges on multinational corporations, and these corporations can

always opt for cheaper and more efficient production elsewhere, work for Filipinos will remain unsure, even in the Fourth Industrial Revolution.

The World Economic Forum's 2018 readiness report identified a hierarchy of players in the global economy in terms of digitalization and demonstrated the unevenness of the playing field: 25 of the 100 countries it looked at are considered as "leading" the future of production because they account for more than 75 per cent of global manufacturing value added, which can even increase in the future. Yet, on the other end of the scale are 58 countries considered "nascent:" they are the "least ready for the future of production." xivii

Re-shoring is indeed already taking place and is predicted to become the norm.xlviii Developed countries, which are also leading digitalized production, are now better able to cut down on costs in such manufacturing industries as garments, electronics and automotive without having to outsource production processes to developing countries.xlix This is what happened when Adidas reshored production to Germany and the United States, using computerized knitting, robotic cutting and additive manufacturing.1

Lukas Schlogl, research associate at King's College London, and Andy Sumner, Fellow at King's College London, added that, with re-shoring, workers are bound to first be pushed into even lower-skill and lower-value service sector jobs and wage stagnation.¹¹

Christophe Degryse, senior researcher at the European Trade Union Institute, further described the future of work as a polarized global society "between masses of increasingly isolated low-income workers and the top-of-the-market workers who are in a position to take advantage of an even richer palette of digital instruments, " with "millions of digital galley slaves" in countries like the Philippines. A study on global digital platforms in 2017 that included the Philippines noted that the growing

gig economy, while usually contextualized in international development and "framed in contrast to…massive unemployment," involves a number of risks for workers, including weaker bargaining power and a race to the bottom to compete with other workers.ⁱⁱⁱ

The precariousness of new kinds of work under the Fourth Industrial Revolution continues and is taking on new forms. For instance, digital platforms, are emerging as new venues for employment as well as sites for discrimination, not only based on gender but on race, for women in the developing world. liv Generally, there are also issues in the areas of adequacy of earnings, work processes, working hours, health and safety, career development, stability of work, social protection and freedom of association.\(^{\partial}\) A survey of global freelancers involving a total of 22 countries revealed that 58 per cent of South-East Asian freelancers, including those from the Philippines, have experienced not being paid for services they had already rendered. Vi Meanwhile, the conditions of the sweatshop-like work for digital cleaners or content moderators, with 10-hour shifts, involve hazards on a new level: repetitive exposure to the content's brutality, torture and violence that have caused the "cleaners" harm, from nightmares to suicide.

Digital cleaning, with its many harmful implications, is among the new work opportunities the Fourth Industrial Revolution has brought to a developing country like the Philippines. Ivii Online gender-based violence has become an issue in the increased online engagement of women for work and otherwise. GenderIT featured online gender-based violence as an important issue, citing the Philippine National Police Anti-Cybercrime Group findings of a substantial increase of online harassment cases from 2013 onwards. Iviii The Foundation for Media Alternatives, a grass-roots organization in the Philippines focusing on gender and technology, identified 160 cases of online gender-based violence from 2012 onwards, including online harassment; cyberbullying; digital stalking; monitoring and tracking; identity theft (including

deleting, changing and faking personal information); sexual (verbal) assault, threats and abusive comments; and uploading of photos and videos (often of an intimate nature) without consent. ^{lix}

Opportunities for moving forward: Touch points on strategies for the future of work

Amid the differing opinions of the Fourth Industrial Revolution as a force that will change how work is experienced in the Philippines, especially by women, there are several "touch points" for strategies on moving forward.

An improved, more gender-responsive e-government.

The United Nations Economic and Social Commission for Asia and the Pacific has added a gender mainstreaming lens to the debate. It highlighted "gender gaps in egovernment," including the lack of a gender lens from relevant officials that render "ICT policy development…a largely gender-neutral exercise." Ix It recommends a thorough gender mainstreaming into ICT policies and programmes, covering marginalized people's need for access to related services, the integration of digital literacy in the public school system and "availability of affordable connectivity and infrastructure." Ixi

Upskilling and ensuring ICT access for workers and entrepreneurs. Jose Roland Moya, Director General of the Employers Confederation of the Philippines, agreed with the need to catch up with the Fourth Industrial Revolution. But he argued that workers' skills should be expanded for their own sake. As he explained, "Emphasis must also be made on continuous learning, upskilling and reskilling in order to lessen as much as possible [the adverse impact of the Fourth Industrial Revolution]." ixii

The Philippine Department of Labor and Employment stressed that changes in work opportunities will take place within the next six years and estimates that 2.5 million jobs available in the future will be mostly home-

based. Ixiii Taking this as an opportunity for promoting income-earning opportunity for women, the government initiated efforts to ensure that women's skills are updated. In 2018, the country's Department of Information and Communications Technology, in partnership with the ILO, JPMorgan Chase Foundation and the Taytay municipal government in Rizal Province, launched an ICT literacy training for women in selected rural areas. Creating digital campaign strategies for MSMEs, the training was designed to enable participants "to compete for online jobs in the freelancing and homebased outsourcing industry segments...[and provide] an online marketing opportunity for MSMEs." Ixiv Such effort is not misplaced because the Philippines is already recognized by the OECD as among five countries in the world where "women-run online entrepreneur firms predominate." Ixv

Also as part of the ILO Women in STEM Readiness and Development Programme, the Filipina STEM Leaders Forum was launched in 2019, featuring four Filipina leaders and role models in STEM who talked about their struggles and triumphs in the industry. Along the same line of promoting women in STEM and IT industries, Julia Abad, the Executive Director of the Philippine Business Coalition for Women Empowerment, explained that the coalition was formed because of the situation of women workers in the time of the Fourth Industrial Revolution.

Social protection for workers. Melisa Serrano, a professor at the University of the Philippines' School of Labor and Industrial Relations, elaborated on the adverse effects of the Fourth Industrial Revolution on work in terms of expansion of informal and precarious low-skill work, non-standard employment and forms of work outside of employment, widening income inequality as well as job losses due to artificial intelligence, automation and digitalization. All these new technologies, including the gig economy, require government intervention and regulatory frameworks. Disciplinarily, Richard Heeks, in Decent Work and the Digital Gig Economy, highlighted

the need for regulating the new forms of work, especially on digital platforms, which he proposed should be anchored to the ILO Decent Work framework. Ixix

Reconsidering the current development path taken. Key to the future of work, as Professor Serrano also noted, is a "fair and equitable transition" that regulates the adoption of automation technology and allows economies to adjust while improving the economic conditions of mid- and low-income households and to reabsorb unemployed workers in the labour force and "redistribute the gains from productivity as a result of digital automation.box She also emphasized the applicability of more responsive forms of social protection measures that prepare for the threat of job displacement in the Philippines, such as "income and wealth transfers." "boxi Professor Ofreneo suggested the same—a "basic income guarantee" for all citizens, regardless of whether they have jobs or not." boxii

Africa, with the IBON Foundation, suggested that "the government has to take charge of the economy's direction and not let it be overly influenced by what is acceptable or desired by foreign transnational corporations in their rational self-interested drive for profit maximization." In his opinion, the government must lead the dawn of the Fourth Industrial Revolution towards a national industrialization, starting with the agricultural industry, that leads to better wealth creation and distribution. In the second service of the second service of the economy's direction and distribution.

Challenges for the future of work: Possible research priorities

The debates on the future of work in the Philippines have revealed several challenges and thus possible research priorities. Unquestionably, women workers are threatened with job displacement and are at a higher risk than men not only of losing jobs but of keeping only lower-end jobs, if any. Possible impacts on women workers in the Philippines must further be analysed,

providing nuance to these general issues.

Data on the changes in women's work ushered in by the Fourth Industrial Revolution must be established. New research should look at how the Fourth Industrial Revolution has already affected workers, at least in terms of gender gaps in labour force participation and employment; concentration of women in more precarious types of occupations and the nature of employment; and invisible work, such as sex work and unpaid care work. New forms of work made available to women and what new work relations they create should be investigated.

New ways of organizing workers in these changing contexts should be explored. The nature of the shift towards the Fourth Industrial Revolution must further be analysed. As a developing country, the Philippines' position in the global economic order that determines the pace, direction and dynamics of this shift, as well as the gendered international division of labour, should be examined more deeply. Policy studies towards protecting national interests as well as promoting global cooperation should be explored.

The emphasis on protecting the rights of workers—in the transition towards the full Fourth Industrial Revolution and in the future—should target specific industries, occupation groups and work beyond those recognized in national accounts.

Feminist views on the future of work in the Philippines are still developing; feminist leaders, women's rights advocates, gender experts and women's organizations need to join the discussion more actively. Equally, if not more importantly, we must ask how women have responded to these changes, what their priorities and strategies are and how these realities should inform policies. Women, in all their diversity, who are or will be affected by the digital revolution, must be ensured of adequate space in the debate and genuine participation in the determination of the future of work in the Philippines.

Endnotes

- [†] These include Work for a Brighter Future (2019) and World Employment Outlook (2019).
- ⁱⁱ These include The Future of Jobs: Employment, Skills and Workforce Strategy for the Fourth Industrial Revolution (2016) and Readiness for the Future of Production Report (2018).
- iii Philippine Statistics Authority, 2018 Gender Statistics on Labor and Employment (Manila: PSA, 2018).
- iv ibid.
- IBON Foundation, "Faltering Economy, Shell of a Democracy,"
 "Yearend 2018 Bird talk: Economic and Political Briefing
 (Manila: IBON, 2019), 13.
- vi PSA, 2018.
- vii International Labour Organisation, Decent Work Country Diagnostics: Philippines 2017 (Manila: ILO, 2017), 27.
- viii Philippine Statistics Authority, 2018 Gender Statistics on Labor and Employment (Manila: PSA, 2018).
- ix ibid.
- x ibid.
- xi ibid.
- vii International Labour Organisation, Decent Work Country Diagnostics: Philippines 2017 (Manila: ILO, 2017), 116.
- xiii Ibid., p. 30.
- xiv Philippine Statistics Authority, 2018 Gender Statistics on Labor and Employment (Manila: PSA, 2018).
- Philippine Commission on Women, Enacting the Anti-Prostitution Law: Amending Articles 202 and 341 of the Revised Penal Code (Manila: PCW, 2009).
- wi Michael R.M. Abrigo and Kris Francisco-Abrigo, Counting Women's Work in the Philippines (Quezon City: Philippine Institute for Development Studies, 2019), 7.
- ^{xvii} The United Nations Development Programme, Development 4.0: Opportunities and Challenges for Accelerating Progress towards the Sustainable Development Goals in Asia and the Pacific (Bangkok: UNDP, 2018), 7-11.
- The Future of Jobs at Risk of Automation (Bangkok: International Labour Organization, 2016), 17.
- xix ibid., 31.
- ×× ibid., 15, 31.
- xxi ibid., 20.
- Revolution: Are We There yet?" Business Mirror, last modified October 4, 2018; Melisa B. Serrano, "Facing the Challenges of Digitalization: Implications for Social and Labour Policies." Paper presented at the panel discussion on

- Various Pillars around a Progressive Economic Policy,'
 Friedrich-Ebert-Stiftung and Socdem Asia Conference on
 Charting a New Economic Roadmap: Inclusive Development
 and Democratization, Penang, Malaysia, Sep. 21-23, 2018.
- viiii Czeriza Valencia, "Textile, Footwear Workers Most Vulnerable to New Technology – PIDS", Philippine Star, last modified September 16, 2018.
- vivi ILO, "Wages and Productivity in Garment Sector in Asia and the Pacific and the Arab States", (Bangkok: ILO, 2016), 2-3.
- W United Nations Development Programme, Development 4.0: Opportunities and Challenges for Accelerating Progress towards the Sustainable Development Goals in Asia and the Pacific (Bangkok: UNDP, 2018), 32.
- wwi Chang, Jae-Hee and Phu Hyunh, ASEAN in Transformation: The Future of Jobs at Risk of Automation, Bangkok: International Labour Organization, 2016, 31.
- wwii ibid., 31; United Nations Development Programme,
 Development 4.0: Opportunities and Challenges for
 Accelerating Progress towards the Sustainable Development
 Goals in Asia and the Pacific (Bangkok: UNDP, 2018), 33.
- A Developing Country Perspective on Employment Impacts and Standards in Online Outsourcing, Crowdwork, etc. (Manchester, UK: Economic and Social Research Council, 2017), 5.
- xxix ibid., 3.
- xxx Riesewieck, Moritz and Hans Block, The Cleaners, Riesewieck, M. and Hans Block. The Cleaners. Cologne, Germany: Gebrüder Beetz Filmproduktion Köln Gmbh & Co. Kg. and Filmart Produções. Last modified 2018. http://bit.ly/2Kjmlli.
- www. World Economic Forum, Readiness for the Future of Production Report 2018 (Cologny, Switzerland: WEF, 2018), 5.
- xxxii ibid., 9.
- Department of Information and Communications
 Technology, Philippine Digital Transformation Strategy 2022,
 (Manila, DICT, 2019), 44.
- xxxiiv National Economic Development Authority, Philippine Development Plan 2017-2022 (Pasig City: NEDA, 2017).
- xxxv ibid.
- xxxvi ibid.
- Technical Education and Skills Development Authority, Technological Change is Coming: The Fourth Industrial Revolution (Taguig City: TESDA, 2016).

- xxxviii See https://www.pids.gov.ph/events/360.
- xxxix Elmer P. Dadios et al., Preparing the Philippines for the Fourth Industrial Revolution: A Scoping Study (Quezon City, Philippine Institute for Development, 2018), 87.
- xi Katrina Domingo, "Philippines' 'Slow' Automation Shift May Lead to Job, Investment Losses: Analyst," ABS-CBN News, last modified September 26, 2018.
- xli ibid.
- Revolution: Are We There yet?" Business Mirror, last modified October 4, 2018; Melisa B. Serrano, "Facing the Challenges of Digitalization: Implications for Social and Labour Policies." Paper presented at the panel discussion on Various Pillars around a Progressive Economic Policy,' Friedrich-Ebert-Stiftung and Socdem Asia Conference on Charting a New Economic Roadmap: Inclusive Development and Democratization, Penang, Malaysia, Sep. 21-23, 2018.
- xliii ibid.
- wiv Gerardo Sicat, "The Fourth Industrial Revolution: What it could mean for us," The Philippine Star, last modified September 26, 2018.
- xlv ibid.
- xlvi Rene E. Ofreneo, "Challenges of the 4th Industrial Revolution," Business Mirror, last modified February 22, 2017.
- xivii World Economic Forum, Readiness for the Future of Production Report 2018 (Cologny, Swizterland: WEF, 2018), viii.
- xlviii ibid., 11.
- xlix Jae-Hee Chang and Phu Hyunh, ASEAN in Transformation: The Future of Jobs at Risk of Automation (Bangkok: International Labour Organization, 2016), 2.
- United Nations Development Programme, Development 4.0: Opportunities and Challenges for Accelerating Progress towards the Sustainable Development Goals in Asia and the Pacific (Bangkok: UNDP, 2018), 25.
- Lukas Schlogl and Andy Summer, Automation and the Future of Economic Development, Work, and Wages in Developing Countries (Washington, D.C.: Center for Global Development, 2018).
- Christophe Degryse, Digitalisation of the Economy and Its Impact on Labour Markets (Brussels: European Trade Union Institute, 2016), 54.
- Mark Graham, Isis Hjorth and Vili Lehdonvitra, "Digital Labour and Development: Impacts of Global Digital Labour Platforms and the Gig Economy on Worker Livelihoods," Transfer 23, no. 2 (2017), 16.
- liv ibid., 9-14.
- ^I Heeks, 2017, 14.

- "PayPal Global Freelancer Survey," PayPal, last modified March 1, 2018.
- ^{Ivii} Arno Maierbruggger, "The Digital Rubbish Collectors of the Philippines," Investine, last modified April 30, 2016.
- Mary Rose Ofianga, "More To Do: Technology-facilitated Gender-Based Violence in the Philippines," GenderIT, last modified November 20, 2018.
- lix ibid
- Economic and Social Commission for Asia and the Pacific, United Nations. E-Government for Women's Empowerment in Asia and the Pacific, last modified May 2016.
- lxi ibid.
- Revolution: Are We There yet?" Business Mirror, last modified October 4, 2018; Melisa B. Serrano, "Facing the Challenges of Digitalization: Implications for
- Social and Labour Policies." Paper presented at the panel discussion on Various Pillars around a Progressive Economic Policy,' Friedrich-Ebert-Stiftung and Socdem Asia Conference on Charting a New Economic Roadmap: Inclusive Development and Democratization, Penang, Malaysia, Sep. 21-23, 2018.
- Teresa Umali, "Training prepares Filipino women for Fourth Industrial Revolution," OpenGov Asia, last modified October 15, 2018.
- lxiv ibid.
- Debra Howcroft and Jill Rubery, "Gender Equality Prospects and the Fourth Industrial Revolution," Policy Network, last modified April 29, 2018.
- Mikael Angelo Francisco, "In the Face of 4th Industrial Revolution, It's Time to Educate Girls and Empower Women for Various STEM Fields," GMA News Online, last modified February 26, 2019.
- ^{lovii} Julia Abad, "Empowering Women for the Future of Work," Philippine Daily Inquirer, last modified June 16, 2018.
- Implications for Social and Labour Policies." Paper presented at the panel discussion on Various Pillars around a Progressive Economic Policy,' Friedrich-Ebert-Stiftung and Socdem Asia Conference on Charting a New Economic Roadmap: Inclusive Development and Democratization, Penang, Malaysia, Sep. 21-23, 2018.
- Richard Heeks, Decent Work and the Digital Gig Economy: A Developing Country Perspective on Employment Impacts and Standards in Online Outsourcing, Crowdwork, etc.

(Manchester, UK: Economic and Social Research Council, 2017), 26.

- lxx ibid.
- lxxi ibid.
- Revolution," Business Mirror, last modified February 22, 2017.
- Revolution: Are We There yet?" Business Mirror, last modified October 4, 2018; Melisa B. Serrano, "Facing the

Challenges of Digitalization: Implications for Social and Labour Policies." Paper presented at the panel discussion on Various Pillars around a Progressive Economic Policy,' Friedrich-Ebert-Stiftung and Socdem Asia Conference on Charting a New Economic Roadmap: Inclusive Development and Democratization, Penang, Malaysia, Sep. 21-23, 2018.

Bibliography

Abad, Julia. "Empowering Women for the Future of Work." Philippine Daily Inquirer. Last modified June 16, 2018. http://bit.ly/2Y5HNUb.

Abrigo, Michael R.M. and Kris Abrigo-Francisco. Counting Women's Work in the Philippines. Quezon City: Philippine Institute for Development Studies, 2019.

Chang, Jae-Hee and Phu Hyunh. ASEAN in Transformation: The Future of Jobs at Risk of Automation. Bangkok: International Labour Organization, 2016.

Dadios, Elmer et al. Preparing the Philippines for the Fourth Industrial Revolution: A Scoping Study. Quezon City, Philippine Institute for Development, 2018.

Degryse, Christophe. Digitalisation of the Economy and Its Impact on Labour Markets. Brussels: European Trade Union Institute, 2016.

Department of Information and Communications Technology. Philippine Digital Transformation Strategy 2022. Manila: DICT, 2019.

Domingo, Katrina. "Philippines' 'Slow' Automation Shift May Lead to Job, Investment Losses: Analyst." ABS-CBN News. Last modified September 26, 2018. http://bit.ly/2UY76FS.

Economic and Social Commission for Asia and the Pacific. E-Government for Women's Empowerment in Asia and the Pacific. Bangkok: ESCAP, 2016. Last modified May 2016. http://bit.ly/2Y6jYLR.

Francisco, Mikael Angelo. "In the Face of 4th Industrial Revolution, It's Time to Educate Girls and Empower Women for Various STEM Fields." GMA News Online. Last modified February 26, 2019. http://bit.ly/2GWu9M8.

Graham, Mark, Isis Hjorth and Vili Lehdonvitra. "Digital Labour and Development: Impacts of Global Digital Labour Platforms and the Gig Economy on Worker Livelihoods." Transfer 23, no. 2 (2017).

Heeks, Richard. Decent Work and the Digital Gig Economy: A Developing Country Perspective on Employment Impacts and Standards in Online Outsourcing, Crowdwork, etc. Manchester, UK: Economic and Social Research Council, 2017.

Howcroft, Debra and Jill Rubery. "Gender Equality Prospects and the Fourth Industrial Revolution." Policy Network. Last modified April 29, 2018. http://bit.ly/2vEmCfS.

IBON Foundation. "Faltering Economy, Shell of a Democracy." Yearend 2018 Bird Talk: Economic and Political Briefing. Manila: IBON Foundation, 2019.

International Labour Organization. Decent Work Country Diagnostics: Philippines 2017. Manila: ILO, 2017.

International Labour Organization. Wages and Productivity in the Garment Sector in Asia and the Pacific and the Arab States. Bangkok: ILO, 2016.

Maierbruggger, Arno. "The Digital Rubbish Collectors of the Philippines." Investine. Last modified April 30, 2016. http://bit.ly/2WulOYI.

National Economic Development Authority. Philippine Development Plan 2017-2022. Pasig City: NEDA, 2017.

Ofianga, Mary Rose. "More To Do: Technology-facilitated Gender-Based Violence in the Philippines." GenderIT. Last modified November 20, 2018. http://bit.ly/2JfBDN6.

Ofreneo, Rene. "Challenges of the 4th Industrial Revolution." Business Mirror. Last modified February 22, 2017. http://bit.ly/2K6c55z.

"PayPal Global Freelancer Survey." PayPal. Last modified March 1, 2018. http://bit.ly/2Wtg1DQ.

Philippine Commission on Women [PCW]. Enacting the Anti-Prostitution Law: Amending Articles 202 and 341 of the Revised Penal Code (RPC). Last modified 2009. http://bit.ly/3019ZcP.

Philippine Statistics Authority [PSA]. 2018 Gender Statistics on Labor and Employment. Manila: PSA. 2018.

Rosales, Elijah Felice and Rizal Raoul Reyes. "Fourth Industrial Revolution: Are we there yet?" Business Mirror. Last modified October 4, 2018. http://bit.ly/2H263kk

Schlogl, Lukas and Andy Sumner. Automation and the Future of Economic Development, Work, and Wages in Developing Countries. Washington, D.C.: Center for Global Development. 2018.

Serrano, Melisa. "Facing the Challenges of Digitalization: Implications for Social and Labour Policies." Paper presented at the panel discussion on 'Various Pillars around a Progressive Economic Policy,' Friedrich-Ebert-Stiftung and Socdem Asia Conference on Charting a New Economic Roadmap: Inclusive Development and Democratization, Penang, Malaysia, 21-23 September 2018.

Sicat, Gerardo. "The Fourth Industrial Revolution: What it could mean for us." The Philippine Star. Last modified September 26, 2018. http://bit.ly/2VKcRv5

Technical Education and Skills Development Authority. Technological Change is Coming: The Fourth Industrial Revolution. Taguig City: TESDA, 2016.

Riesewieck, M. and Hans Block. The Cleaners. Cologne, Germany: Gebrüder Beetz Filmproduktion Köln Gmbh & Co. Kg. and Filmart Produções.. Last modified 2018. http://bit.ly/2Kjmlli

United Nations Development Programme. Development 4.0: Opportunities and Challenges for Accelerating Progress towards the Sustainable Development Goals in Asia and the Pacific. Bangkok: UNDP, 2018.

Umali, Teresa. "Training Prepares Filipino Women for Fourth Industrial Revolution". OpenGov Asia. Last modified October 15, 2018. http://bit.ly/2DQa3Cv.

Valencia, Czeriza. "Textile, Footwear Workers Most Vulnerable to New Technology – PIDS." Philippine Star. Last modified September 16, 2018 http://bit.ly/2Jlc7kx

World Economic Forum. Readiness for the Future of Production Report 2018. Geneva: World Economic Forum, 2018.

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