



Employment Profile of Women with Disabilities in San Remigio and Mandaue City, Cebu, Philippines

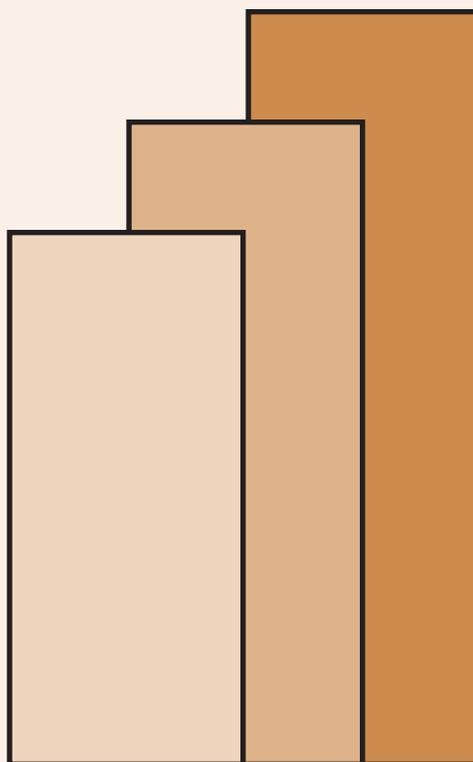
Christian D. Mina

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For comments, suggestions or further inquiries please contact:

The **Research Information Department**, Philippine Institute for Development Studies

18th Floor, Three Cyberpod Centris – North Tower, EDSA corner Quezon Avenue, 1100 Quezon City, Philippines

Tel Nos: (63-2) 3721291 and 3721292; E-mail: publications@mail.pids.gov.ph

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Christian D. Mina¹

Abstract

Persons with disability (PWDs) in developing countries, in general, have lower employment rates, as noted in empirical studies (e.g., Eide et al., 2004; Zaidi and Burchardt, 2005; Meyer and Mok, 2008). PWDs who are women tend to have much lower employment outcomes. In the Philippines, not even half (36%) of the surveyed PWD women in selected cities in Metro Manila and Rosario, Batangas reported that they were engaged in an economic activity (Tabuga and Mina 2011). The most typical jobs of these few employed PWD women were house helpers, vendors, laundresses, and farmers/farm helpers.

This study, an off-shoot of the third joint project of the Philippine Institute for Development Studies and Institute of Developing Economies, looked at the employment profile of adult women with disability in San Remigio and Mandaue City in Cebu, Philippines. Using the primary data collected through survey (involving PWD enumerators) and key informant interviews with various stakeholders, the study found that both the rate and the quality of employment of PWD women in the study sites were generally low. These low employment outcomes of the respondents could be attributed to the following factors: low level of education, lack of training experience, lack of employment opportunities within a community, functioning limitations and low access to assistive devices and/or services, physical barriers and lack of PWD-friendly facilities, and low awareness on relevant policies and programs. Some of the study's recommendations include exploring ways on how to: intensify human capital investment among PWDs, entice employers to provide opportunities to PWDs, provide the necessary assistive devices/services to the needy PWDs, and make public infrastructure more PWD-friendly, among others.

Key words: *person with disability (PWD), adult women, labor force participation, employment, Mandaue City, San Remigio, Cebu, Philippines*

¹ Supervising research specialist at the Philippine Institute for Development Studies (PIDS). The author gratefully acknowledges the excellent research assistance of Mr. Arkin A. Arboneda, Research Analyst II at the PIDS, and assistance of the LGU officials in Mandaue City and San Remigio for the conduct of the survey and interviews, and most especially, to the PWD enumerators who conducted the interviews with the respondents. The usual disclaimer applies.

Employment profile of women with disabilities in San Remigio and Mandaue City, Cebu, Philippines¹

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1. Introduction

The 2011 World Report on Disability noted that about 15.6 to 19.4 percent of the world's population have some form of disability, estimated at around 785-985 million (WHO 2011). In the Philippines, the latest (2015) Census of Population and Housing did not include questions on persons with disability; thus, the latest official disability statistics available is for 2010 only. The census pegs the disabled population at 1.44 million, or about 1.52 percent of the population³. This figure is much lower than the lower-bound estimate of the 2004 World Health Survey and Global Burden of Disease, which is 15.6 percent. The majority of studies in developing countries argued that persons with disability (PWDs) have lower employment rates and lower educational attainment than persons without disability (Eide et al., 2004; Zaidi and Burchardt, 2005; Meyer and Mok, 2008).

This paper aims to provide a profile of employment of adult women with disabilities in Mandaue City and San Remigio in Cebu, Philippines. This study is an off-shoot of the recently concluded collaborative project of the Philippine Institute for Development Studies (PIDS) and the Institute of Developing Economies (IDE)-Japan External Trade Organization (JETRO) titled "Poverty Alleviation of Women and Children with Disabilities in Cebu, Philippines." This particular project is the result of a continuing partnership of the PIDS and IDE-JETRO on the conduct of disability research studies. The first collaboration happened in 2008 when a survey was conducted to determine the socioeconomic conditions of PWDs in selected four cities of Metro Manila, representing the urban environment. This was followed by a 2010 survey in Rosario, Batangas, which looked into the socioeconomic conditions of PWDs in a rural area. Based on the key findings of the two aforementioned studies, adult women and children with disabilities were considered as the most vulnerable PWD groups. Thus, the 2016 PWD survey focused on the conditions of adult women and children with disabilities. Mandaue City and San Remigio were selected as the study areas in order to provide an idea on the conditions of the vulnerable PWD groups in Visayas.

2. Review of literature

In a study on comparing time-series data (1970-1992, National Health) of US labor force participation rates between those with disabilities and without, Yelin and Katz (1994)⁴ showed that labor force participation rates of those with disabilities are tied to labor market dynamics in both the long and short term. From 1970-1992, the proportion of all working age adults surged 13.7 percent, of which 1.1 percent came from the disabled population. Notably, all of the increase of the latter came from the 18-44 disabled

¹ This paper will be part of an upcoming PWD book

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³ In the 2010 CPH, the question on disability was phrased as "Does _____ have any physical or mental disability?". Note that this is an "impairment approach" to the measurement of disability statistics as compared to the "difficulties in functioning approach" espoused by the WHO as outlined in the International Classification of Functioning, Disability, and Health.

⁴ Yelin, Edward S. and Patricia P. Katz. (1994). "Labor Force Trends of Persons With and Without Disabilities", *Monthly Labor Review*, October 1994.

women population. (Labor force participation rates for men fell during that period, with those disabled even more so). For the years 1981-1992, persons with disabilities experienced almost twice the increase in the proportion of working part time for economic reasons than those without disabilities (expansionary economy), but during the recession, the proportion of PWDs working part time did not increase as much as those without. Thus, it seems that people with disabilities tend to be hired during good times—even more so than those not disabled—but also tend to be displaced, again, even more than their healthy counterparts.

For Nazarov, Kang and Von Schrader (2015)⁵, changes in South Korea's employment quota system⁶ have increased labor force participation for persons with disabilities, but has limited impact on their probability of employment. Also, compulsory hiring has not substantially affected the level of job satisfaction observed among employed persons with disabilities compared to their non-disabled counterparts. Using time series data from the Korean Labor and Income Panel Study, the authors also tried to estimate the effect of disability on labor force participation and employment and the interactions of the disability indicator with the year fixed effects. Significant characteristics include age (positive), self-reported health status (negative), gender (positive, male), civil status (positive, married), log of non-earned income (negative), educational attainment (positive), and area of residence. Interestingly, unemployment rate was not significant.

Lauretjie (2003)⁷ estimated the effect of a disability (and its severity) on the probability of participating in the work force and of working for disabled workers, using the Longitudinal Study of the Vocational Rehabilitation Services Program (LSVRSP) database of the USA. Using probit models, the empirical results show that a most severe disability reduces the probability of employment by 10.5 percent over a not severe disability, and that a congenital disability interestingly raises the probability of employment by 11 percent. A congenital disability raises the probability of having work than having the disability later in life. The study also mentions that those who entered the Vocational Rehabilitation Program has an increased likelihood of employment, but the employment rate (46%) is still well below the normal population

Yin and Shaewitz (2015)⁸ profiled labor force participation rates of the disabled in the US using the 2008-2013 American Community Survey⁹ (conducted annually by the U.S. Census Bureau to provide demographic, economic, and housing data on a nationally representative sample of U.S. residents). They found that those with vision or hearing difficulties have the highest labor force participation rate at 26 percent, followed by those with cognitive disabilities (17%), and ambulatory difficulties (15%). The lowest is for those with self-care difficulties at 8 percent. The overall employment rate for non-disabled people was 70 percent, compared to 25 percent in the disabled population. But within the disabled population, the ones with the highest employment rates are those with hearing and vision difficulties (45%), followed by those with ambulatory difficulties (22%), cognitive difficulties (21%), and 14 percent for those with self-care difficulties.

⁵ Nazarov, Zafar, Dongug Kang and Sarah Von Shrader. (2015). "Employment Quota Systems and Labor Market Outcomes of Individuals with Disabilities: Empirical Evidence from South Korea". Fiscal Studies, Vol 36 No. 1 (pp 99-126). Institute for Fiscal Studies.

⁶ In South Korea, the Disability Employment Promotion Act (DEPA), obligates employers with 300 employees and above to hire 50 of them from the PWD community.

⁷ Claretie, Terence M. (2003). "Quantification of the Effect of Worker Disability on the Probability of Participation and Employment", *Journal of Legal Economics*, Spring-Summer 2003.

⁸ Yin, Michelle and Dahlia Shaewitz. (2015). *One Size Does Not Fit All: A New Look at Labor Force Participation Rates of People with Disabilities*, American Institutes for Research: Washington, DC.

⁹ The ACS categorized disability into four types: cognitive disability, ambulatory disability, vision or hearing disability, and ambulatory disability.

The study also found out that in the US, for disabled persons who are employed, the type of job they have is likely low-income jobs with poor benefits and no opportunities for career progression. As a result, once they get their Social Security Disability benefit, they have less motivation to rejoin the labor force. Table 2 shows the top ten occupations for people with disabilities in 2003 and 2013 in the US.

Table 1. Top Ten Occupations for People with Disabilities in 2003 and 2013, USA

Ranking	2003	2013
1	Janitors and building cleaners	Janitors and building cleaners
2	Cashiers	Cashiers
3	Laborers and freight, stock and material movers, hand	Laborers and freight, stock and material movers, hand
4	Driver/sales workers and truck drivers	Driver/sales workers and truck drivers
5	Cooks	Cooks
6	Retail salespersons	Retail salespersons
7	Nursing, psychiatric, and home health aides	Nursing, psychiatric, and home health aides
8	Maids and housekeeping cleaners	Stock clerks and order fillers
9	Secretaries and administrative assistants	Other production workers, including semiconductor processors and cooling and freezing equipment operators
10	Stock clerks and order fillers	Secretaries and administrative assistants

Source: Yin and Shaewitz (2015)

Note: Occupation categories are similar by disability type, although rankings of the occupation change slightly by type

3. Methodology

This study utilized a survey data set containing information on sample PWDs and their households in Mandaue City and San Remigio, Cebu, Philippines. The said survey was a household-level survey that tapped PWDs as enumerators and abled persons (either members of the PIDS research team or local persons recommended by the LGU focal persons) as recorders. Such data collection strategy was adopted during the 2008 PWD survey in selected cities in Metro Manila (a component of the first phase of the IDE-JETRO–PIDS project). Initial findings of the study were validated through a validation workshop (which was participated in by various stakeholders including the PWD respondents and enumerators) and a series of key informant interviews.

The subsequent discussions pertain to the sampling design and econometric methodology of the study.

3.1. Sampling design¹⁰

Study sites

The study population was limited to two areas in the province of Cebu—one urban area and one rural area. In consultation with the PWD focal persons from the Office of the Provincial Social Welfare, Mandaue City was selected as the urban study site while the Municipality of San Remigio was chosen as the rural study site. These local government units (LGUs) serve as the domains of this study. The criteria for selection of the study areas are as follows: (1) distribution of women and children with disabilities; (2) cooperativeness of the local government; (3) availability of PWD enumerators; and, (4) accessibility and safety of the area.

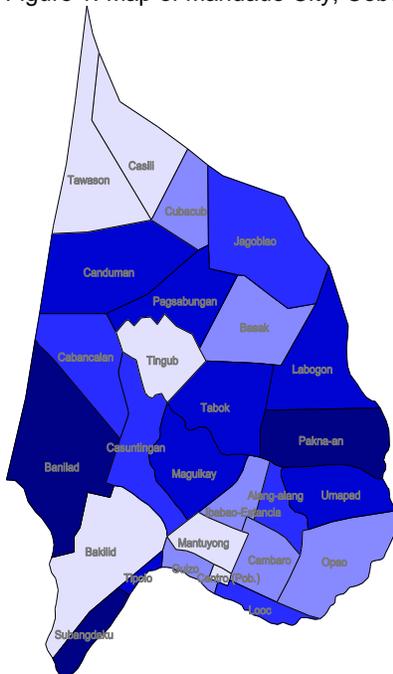
¹⁰ Since this was a component of the IDE-JETRO–PIDS project that aimed at collecting information on adult women and children with disabilities, the sampling methodology adopted in this study was similar to that used for the component for adult women.

Mandaue City

Mandaue city is located on the coastal plains of Cebu province. It is bounded on the north by the municipality of Consolacion, on the east by the Mactan channel, on the southwest by barangay Banilad of Cebu City, on the northwest by barangay Talamban, Cebu City, and on the south by the Cebu North Reclamation. The city became a chartered city on June 21, 1961. It is a highly urbanized city and is home to many industrial and commercial establishments. The city also has two major seaports and is very strategic as it connects to other major cities, namely: Cebu and Lapu-lapu cities¹¹.

Mandaue is a first-class city with 27 barangays and a land area of 3,487 hectares (see Figure 1 for the city map). The city's population in 2010 was around 331,320 (Table 2). Mandaue City's total revenue in 2014 was PHP 1.35 billion, which was higher than the 2013 figure of PHP 1.25 billion. The City also posted an increase in its regular income from PHP 977 million in 2012 to PHP 1.23 billion in 2014. On the other hand, the total expenditures of the City in 2014 was around PHP 995 million, with the local development fund amounted to PHP 70.9 million. The biggest expenditure item in 2014 was the maintenance and other operating expenses (MOOE), which amounted to PHP 675.5 million. This was followed by economic services, which amounted to PHP 523.6 million, followed by general public services, with PHP 307.9 million. Expenditure on social services and social welfare only amounted to PHP 20.4 million. Meanwhile, the City's real property tax accomplishment for 2014 was 83 percent and its total expenditures per capita amounted to PHP 3,003.49.

Figure 1. Map of Mandaue City, Cebu



Source: PIDS (<http://gis.pids.gov.ph/>)

¹¹http://www.unep.org/ietc/Portals/136/Other%20documents/Waste%20Management/Waste%20Plastic/WP_6_WasteQC_Mandaue.pdf Accessed on February 16, 2016.

Table 2. Financial performance indicators, Mandaue City, 2014

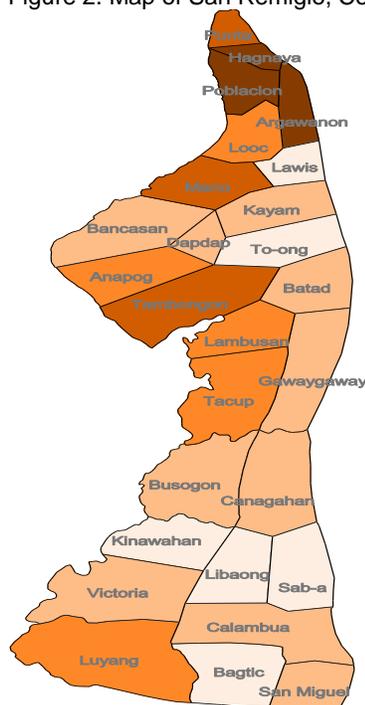
Indicator	Value
Income Class	1
Number of Barangays	27
Population (2010)	331,213
Total Revenue	PHP 1,359,792,470.75
Revenue Growth	9%
Annual Regular Income	PHP 1,229,098,709.63
% Annual Regular Income to Total Revenue	90%
Total Expenditures	PHP 995,116,743.26
20% Local Development Fund	PHP 70,964,190.18
Actual MOOE	PHP 675,529,131.87
General Public Services	PHP 307,921,078.37
Education, Culture and Sports/Manpower Development	PHP 54,912,493.25
Health, Nutrition and Population Control	PHP 15,768,717.15
Housing and Community Development	PHP 22,766,545.13
Social Services and Social Welfare	PHP 20,391,301.42
Social Services Expenditures	PHP 113,839,056.95
Economic Services	PHP 523,608,778.57
Real Property Tax Accomplishment (RPTAR)	83%
Total Expenditures per Capita	PHP 3,003.49

Sources: 2010 Census of Population and Housing, Philippine Statistics Authority (population); Bureau of Local Government Finance, Department of Finance (all other indicators)

Municipality of San Remigio

The Municipality of San Remigio is located in the northern part of the province of Cebu (see Figure 2 for municipal map). San Remigio is considerably rural and also a fishing community, with one of the longest coastline facing Tanon Strait between the Island of Negros and Cebu. The Hagnaya port which connects Bantayan Island to the province of Cebu is located in San Remigio. San Remigio is a third-class municipality, has 27 barangays and has a total population of 51,370 (as of 2010).

Figure 2. Map of San Remigio, Cebu



Source: PIDS (<http://gis.pids.gov.ph/>)

In 2014, its total revenue amounted to PHP 100.2 million while its total expenditure per capita was estimated to be around PHP 2,000.63 (Table 3). Aside from the MOOE, which amounted to PHP 60.5 million, other big expenditure items of San Remigio include the following: general public (PHP 55.8 million); social services (PHP 34.7 million); health, nutrition and population control (PHP 13.5 million).

Table 3. Financial performance indicators, San Remigio, 2014

Indicator	Value
Income Class	3
Number of Barangays	27
Population (2010)	51,370
Total Revenue	PHP 100,289,793.12
Revenue Growth	16%
Annual Regular Income	PHP 93,866,934.25
% Annual Regular Income to Total Revenue	94%
Total Expenditures	PHP 102,820,597.66
20% Local Development Fund	PHP 24,034,662.02
Actual MOOE Amount	PHP 60,592,368.56
Actual CO Amount	PHP 3,219,933.00
General Public Services	PHP 55,837,143.08
Education, Culture and Sports/Manpower Development	PHP 4,571,227.17
Health, Nutrition and Population Control	PHP 13,560,324.94
Housing and Community Development	PHP 12,375,310.00
Social Services and Social Welfare	PHP 4,274,062.47
Social Services Expenditures	PHP 34,780,924.58
Economic Services	PHP 11,024,544.00
Real Property Tax Accomplishment (RPTAR)	5%
Total Expenditures per Capita	PHP 2,000.63

Sources: 2010 Census of Population and Housing, Philippine Statistics Authority (population); Bureau of Local Government Finance, Department of Finance (all other indicators)

Sampling frame

The sampling frames used in this study are the PWD lists provided by the Office of the Mayor of San Remigio and the Office of the Social Services of Mandaue City. The municipality of San Remigio has 27 barangays with around 1,289 PWDs, as of 2015. The list of PWDs contains the following information: complete name, address, date of birth, marital status, sex, type of disability, and parents/guardian of the listed PWD. Mandaue City also has 27 barangays but with around 2,889 listed PWDs, as of 2015. The PWD list in Mandaue City contains basic information such as complete name of the PWD, type of disability, date of birth, complete address, sex, and PWD identification number. The PIDS research team also sought the assistance of the Provincial Social Welfare Office in validating the PWDs listed in Mandaue City and San Remigio. The following additional information were asked during the validation visits: employment, livelihood, membership in organization(s), highest educational attainment as well as information on whether the PWD is currently in school or not.

Thus, the study population refers to all adult women and children with disabilities in San Remigio and Mandaue City who are included in the PWD lists, or those who have become beneficiaries of government programs at least once. Ideally, the study population should have been all the adult women and children with disabilities in the said areas, including those who did not receive any assistance from the

government. Unfortunately, such registry has not been available. The 2015 Census of Population could have been a good¹² sampling frame but has not been publicly available as of this writing.

Sampling scheme

The study adopted a multi-stage stratified random sampling scheme in selecting the sampling units, which are adult women and children with disabilities¹³. Taking into account budget considerations and logistical challenges of tapping PWDs as enumerators, a sample size of 200 was considered by the project team as reasonably large enough to make meaningful inference. The sample size of 200 was equally divided into two study domains; that is, Mandaue City and San Remigio each has a total of 100 samples.

Each study domain was divided into clusters of barangays based on geographical location and size, which is the total number of eligible PWD population; 4 clusters in Mandaue City and 2 clusters in San Remigio. Each cluster contains sufficient number of eligible PWD population so only one sample cluster per study domain can be drawn. Sample clusters (1 for Mandaue City and 1 for San Remigio) were selected using Probability Proportional to Size (PPS), specifically the Cumulative Total Method. The selected cluster in Mandaue City, which account for 25 percent of the total eligible PWD population (adult women and children), covers barangays in the south eastern part, namely: Cambaro, Looc, Opao, Umapad, and Paknaan. All these barangays are classified as urban. The selected cluster in San Remigio, which account for 50.7 percent of the total eligible PWD population (adult women and children), covers barangays in the northern/central part, namely: Anapog, Argawanon, Batad, Kayam, Lambusan, Lawis, Maño, Tambongon, and Toong. These selected barangays are classified as rural. Three barangays in the selected cluster in San Remigio were not covered based on the advice of the LGU focal person.

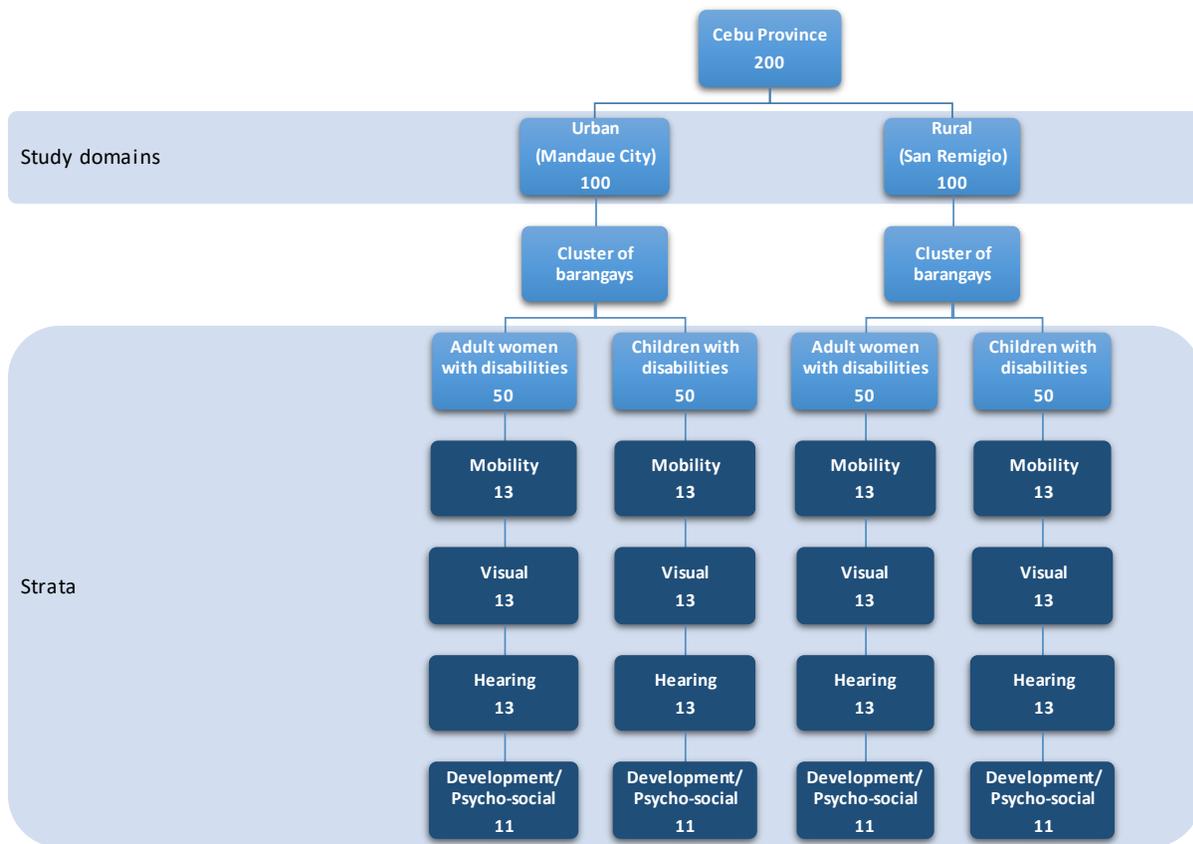
In order to ensure enough number of samples of adult women and children with disabilities in the analysis, the sample requirements of 100 were equally divided into adult women and children (that is, 50 adult women and 50 children) per study domain. The sample size requirements per type of PWD were further allocated among the four types of impairment considered in this study, namely: mobility, visual, hearing, and development/psycho-social. In order to make sure that each type of impairment (particularly the mobility, visual and hearing) would be well represented, the equal allocation scheme was used instead of proportional allocation. The three major types of impairment—mobility, visual and hearing—had 13 samples each, while the remaining 11 samples were allocated to development/psycho-social disability. Thus, within each sample cluster of barangays, a total of eight strata were formed based on the two types of respondents (adult women and children) and four types of impairment (mobility, visual, hearing, and development/psycho-social). Figure 3 shows the number of required samples per stratum by domain.

Within each stratum, simple random sampling was employed to select the sample households, taking into account the required sample size per stratum.

¹² both in terms of comprehensiveness and timeliness

¹³ Since the study would also conduct a household-level analysis, each PWD sample should represent only one household.

Figure 3. Study domains, strata, and the required sample sizes for each level



Source: Author

Moreover, the planned number of samples differ from the actual number due to several reasons like incorrect classification of impairment, not around at home even after repeated visits. Thus, replacements were done but the team made sure that the replacement samples are similar to those being replaced.

3.2. Statistical analysis

Descriptive analysis

Descriptive analysis was used in examining the profile of respondents belonging to different groups in terms of study area and impairment type. The study mainly looked at labor force participation, employment profile including economic activities and quality of jobs/businesses, as well as factors that have contributed to low rate and quality of employment of disabled women in the study areas. The aforementioned labor force concepts were discussed in the paragraphs that follow.

Labor force participation rate was referred to as the proportion of working age population (aged 15 years and over) who contributed to the production of goods and services in the country, either employed or unemployed, during the reference period. Employed individuals were working age population who worked for at least an hour, or with a job or business but not at work, during the reference period. Unemployed individuals were working age population who reported to have no work and were either (i) looking for work and available for and/or willing to take up work (during the previous week or within the next two weeks), or (ii) not looking for work because of their belief that no work was available, temporary illness, or bad weather, or they were awaiting results of their previous job application or

waiting for rehire or job recall, but were available for and/or willing to take up work (during the previous week or within the next two weeks). This new definition of unemployed (adopted by the PSA starting April 2005) was adopted in. On the other hand, those not part of the labor force (also known as economically inactive) were referred to as those who were neither employed nor unemployed and were either (i) not looking for work because of their belief that no work was available, temporary illness, or bad weather, or they were awaiting results of previous job application or waiting for rehire or job recall, and were not available for and/or willing to take up work (during the previous week or within the next two weeks), or (ii) not looking for work because of any of the following reasons: housekeeping, schooling, retired/recipient of a disability pension, too young/old (NSO 2012).

In terms of employment profile, specific occupations assumed by the employed respondents were identified from the reported economic activities and categorized into major occupational groups. The study used the occupational classification of the Community-Based Monitoring System's (CBMS') censuses, which adopted the 1992 Philippine Standard Occupational Classification (PSOC).

Measures of employment quality used in this study were vulnerable employment, informal employment, working poverty, and underemployment (ILOf 2017; ILO 2014; Mahmood et al. 2014). The vulnerable employment rate was defined by the International Labour Organization (ILO) as the proportion of employed who were own-account and contributing family workers. Own-account workers were also known as self-employed workers without employees while contributing family workers were also known as unpaid family workers (ILOf-ES 2013). The two aforementioned classes of workers were considered as vulnerable because they were said to be "employed under relatively difficult circumstances" as they were "less likely to have formal work arrangements, access to benefits or social protection program[s] and were more at risk to economic cycles" (ILOf-ES 2013, pp. 18-19).

An almost similar measure of employment quality was informal employment. Although the module on economic activities in the survey was not designed to capture informal employment, looking at some items like class of worker and nature of employment could provide an idea on the informality of employment of the respondents. Informal employment was defined as "jobs [or employment] that generally lack basic social or legal protection or employment benefits, irrespective of whether they are performed inside or outside the informal sector"¹⁴ (Mahmood 2014, p.38). This was composed of informal sector employment and informal employment in formal enterprises. The specific economic activities that were tagged as informal based on the preceding definition included the following: "employers, employees, own account operators, unpaid family workers in informal enterprises^[15]; domestic workers, casual or day laborers, temporary or part-time workers, industrial outworkers (including homeworkers), and unregistered or undeclared workers [in formal enterprises, private households or those with no fixed employer]; and, "employers, own-account workers, contributing unpaid family workers, own-account workers producing goods exclusively for their own household's consumption, members of informal producer cooperatives" (Mahmood 2014, p.38).

Working poverty rate was defined as the proportion of employed people who were living in poverty (ILO-Philippines 2015). Given that the reference period used in collecting information on household income was July 2015 to June 2016, the poverty threshold used in generating the poverty status of sample households based on household income and in estimating the poverty rate among the working respondents was estimated by adding the poverty threshold for the first semester of 2015 (representing the threshold for the second semester of 2015) and the inflated threshold (representing the poverty threshold for the first semester of 2016). The monthly growth rate of the food consumer price index (CPI) of the

¹⁴ a job-centered concept, as agreed by the 17th International Conference of Labour Statisticians (ICLS) in 2003 (Mahmood 2014)

¹⁵ defined as small and registered or unincorporated enterprises (Mahmood 2014, p.38)

bottom 30 percent for the first semester of 2016¹⁶ (from 2015) were then multiplied with the monthly estimate of the poverty threshold for 2015¹⁷. To characterize further the poverty status, the author also estimated the percentage deviation of per capita income of the respondents' households from the poverty threshold.

Underemployment rate was the proportion of respondents who were employed but expressed desire to increase their number of working hours or to look for an additional job. The visibly underemployment rate was referred to as the proportion of underemployed respondents who worked less than 40 hours during the reference week (NSO 2012).

4. Key findings from the survey

4.1. Basic profile of respondents

Distribution of samples

The study covered a total of 1,031 adult women with disabilities; 756 in Mandaue City and 275 in San Remigio¹⁸. In Mandaue City, around half of the respondents were found in Barangays Paknaan and Opao. Apparently, Paknaan was the most populated barangay in Mandaue City in 2015, accounting for 7.4 percent of the city population. In San Remigio, the majority (68.4%) of the respondents were located in Barangays Maño, Argawanon and Tambongon, which were also the most populated rural barangays in the municipality in 2015 (with population shares of 6.4%, 7.2% and 5.4%, respectively).

Table 4. Distribution of PWD adult women respondents, by study area and by barangay, 2016

Study area	Barangay	No.	%
Mandaue City	Cambaro	139	18.4
	Looc	123	16.2
	Opao	170	22.4
	Paknaan	214	28.4
	Umapad	110	14.5
	All	756	100.0
San Remigio	Anapog	16	5.8
	Argawanon	62	22.6
	Batad	5	1.8
	Kayam	6	2.2
	Lambusan	29	10.6
	Lawis	9	3.2
	Maño	70	25.4
	Tambongon	56	20.4
	Toong	22	7.9
	All	275	100.0

Source of basic data: PIDS-IDE PWD Survey, July 2016

¹⁶ per advice of the Poverty Group of the PSA

¹⁷ The poverty threshold for the first semester of 2015 was divided by six to come up with the monthly poverty threshold.

¹⁸ equivalent to a total of 103 samples; 50 in Mandaue City and 53 in San Remigio (Note: 3 additional samples for the mobility group in San Remigio were interviewed to augment the originally planned sample size)

Impairment type

The mobility group was the largest group in both study areas. Almost half of the respondents in Mandaue City and 35.6 percent in San Remigio belonged to this group. The hearing group, on the other hand, was the smallest group; 13.8 percent in Mandaue City while 18.1 percent in San Remigio. Meanwhile, a larger proportion of respondents in Mandaue City had multiple impairments (i.e., at most two types of impairment); around 30 percent in Mandaue City while only 3.6 percent in San Remigio (Table 5). Respondents with multiple impairments in Mandaue City and San Remigio largely came from the visual and development/psycho-social groups, respectively.

Table 5. Distribution of PWD adult women respondents, by study area and impairment type, 2016

Impairment type	Mandaue City			San Remigio		
	Frequency	Share (%)	With multiple impairments (%)	Frequency	Share (%)	With multiple impairments (%)
Mobility	372	49.2	23.1	98	35.6	5.0
Visual	140	18.5	56.3	73	26.6	0.0
Hearing	104	13.8	10.4	50	18.1	0.0
Development/ Psycho-social	140	18.5	28.1	54	19.7	9.1
All groups	756	100.0	28.4	275	100.0	3.6

Source of basic data: PIDS-IDE PWD Survey, July 2016

Medical conditions

In terms of specific medical conditions, the leading conditions of the mobility-impaired were polio (38.5% in Mandaue City; 25% in San Remigio) and lower limb amputation (7.7% in Mandaue City; 25% in San Remigio) (Table 6). Almost all of those with polio had paralysis and muscle weakness, mostly in their legs (right leg in Mandaue City; left leg in San Remigio). There were also respondents who experienced post-polio syndrome; 20 percent in Mandaue City while 50 percent in San Remigio. On the other hand, most respondents with lower limb amputation had one missing leg; mostly above the knee in Mandaue City while below the knee in San Remigio.

Table 6. Distribution of PWD adult women respondents, by study area, by impairment type and by specific condition, 2016

Impairment/ Condition	Mandaue City		San Remigio	
	N	%	N	%
Mobility	372	100.0	98	100.0
Spinal cord injury	0	0.0	6	6.3
Cerebral palsy	29	7.7	0	0.0
Polio	114	30.8	25	25.0
Polio/Stroke	29	7.7	0	0.0
Lower limb amputation	29	7.7	25	25.0
Congenital lower limb defect	57	15.4	18	18.8
Stroke	57	15.4	18	18.8
Others	57	15.4	6	6.3
Visual	140	100.0	73	100.0
Totally blind	32	23.1	6	7.7
Partially blind	108	76.9	68	92.3
Hearing	104	100.0	50	100.0
Totally deaf	40	38.5	31	61.5
Partially deaf	64	61.5	19	38.5
Development/psycho-social	140	100.0	54	100.0
Intellectual	102	72.7	5	9.1
Mental retardation	38	27.3	0	0.0
Mental retardation/Learning disability	13	9.1	0	0.0
Learning disability	51	36.4	0	0.0
Down syndrome	0	0.0	5	9.1
Others	0	0.0	0	0.0
Psycho-social	38	27.3	49	90.9
Disordered mood	13	9.1	0	0.0
Disordered mood/Toxic psychosis	13	9.1	5	9.1
Toxic psychosis	0	0.0	15	27.3
Schizophrenia/Toxic psychosis	0	0.0	5	9.1
Schizophrenia/Toxic psychosis/Neurotic	0	0.0	5	9.1
Others	13	9.1	20	36.4

N = number or frequency; % = proportion

Source of basic data: PIDS-IDE PWD Survey, July 2016

There was also a significant proportion of mobility-impaired respondents with congenital lower limb defect and stroke. Among those with congenital lower limb defect in Mandaue City, either a leg below the knee was or both lower legs were affected. In San Remigio, either a leg above the knee was or both feet were affected. Meanwhile, both arms and legs were the affected body parts among the majority of those with stroke in Mandaue City. In San Remigio, there was a slightly more respondents whose legs (only) were affected by stroke than those whose both arms and legs were affected. All of those with stroke in Mandaue City had movement difficulty while two-thirds had speech problem. In San Remigio, only a small proportion had movement difficulty; many either had difficulty in thinking, emotions or speech.

Most of the visually impaired were partially blind. San Remigio had a higher proportion of partially blind members (92.3%) than Mandaue City (76.9%).

On the other hand, the majority of the hearing-impaired respondents in Mandaue City were partially deaf while the majority of deaf in San Remigio were totally deaf.

Respondents with intellectual disability (72.7%), specifically learning disability and mental retardation, mostly comprised the development/psycho-social group in Mandaue City. In San Remigio, the said group were composed of those with psycho-social disability (90.9%), mostly toxic psychosis.

Educational attainment

In terms of educational attainment, San Remigio had slightly higher proportion of respondents who had high school diploma (27.2%); compared to Mandaue City's 19.7 percent (Figure _b). Such proportions, however, were lower than the proportion of those who did not even finish elementary, which were almost 50 percent (48.9% in Mandaue City, 49.8% in San Remigio). If we were to define less-educated as those who did not finish secondary education, then the majority of respondents in both study areas could be considered as less-educated. San Remigio was slightly better-off in terms of educational profile than Mandaue City; with 7.5 percent differential in terms of proportion of less-educated (or more-educated) respondents.

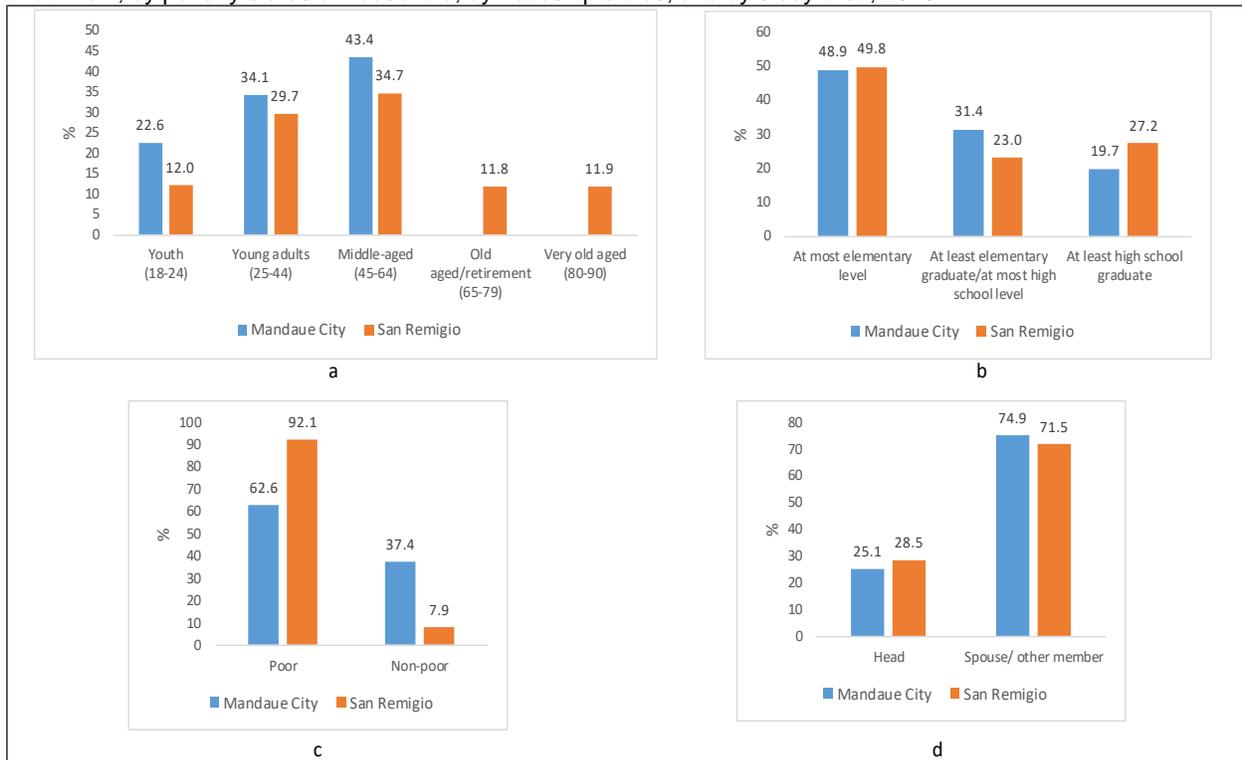
Headship status

In terms of headship status, only about one-fourth of the respondents in each study area were heads of their households. The majority were either spouses of heads or merely members of their households.

Households' poverty status

Households of almost all (92.1%) respondents in San Remigio were considered as income poor. A relatively lower but still a high proportion (62.6%) of households was considered as poor in Mandaue City.

Figure 4. Percentage distribution of PWD adult women respondents, by age group, by highest educational attainment, by poverty status of household, by headship status, and by study area, 2016

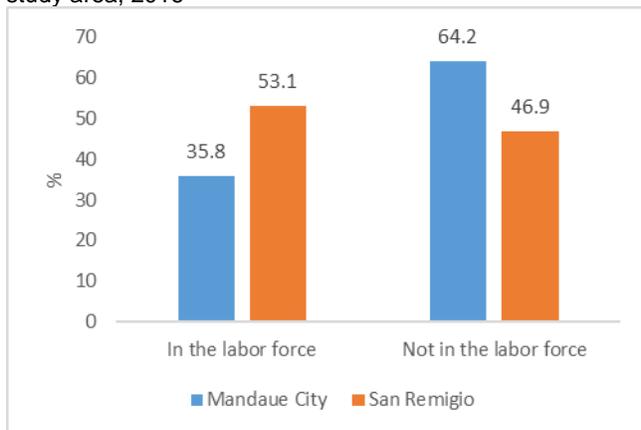


Source of basic data: PIDS-IDE PWD Survey, July 2016

4.2. Labor force participation (LFP)

More than half of the sample respondents in the study areas were not part of the labor force. Labor force participation rate in San Remigio was relatively higher than in Mandaue City. Only around a third (35.8%) of respondents in Mandaue City were part of the labor force while a little more than half (53.1%) of those in San Remigio were considered as economically active (Figure 5).

Figure 5. Percentage distribution of PWD adult women respondents, by mode of labor force participation and by study area, 2016

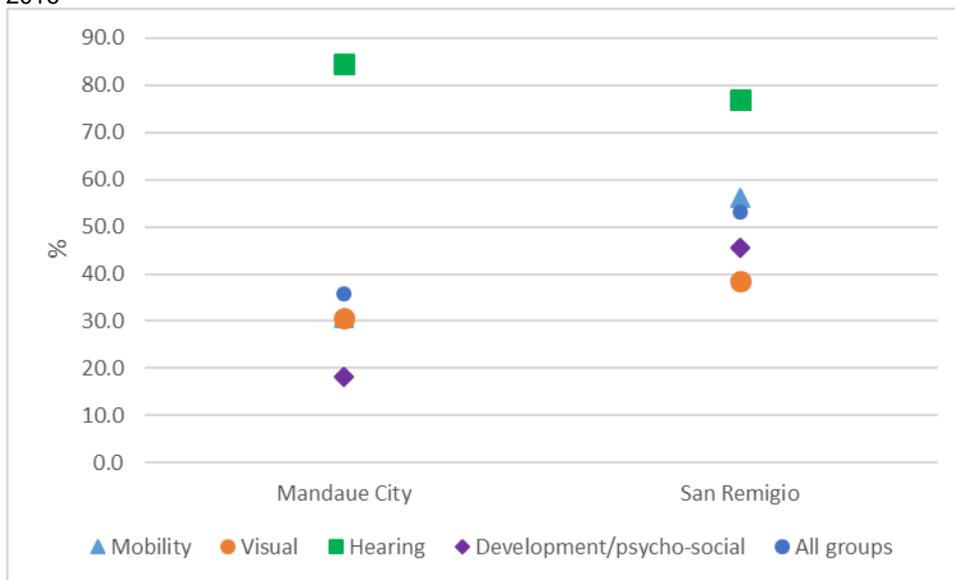


Source of basic data: PIDS-IDE PWD Survey, July 2016

Among impairment groups, the hearing group had the highest labor force participation rate in both study areas (Figure 6). In fact, majority of the hearing-impaired respondents were either working or looking for/willing to work probably because they were the most mobile among the PWD groups (Figure 7). The finding that labor force participation rate among deaf respondents was slightly higher in Mandaue City can be explained by higher proportion of partially deaf (e.g., hard of hearing) members in the said area than in San Remigio. In the point of view of both PWD respondents and their families, partially deaf people tend to have higher probability of entering and staying in the labor market compared to those who were totally deaf.

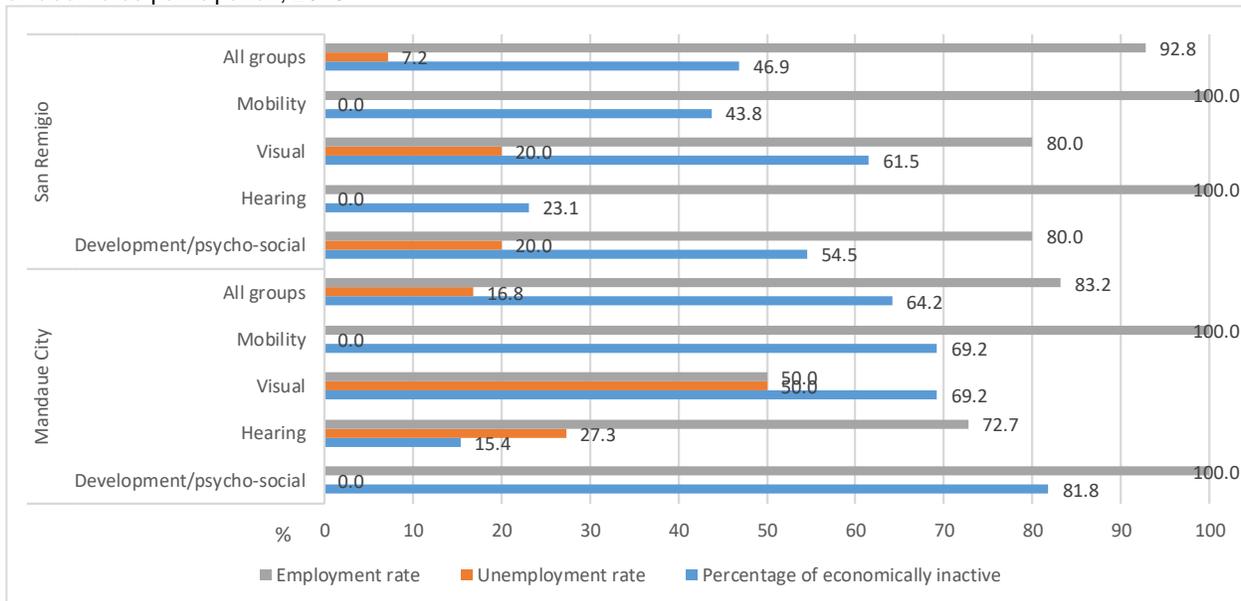
On the other hand, the development/psycho-social disability group (mostly with learning disability and mental retardation) in Mandaue City and the visual group in San Remigio had the lowest labor force participation rates. Based on the research team’s observation in the field, survey respondents belonging to these two groups tend to face higher degree of functioning difficulty as compared to the hearing- and mobility-impaired. Even in other countries, these two groups were more likely to persistently experience employment biases (Shaw 2013).

Figure 6. Labor force participation rates of PWD adult women respondents, by study area and by impairment type, 2016



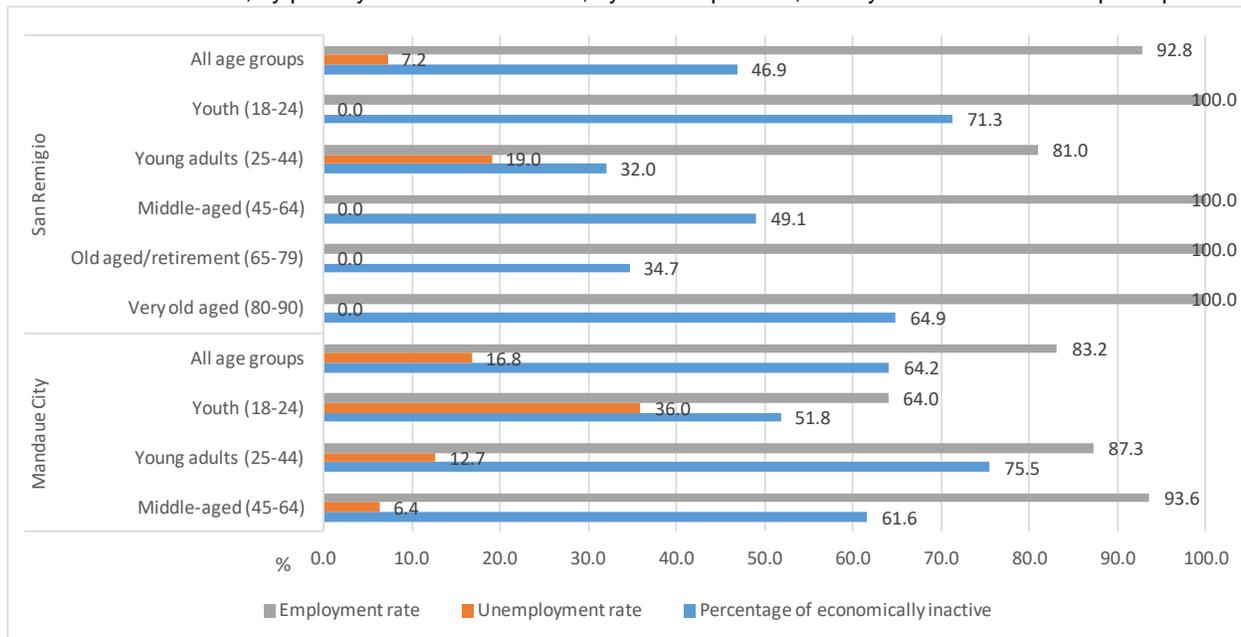
Source of basic data: PIDS-IDE PWD Survey, July 2016

Figure 7. Percentage distribution of PWD adult women respondents, by study area, by impairment type, and by mode of labor force participation, 2016



Source of basic data: PIDS-IDE PWD Survey, July 2016

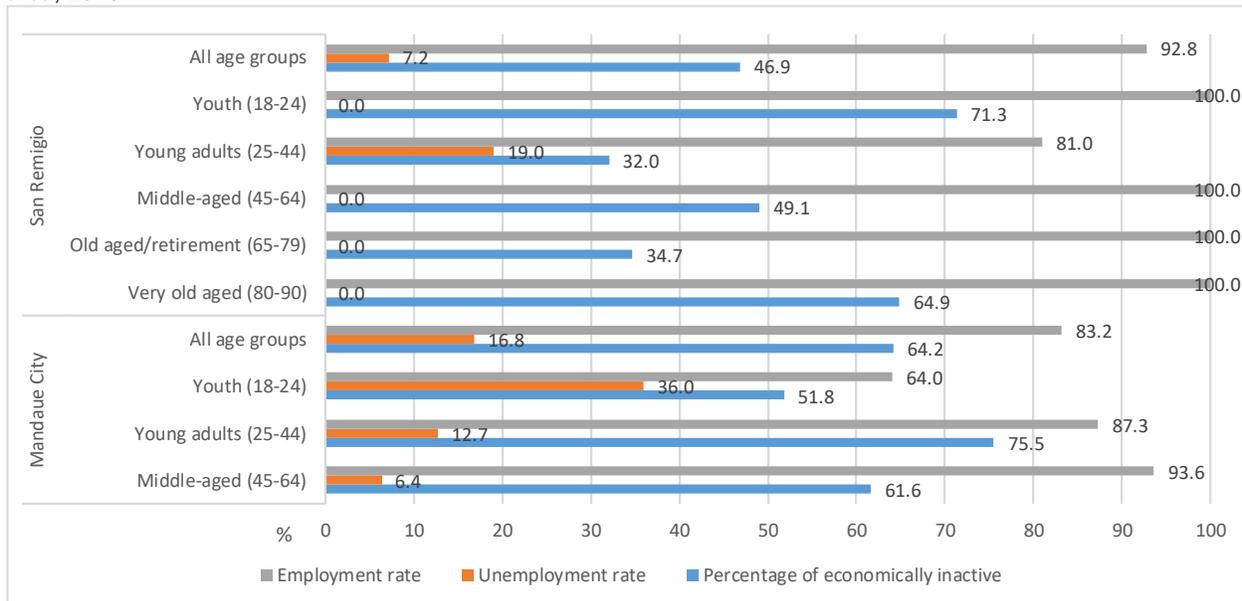
Figure 8. Percentage distribution of PWD adult women respondents, by study area, by age group, by highest educational attainment, by poverty status of household, by headship status, and by mode of labor force participation



Source of basic data: PIDS-IDE PWD Survey, July 2016

In terms of frequency, the mobility-impaired respondents in Mandaue City dominated the respondents who were not part of the labor force while the hearing group had the least number of economically inactive members (Figure 9). The unemployed respondents, on the other hand, were mostly visually impaired and hearing impaired. Employed respondents, meanwhile, were dominated by mobility-impaired as well as hearing-impaired respondents.

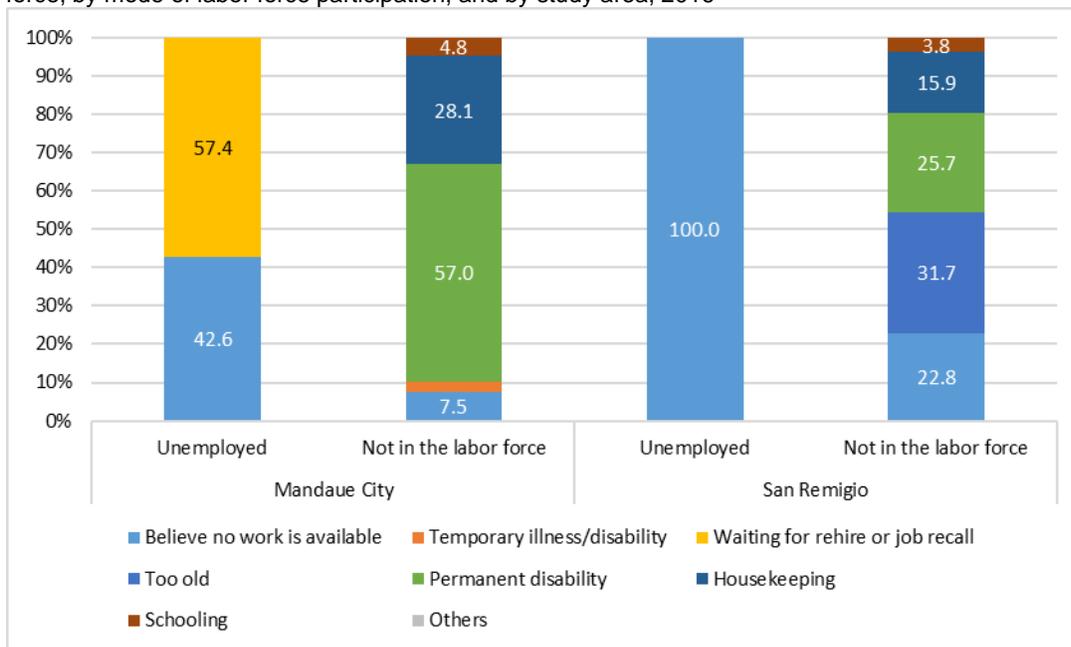
Figure 9. Frequency distribution of PWD adult women respondents, by mode of labor force participation and by study area, 2016



Source of basic data: PIDS-IDE PWD Survey, July 2016

The typical reasons for not participating in the labor force were permanent disability and housekeeping. Majority of respondents, especially in Mandaue City, believed that their disability had been preventing them from getting a decent employment. Others had not been allowed by their families to go out unaccompanied. More often than not, no one among their household members was available to accompany them when going out (either in bringing them to or fetching them from their workplaces) because other members of their family were busy with their own work.

Figure 10. Percentage distribution of PWD adult women respondents, by reasons for not participating in the labor force, by mode of labor force participation, and by study area, 2016



Source of basic data: PIDS-IDE PWD Survey, July 2016

In San Remigio, old age appeared to be the most cited reason of economically inactive respondents. Majority of them said that their age limits their capacity to perform economic activities outside home.

There was also a significant proportion of economically inactive respondents who reported that they were not part of the labor force because they were assuming household duties, thus leaving them with no time to carry out or even just to scout for work outside of their homes. While this is true, time-use allocation of respondents showed that PWD women in the study areas had also been engaged in productive activities at home (albeit small), specifically household duties like doing household chores and child care, even if they had not been officially employed. During their typical day, respondents who were not employed spent an average of 4-5 hours on household duties—unpaid works usually undervalued by other people (Appendix Figures 6-9). In general, respondents who were rural dwellers tend to spend larger time on household duties. The pie charts on time-use allocation also revealed that visually-impaired respondents spent the largest amount of time on household duties, equivalent to roughly 5½ hours on such valuable (but usually discounted) unpaid works.

A small proportion of the working-age respondents who were not looking for work were either studying or discouraged (or believed that no work would be available to them).

The reasons reported by those who were considered unemployed differ from those cited by the economically inactive respondents. All unemployed respondents in San Remigio said that they believe that there would be no available work for them. Similar reason has also been cited by less than half of the respondents in Mandaue City. On the other hand, roughly 6 in every 10 respondents in Mandaue reported that they were actually waiting for rehire or job recall.

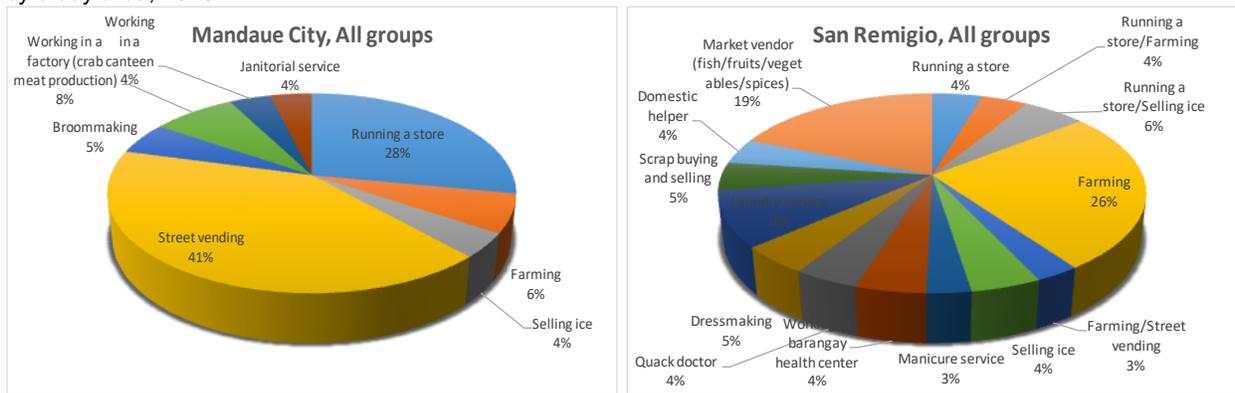
4.3. Employment profile

It would also be interesting to assess the profile of employment gained by PWD women in the study areas, specifically the types of economic activities and quality of jobs/businesses they were engaged in.

Economic activities

Sales and related occupations appeared to be the most common occupations assumed by adult women with disabilities in both study areas (Figure 11). Street vending, running a store and ice selling accounted for 73 percent of all economic activities performed by PWD women in Mandaue City. Similar set of income-generating activities (namely: wet market vending, running a store, ice selling, street vending, and scrap buying/selling) accounted for 45 percent of all economic activities performed by employed respondents in San Remigio. Agriculture-related jobs and/or businesses (either crop or livestock/poultry farming, or fishing) were also dominant in San Remigio, accounting for 33 percent of all occupations assumed by the employed respondents.

Figure 11. Percentage distribution of PWD adult women respondents who were employed, by economic activities and by study area, 2016



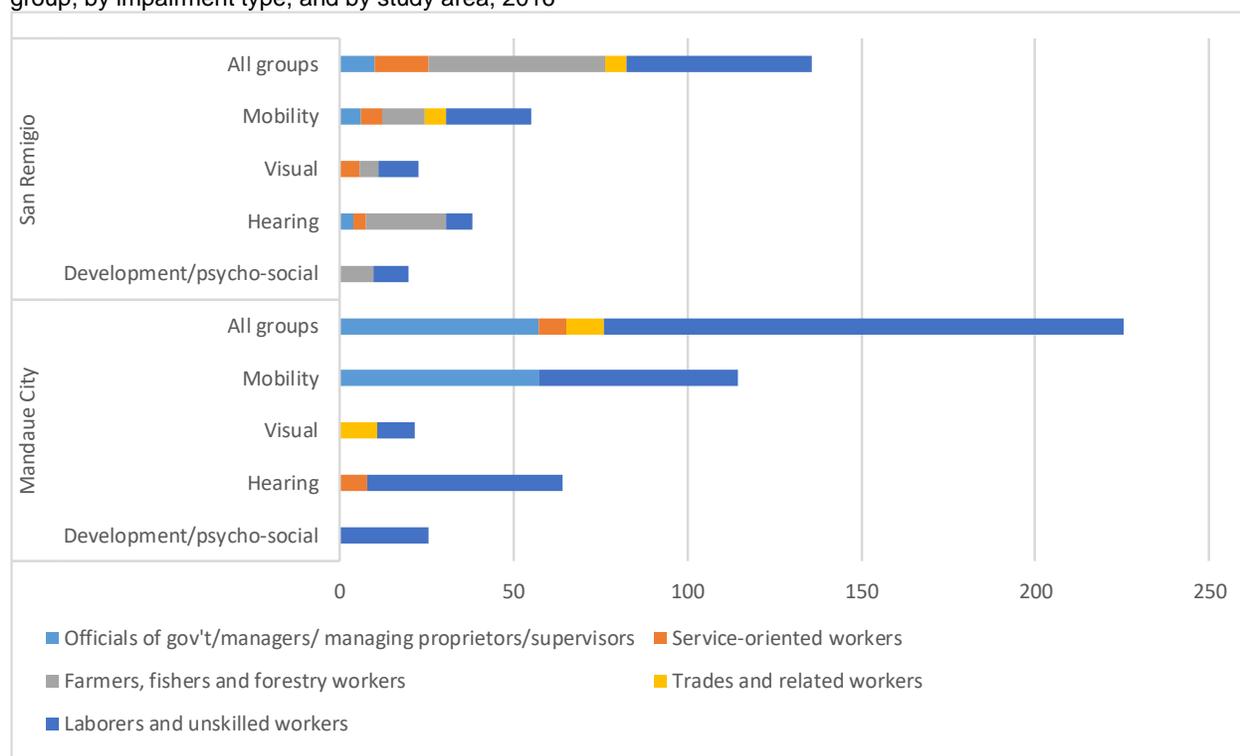
Source of basic data: PIDS-IDE PWD Survey, July 2016

All impairment groups, except development/psycho-social, in Mandaue City were engaged in street vending activities. Street vending has been considered as one of the chief sources of income of urban dwellers, particularly women, in developing countries (Forkuor et al. 2017, Yasmeeen 2001). On the other hand, selling of fresh agricultural produce in wet market and farming were assumed by at least one member of each impairment group in San Remigio. These two related activities were more common in rural areas as agriculture has long been playing a vital role in the Philippine rural economy. In particular, performing of less strenuous (yet, more often, time-consuming) farming activities—e.g., planting/transplanting of seeds, manual weeding, crop care, harvesting (picking of produce), feeding/watering/grazing/herding of livestock animals, cleaning of both shelter and animals, pre- and post-fishing activities, processing (from raw materials to semi-finished and/or final product), storing and marketing of produce—were among the women’s typical responsibilities in the Philippine agricultural value chain (FAO 2005; Gondowarsito 1995; Rola 1995; Illo et al. 1994). The respondents (largely from San Remigio) were also engaged in other service-oriented activities such as being a launderer, janitor, domestic helper, manicurist, and traditional healer. Across impairment type, the hearing group in both areas and the mobility group in San Remigio had the most varied occupations (Appendix Figures 1-4). Apparently, respondents from these two groups were observed to be, holding other factors constant, the most mobile and easiest to communicate with, respectively.

Classifying the occupations into major occupational groups, it can be observed that unskilled labor was the most common occupation among PWD female workers in study areas (Figure 12). San Remigio workers were mostly farmers or laborers/unskilled while Mandaue City workers were either laborers/unskilled or small-scale business operators.

All impairment groups in both study areas had at least one member who was a laborer/unskilled worker. Small-scale business operators (classified under managing proprietors) such as retail store owners and market or street vendors were either mobility-impaired in both areas or hearing-impaired in San Remigio. In the rural area, every impairment group had at least one member who was a farmer/fisher/forestry worker; the majority of them were hearing impaired.

Figure 12. Frequency distribution of PWD adult women respondents who were employed, by major occupational group, by impairment type, and by study area, 2016

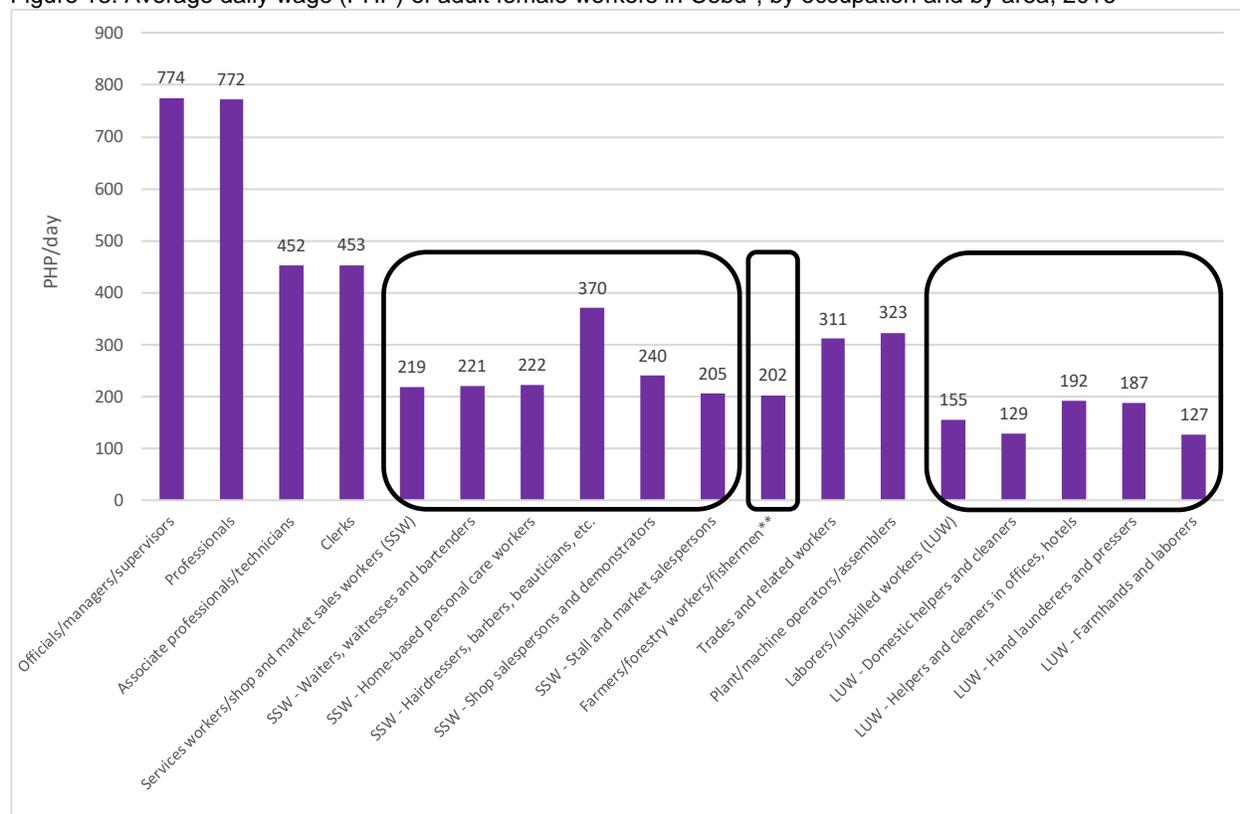


Source of basic data: PIDS-IDE PWD Survey, July 2016

Unfortunately, agricultural, laborers/unskilled and selected service-oriented workers were the lowest wage earners among occupational groups in the Philippines, particularly in Cebu and Region VII (Figure 13). The majority of female workers belonging to these groups received an average of around PHP 200 per day, which was relatively lower than the minimum wage rates in non-agriculture and agriculture sectors in Region VII¹⁹.

¹⁹ The minimum daily wage rates in Region VII were PHP 308-366 for non-agriculture sector (Note: the ceiling increased by PHP 13; from PHP 353 [under Wage Order 19, which became effective on October 10, 2015]) and PHP 288-348 for agriculture sector (both under Wage Order 20, effective March 10, 2017) (NWPC 2017a and NWPC 2017b).

Figure 13. Average daily wage (PHP) of adult female workers in Cebu*, by occupation and by area, 2016



Note: Only wage rates in Cebu and Region VII (for farm workers) were shown in this study to minimize space.

* Wage rates were not available for many of the occupational groups in Mandaue City and San Remigio, thus wage rates in Cebu were used;

** Nominal daily wage rate received by female farm workers in Region VII in 2014

Sources of basic data: Labor Force Survey January 2016 and CountrySTAT (for Farmers/forestry workers/fishermen), Philippine Statistics Authority

Meanwhile, it would also be interesting to know the types of job assumed by those who were not part of the labor force in the past²⁰. Among the 40 percent of the respondents who were not employed during the reference period but with work experience in the past²¹, the majority took any of the following occupations: store keeper/manager/helper, launderer, factory worker, government worker, and farmer/farm worker.

Quality of employment

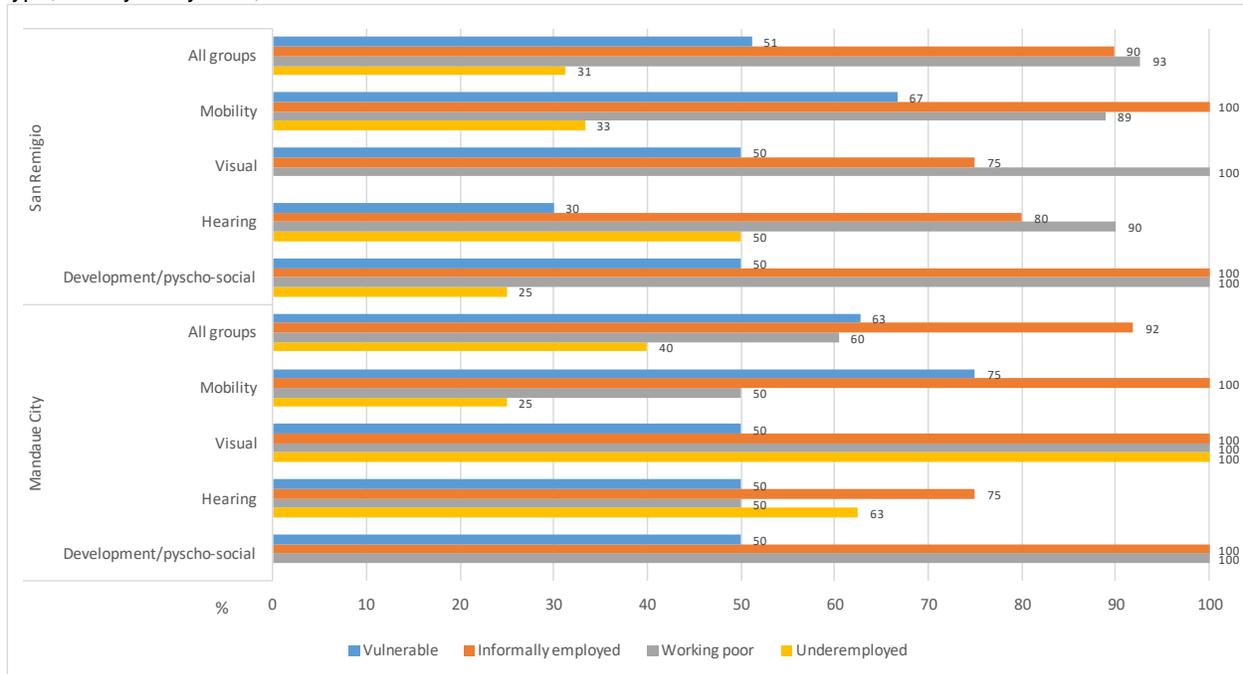
In terms of quality of employment, vulnerable employment rate among respondents was high in both study areas—63 percent in Mandaue City and 51 percent in San Remigio (Figure 14). Respondents who were self-employed without employees dominated the group of vulnerable workers (Figure 15). Vulnerable employment rate was also highest among mobility-impaired respondents but lowest among hearing-impaired respondents. Given that this indicator was found to have a strong inverse relationship with labor productivity, as it could “weigh down productivity and prospects for improved living standards”, it can then be argued that labor productivity among the employed respondents in the study areas tend to be low (ILO-Philippines 2015, p.12). This means that workers with low-quality jobs were

²⁰ prior to the July 2015

²¹ This means that around 3 in every 5 respondents who were not employed did not have a work experience.

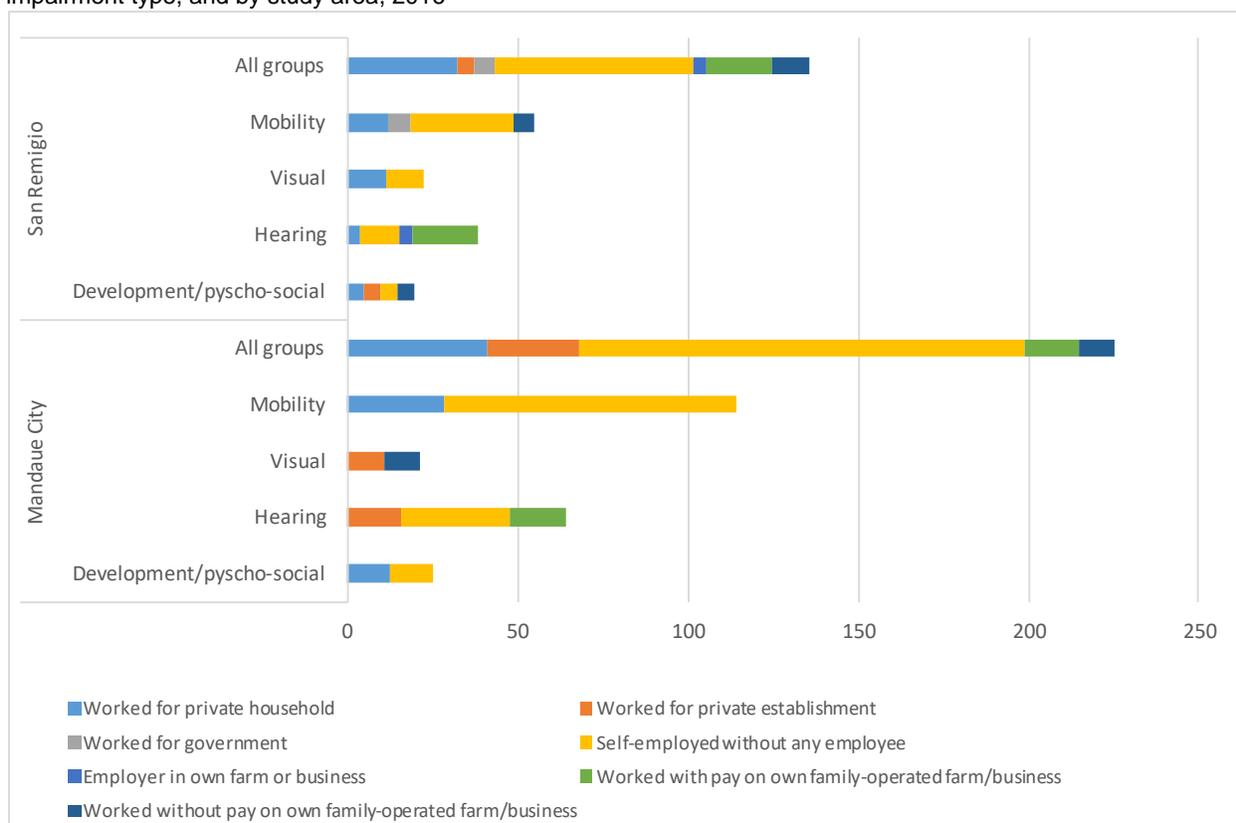
hypothesized to be producing lower output levels. This argument could be particularly true for workers with severe impairment, low level of education and less training experience.

Figure 14. Percentage distribution of PWD adult women respondents with low-quality employment, by impairment type, and by study area, 2016



Source of basic data: PIDS-IDE PWD Survey, July 2016

Figure 15. Percentage distribution of PWD adult women respondents who were employed, by class of worker, by impairment type, and by study area, 2016

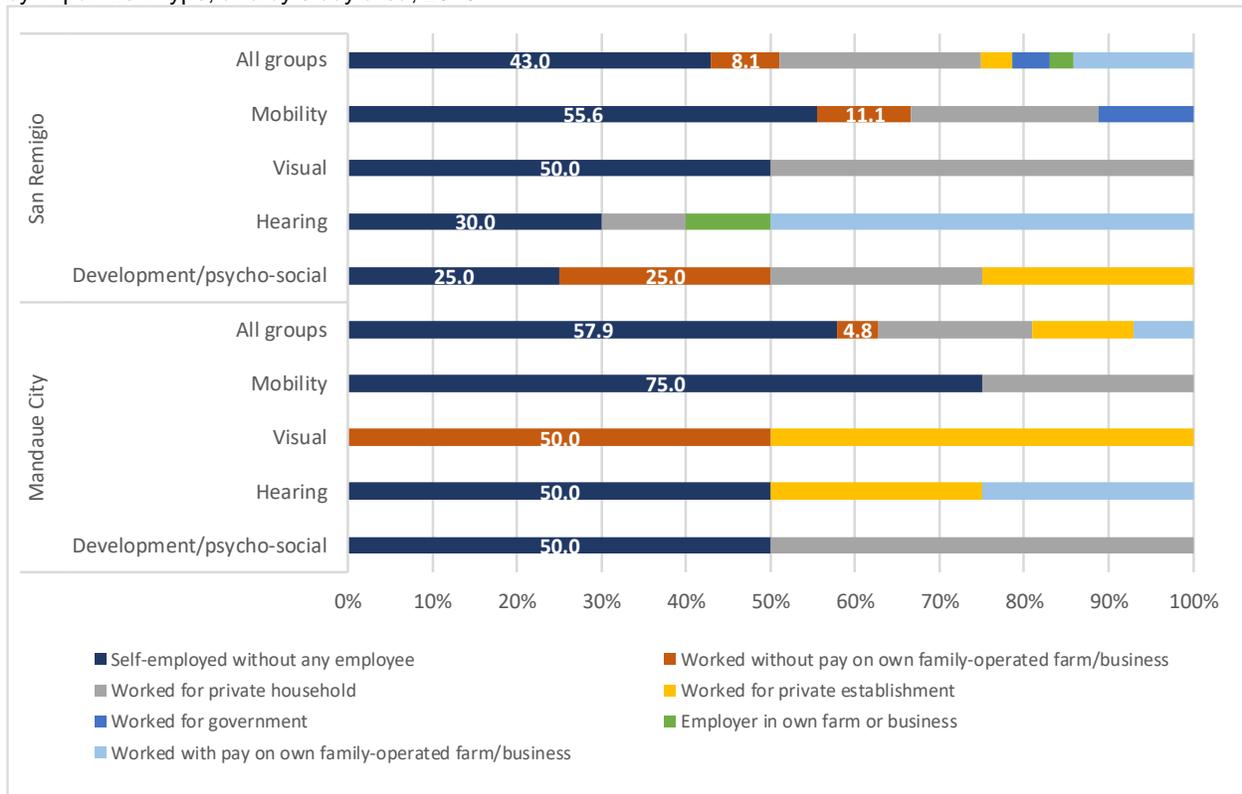


Source of basic data: PIDS-IDE PWD Survey, July 2016

A group of workers engaged in vulnerable employment, apparently, could only be a subset of a larger group of workers—those engaged in informal employment. Mahmood (2014) argued that informal employment could mean lower and unstable earnings, poorer working conditions and lower productivity. The survey data supported this argument, as informal employment accounted for about 90 percent of the total employment of the PWD women respondents. These workers were dominated by those whose nature of employment were either temporary without contract or daily hires. In Mandaue City, temporary workers without contract accounted for 56 percent while 25 percent of the workers were hired on a daily basis (Figure 16). San Remigio workers, on the other hand, were dominated by those hired on a daily basis (48%), followed by temporary workers with no contract (26%). The group of workers who were engaged in informal employment could have been larger had temporary workers with contract (accounting for 10 percent and 8 percent in Mandaue City and San Remigio, respectively) been found²² to be employed in the informal sector, or “unregistered and small, unincorporated private enterprises engaged, at least partly, in producing goods and services for the market” (ILO 2015, p. 1). Among the impairment groups, only the hearing impaired got permanent jobs.

²² The survey data, unfortunately, were not able to capture this type of information as informality of jobs was not part of the primary objectives of the survey.

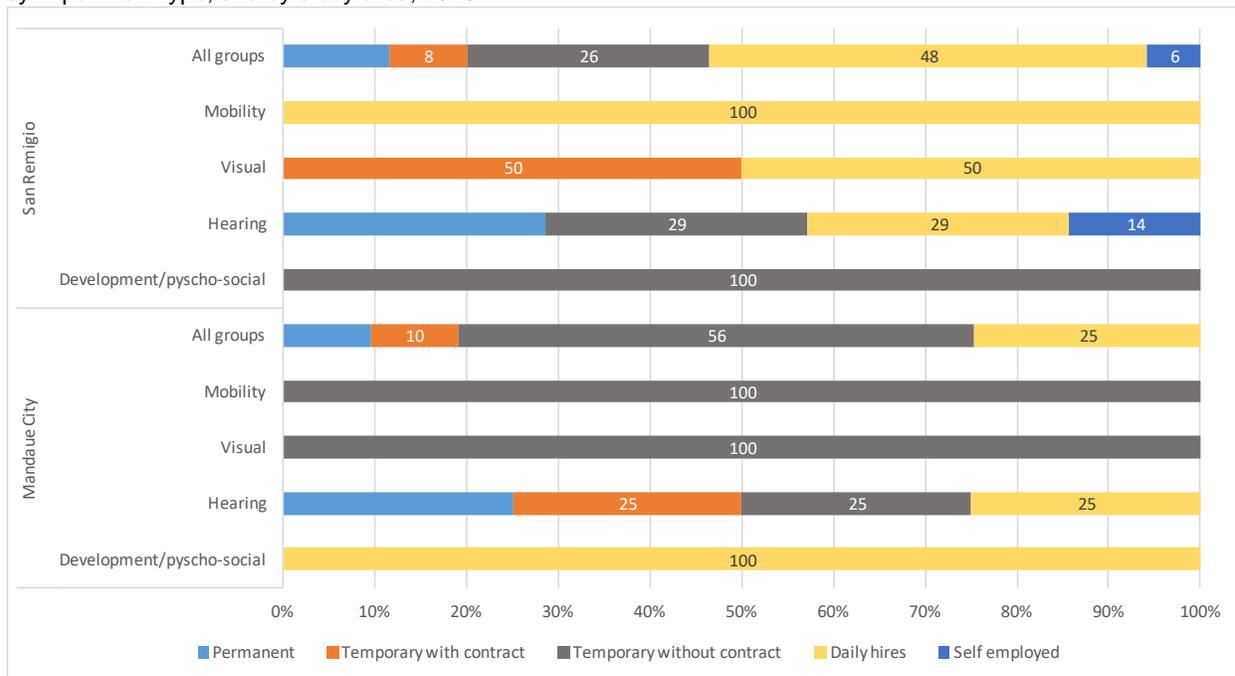
Figure 16. Percentage distribution of PWD adult women respondents who were employed, by nature of employment, by impairment type, and by study area, 2016



Source of basic data: PIDS-IDE PWD Survey, July 2016

Respondents who were classified under vulnerable and/or informal employment comprised most of the working poor. As found in ILOf (2016, as cited in ILOf 2017), workers (specifically the wage and salaried) engaged in vulnerable (and/or informal) employment in developing countries, like the Philippines, were more likely living in poverty. Figure 17 shows that working poverty rate in both study areas was estimated at 72.5 percent; 60.4 percent in Mandaue City and 82.5 percent in San Remigio. The majority of these working poor respondents were far from the estimated poverty threshold. Only a few of these respondents (10.2%), all rural dwellers, were living near the poverty threshold. Employed respondents belonging to visual and development/psycho-social were all living in poverty, and they were far from the poverty threshold. Among the impairment groups, the hearing impaired appeared to be the most well-off as this group had the lowest proportion of employed members who were living far from the poverty threshold.

Figure 17. Percentage distribution of PWD adult women respondents who were employed, by nature of employment, by impairment type, and by study area, 2016



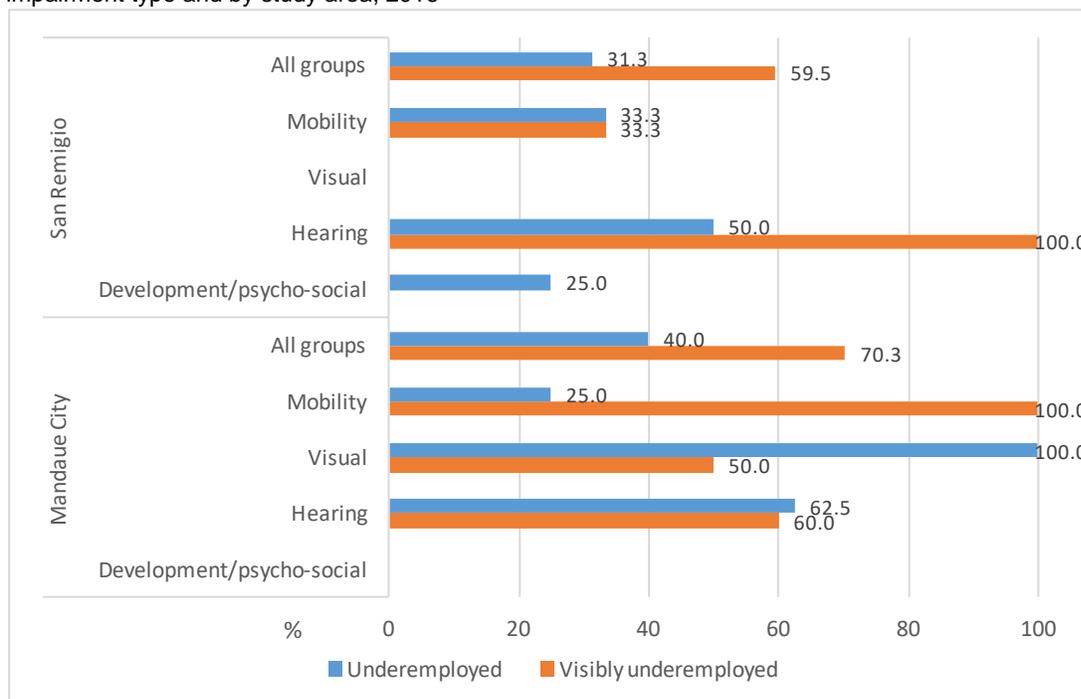
Note: Text in parenthesis refers to deviation of per capita income of the respondent's household from the estimated poverty threshold.

Source of basic data: PIDS-IDE PWD Survey, July 2016

Moreover, the underemployment rate among the adult women respondents in the study areas accounted for at least 30 percent of all the employed; 40 percent in Mandaue City while 31.3 percent in San Remigio (Figure 18). More than half of these were visibly underemployed, or those who reported that they were working less than 40 hours a week and wanted to have longer working hours and/or additional job or business. Based on time-use allocation of employed respondents on a typical working day, they spent only around 4-5 hours a day (equivalent to 22-26 hours a week if the work is on a daily basis) on performing their work/job, excluding travel time (Figure 19). Across impairment group, the visually impaired respondents had the longest working hours per day (9 hours in Mandaue City; 5 hours in San Remigio) while those with development/psycho-social disability had the shortest working hours (4 hours in Mandaue City; 1.5 hours in San Remigio) (Appendix Figures 10-13).

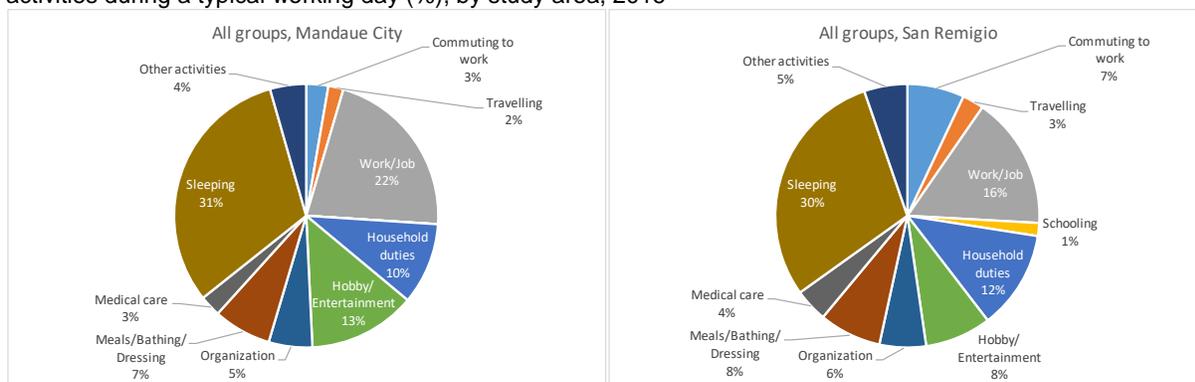
Employed respondents in the urban area whose typical occupation was related to sales perceived that the number of working hours in and/or the amount that they earned from their current jobs or businesses were not sufficient. Meanwhile, the hearing group in both areas and visual group in the city had the highest underemployment rates. This finding could be attributed to their poverty status and/or their lack of job security and employment benefits.

Figure 18. Underemployment and visible underemployment rates among PWD adult women respondents, by impairment type and by study area, 2016



Source of basic data: PIDS-IDE PWD Survey, July 2016

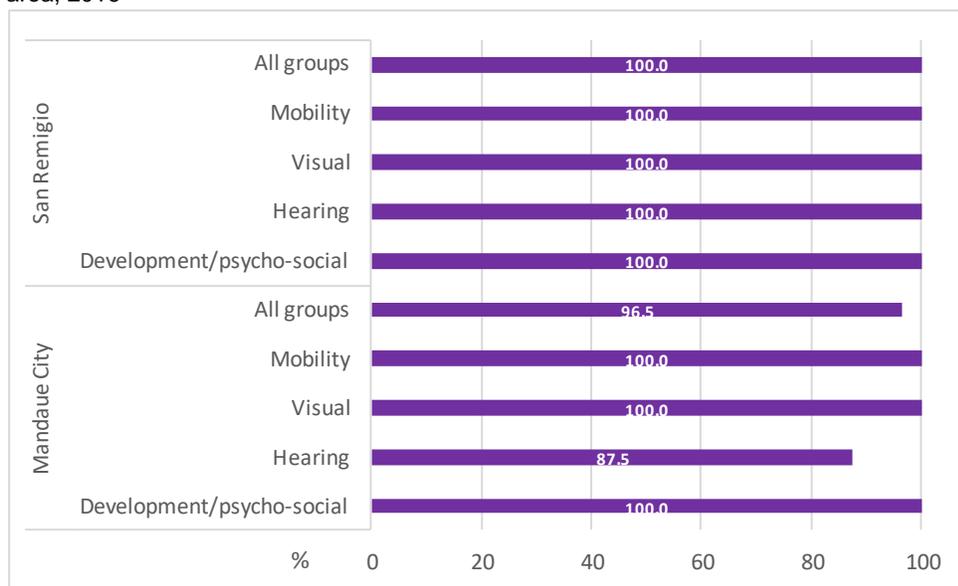
Figure 19. Average percentage of time allocated by adult women respondents who were employed on various activities during a typical working day (%), by study area, 2016



Source of basic data: PIDS-IDE PWD Survey, July 2016

Combining all measures of employment quality, Figure 20 shows that all employed respondents in the study areas, except a very small percentage of hearing impaired in the urban area, had low-quality jobs or businesses. This figure (together with those pertaining to vulnerable and informal employment as well as working poverty) shows that the hearing group was the best-off group among the impairment groups in terms of employment quality. What is clearer, however, is that the PWD women respondents in Mandaue City and San Remigio (regardless of impairment group and area) had jobs or businesses that would hardly be called gainful, and the majority of them were still living in poverty.

Figure 20. Percentage distribution of PWD adult women respondents with low-quality jobs/businesses (i.e., who were either engaged in vulnerable or informal employment, poor or underemployed), by impairment type and by study area, 2016



Source of basic data: PIDS-IDE PWD Survey, July 2016

5. Contributory factors to low employment rate and quality

It was shown in the previous chapter that employment rate among adult women with disabilities in Mandaue City and San Remigio who participated in the study was considerably low. On top of that, among those who were employed, almost all were found to be engaged in low-quality jobs based on class of worker and nature of employment. Possible explanations to these saddening realities were discussed in this chapter.

5.1. Low level of education

Low rate and quality of employment of PWD women respondents can be attributed to their low level of education. Both theoretical and empirical literatures support the positive relationship between educational level and odds of getting a gainful employment. More-educated individuals have higher chance of getting a more stable and/or higher-paying occupation. In addition, those individuals tend to adapt more to varying circumstances and, if experienced a shock, have higher coping ability (Glewwe and Hall 1998). These findings are not only true for female PWDs but for the general population. Apparently, in the Philippines, jobs that are more secure and high-paying, such as those in the services sector like government, education, and financial intermediation, have higher educational requirements. On top of that, wage rate and amount of earnings also depend on the level of education.

The survey data showed that employed respondents were generally less-educated. While a very small percentage of the non-working respondents (i.e., unemployed) had higher level of education, a much larger segment of the said group of respondents (i.e., not part of the labor force) did not finish high school (Figure 21). As argued in the preceding paragraph, low educational level significantly determines labor market inactivity.

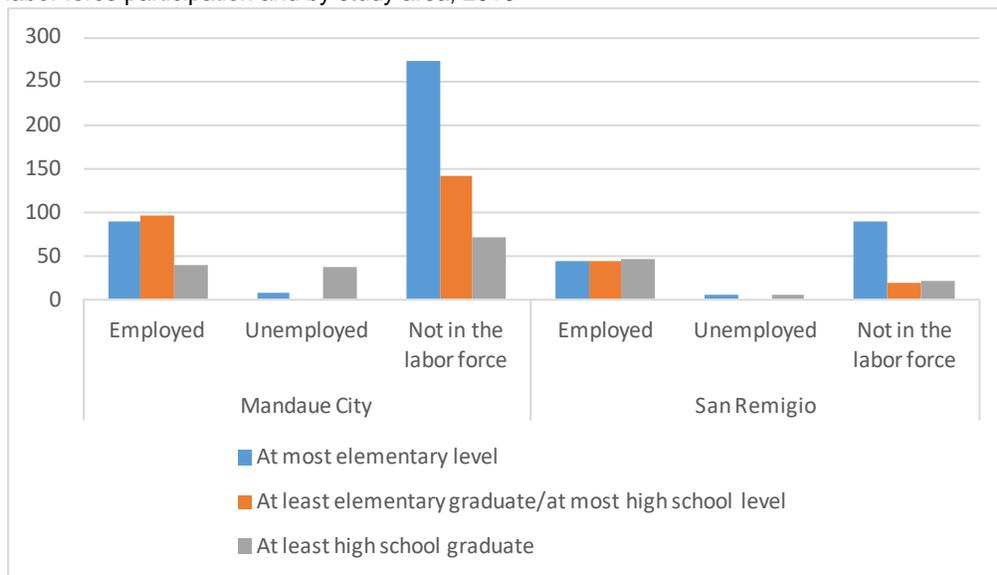
On the other hand, workers in San Remigio, who were relatively older, tend to be more educated than those in Mandaue City (Figure 22). Only a small percentage of them were at least high school graduates. More than a third of them did not even finish elementary. Across type of impairment, the hearing

impaired appeared to be the most educated in Mandaue City. This finding suggests that either deaf schools were more accessible in the urban area, SPED centers had better teachers and facilities for the deaf, and/or any other factor/s. In San Remigio, those with development/psycho-social and mobility disabilities were the most educated while the visually impaired were the least educated. This finding, on the other hand, suggests that in the absence of a SPED center, some PWD groups were able to easily advance to a higher grade level than the other groups. In this case, the mobility impaired (who can go to a mainstream school without a need for a specially trained SPED teacher, unlike the hearing-impaired) were better-off than the visual and hearing groups. Unfortunately, there was no deaf school in San Remigio, which is the reason why educational level of the hearing impaired in San Remigio was relatively lower than those of the other groups. There only SPED center in the municipality started only its operation three years ago and does not have trained teacher for the deaf. Meanwhile, the case of those with development/psycho-social respondents in San Remigio was different as many (if not all) of them became disabled in their later years.

Moreover, the majority of those with low-quality employment (77.6%) did not finish high school; 85.3 percent in Mandaue City while 65.4 percent in San Remigio. This observation is consistent with the result of the multiple correspondence analysis²³—vulnerable workers tend to have lower level of education (Table 7).

Factors affecting the low level of education of PWDs in the study areas include family’s financial difficulties, lack of SPED centers and/or specially trained teachers who can handle people with specific types of impairment, and physical barriers, among others²⁴.

Figure 21. Percentage distribution of PWD adult women respondents, by highest educational attainment, by mode of labor force participation and by study area, 2016

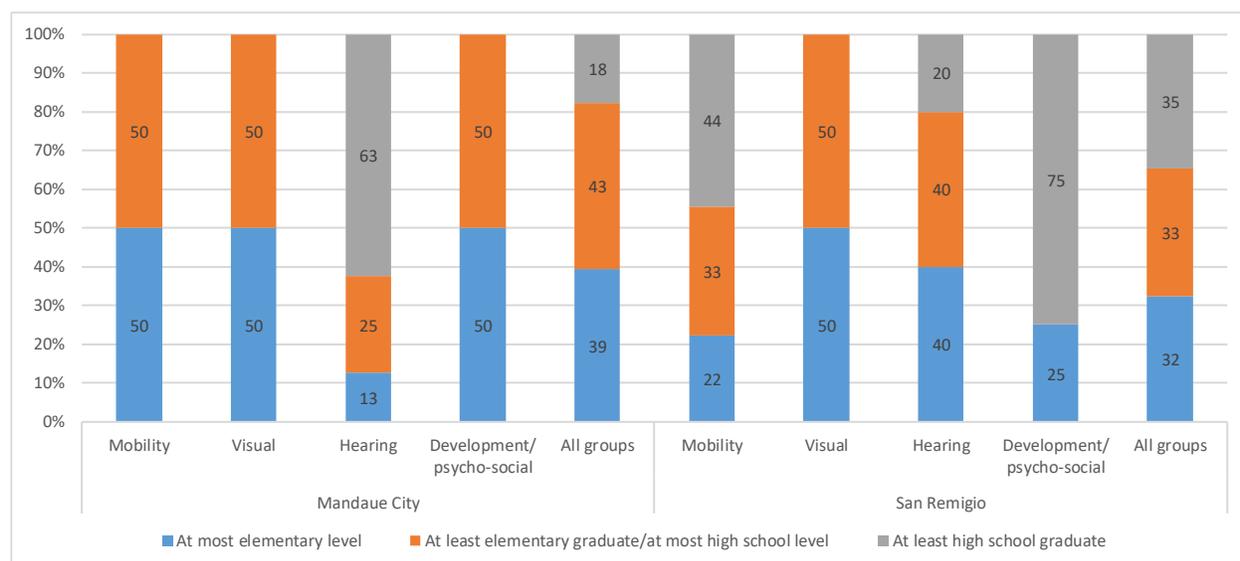


Source of basic data: PIDS-IDE PWD Survey, July 2016

²³ A statistical technique used to examine the multi-way association among the different characteristics of sample respondents.

²⁴ These factors are discussed in Agbon (forthcoming).

Figure 22. Percentage distribution of PWD adult women respondents who were employed, by highest educational attainment, by impairment group and by study area, 2016



Source of basic data: PIDS-IDE PWD Survey, July 2016

Table 7. Results of the multiple correspondence analysis on relationship of educational attainment and training experience with employment profile

Educational attainment/ Training experience	Employment profile
At most elementary undergraduate	<p>Most likely:</p> <ul style="list-style-type: none"> Farmers/fishermen/forestry workers, and Service-oriented workers Vulnerable workers Living in San Remigio With psycho-social/intellectual disability
At most high school undergraduate / No occupational/skills development/livelihood training	<p>Likely:</p> <ul style="list-style-type: none"> Laborers/unskilled workers, and Officials/managers/supervisors Not vulnerable workers Mobility-impaired, and Visually-impaired Living in Mandaue City
At least high school graduate; With occupational/skills development/livelihood training	<p>Most likely:</p> <ul style="list-style-type: none"> Trades and related workers Hearing-impaired

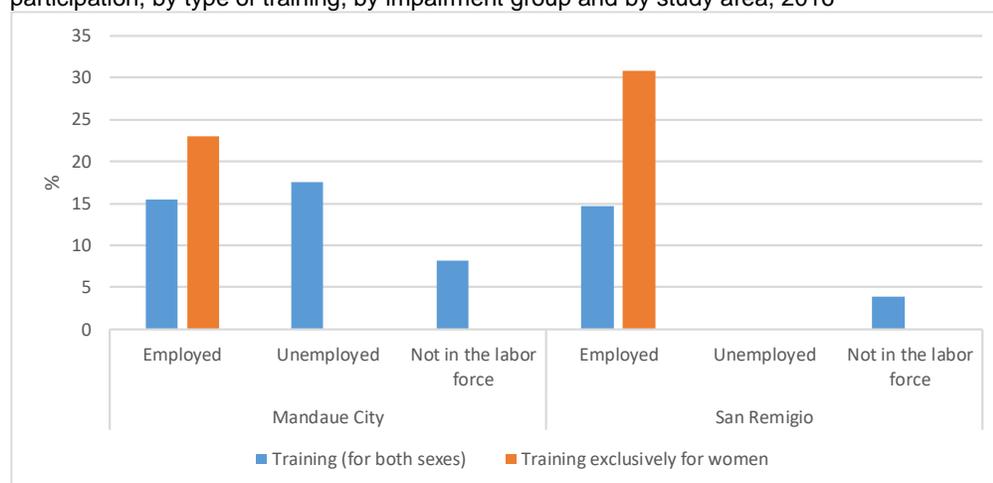
Source of basic data: PIDS-IDE PWD Survey, July 2016

5.2. Lack of training experience

Other than educational level, training experience is another essential factor that positively correlates with the odds of getting a gainful employment. Training is another way of acquiring specific human-capital skills (Officer 2009). Technical-Vocational Education and Training (TVET) and other short-term training courses can provide the training needs of Filipinos.

Unfortunately, the survey data suggest that a very small proportion (<20%) of the respondents had at least one occupational/skills development/livelihood training (Figure 22). Around 23-31 percent of the employed respondents attended at least one training course that was exclusively designed for women.

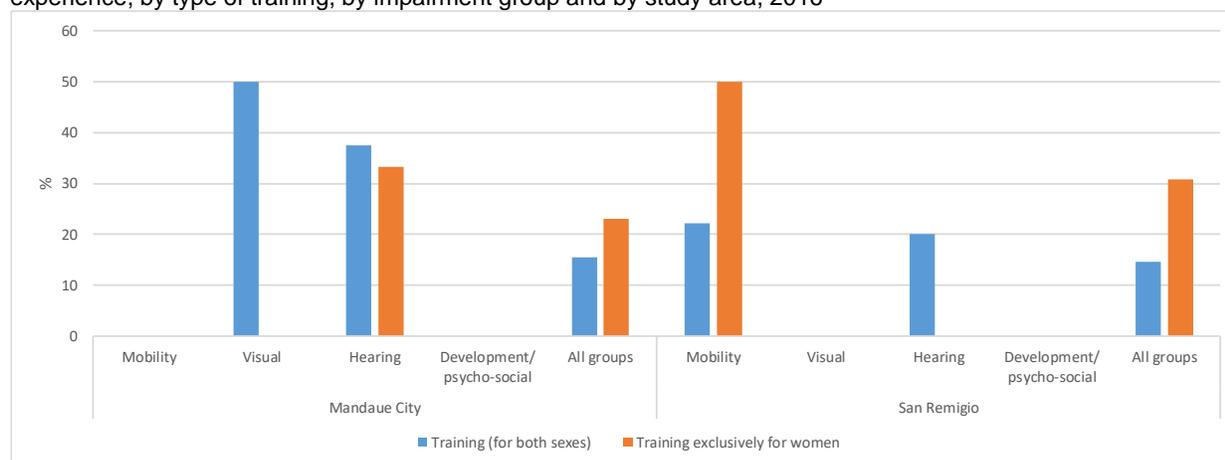
Figure 22. Percentage distribution of PWD adult women respondents with training experience, by mode of labor force participation, by type of training, by impairment group and by study area, 2016



Source of basic data: PIDS-IDE PWD Survey, July 2016

Among the employed respondents in Mandaue City, only hearing- and visually-impaired had undergone at least one occupational/skills development/livelihood training, but only the hearing-impaired had experienced attending training courses for women (Figure 23). In San Remigio, only those employed respondents with mobility and hearing impairments had training experience, but only the mobility-impaired attended trainings exclusively for women.

Figure 23. Percentage distribution of PWD adult women respondents who were employed and with training experience, by type of training, by impairment group and by study area, 2016



Source of basic data: PIDS-IDE PWD Survey, July 2016

Looking at respondents with low-quality employment, only a small proportion (around 15-16%) of them had attended at least one training in the past. The rest of the respondent had no training experience. In fact, the multiple correspondence analysis revealed that laborers/unskilled workers tend to have not attended any occupational/skills development/livelihood training program (Table 7). These workers, although not classified as vulnerable, fall under the category of informally employed based on their nature of employment.

Moreover, only one in every ten employed respondents reported that their Disability People's Organizations (DPOs) conducted occupational trainings; 8.3 percent in Mandaue City and 11.9 percent in

San Remigio. This finding is different from that in Metro Manila where DPOs play a vital role in providing both trainings and employment to PWDs.

One factor that can explain the lack of training experience among PWD women in the study areas is that training centers and programs exclusively for PWDs are hardly available within the vicinity of the study areas. The only training center specially designed for PWDs in Cebu—the Area Vocational Rehabilitation Center (AVRC) II²⁵— is located in Labangon, Cebu City. There seems to be no issue with access to the AVRC II for PWDs in Mandaue City, except for the fact that they still have to incur transportation expenses when going back and forth from Mandaue City to Cebu City, and the amount varies depending on how far their residence is from/to the training center. On the other hand, the AVRC II is very far from San Remigio; the distance between Cebu City and San Remigio was around 100 kilometers. It would not be practical for the PWDs to travel back and forth from San Remigio to Cebu City everyday; instead, they need to look for a place to stay in Cebu City.

Other than distance, another issue is the number of slots available to PWDs. More often than not, such slots are limited. In fact, the average number of graduates from 2010 to 2014 is only 86, of which 31 of them are female²⁶. This figure is very small considering that this is supposed to cater to PWDs in the entire Visayan region. One of the reasons that can explain this low outcome is the not-so-large financial resources of the Center. It would thus be difficult for the Center to absorb a large number of scholars from far cities/municipalities as they would entail higher costs, which would include transportation and/or accommodation allowance.

There is a technical vocational school in San Remigio known as the Manpower Acceleration and Resource Center (MAR Center)²⁷ that caters to the general population, specifically the out-of-school youth and unemployed adult residents. While this Center does not exclusively trains PWDs, this can be also be a venue for PWDs in San Remigio to acquire skills that they can use to compete in the labor market. However, the Center does not always have a trainee who is PWD, although all of its training courses are open to all PWDs in the municipality. One factor that can provide explanation to this is that the PWD affairs officer was said to be not very pro-active in disseminating information to PWDs. Another factor is that the majority (if not all) of the trainees of the Center, who are mostly (if not 100%) non-PWDs, are at least high school graduate²⁸. Although this is what many PWDs are aiming for— inclusion, this fact would be intimidating for some PWDs, especially those who are less-educated.

²⁵ Established in 1974 by the Department of Social Welfare and Development (DSWD) as one of the four rehabilitation centers in the country, AVRC II is designed to provide skills trainings to a varied group of PWDs in the entire Visayan region and link them with potential employers. Any PWDs between ages 16 and 60, regardless of educational attainment, can apply provided that they do not have existing occupational/skills development/livelihood training programs offered by TESDA. A specific training program for PWDs can also be conducted if requested by the PWD affairs officer. In addition, the Center screens the potential training participants and opts to accept only PWDs who have reasonably good chance of becoming employed after vocational rehabilitation.

²⁶ These figures were drawn from the presentation of the Head of the AVRC II about the Center on August 18, 2015 at their office in Camomot – Franza Road, Barangay Labangon, Cebu City.

²⁷ under the auspices of the Technical Education and Skills Development Authority (TESDA) and is funded by the 20% development fund of *Lingap sa Mahirap* under the Social Development Program

²⁸ based on the key informant interview with Mr. Antonio P. Villamor, MAR Center Administrator

5.3. Lack of employment opportunities within a community

Another factor is the lack of employment opportunities within the community or near the place of residence of the PWDs. Based on discussions with selected PWD leaders and LGU staff in Mandaue City and San Remigio, only a few formal establishments employ PWDs, and majority of the are located in Cebu City, which is relatively close to the urban study site (Table 8 and Figure 24). The said city, however, is far from the rural study site (Figure 25).

Some PWD informants from the study areas (i.e., PWD enumerators), on the other hand, relayed that there are PWDs who are working in informal enterprises like small eateries or *carinderia*, as either paid or unpaid family workers and workers who are hired on a daily basis, near their places of residence. Not surprisingly, these informal employers offer lower wages, aside from the fact that they do not provide benefits like leave, health care, bonuses, etc. Many of these PWDs prefer to work near their places of residence to avoid incurring higher transportation costs.

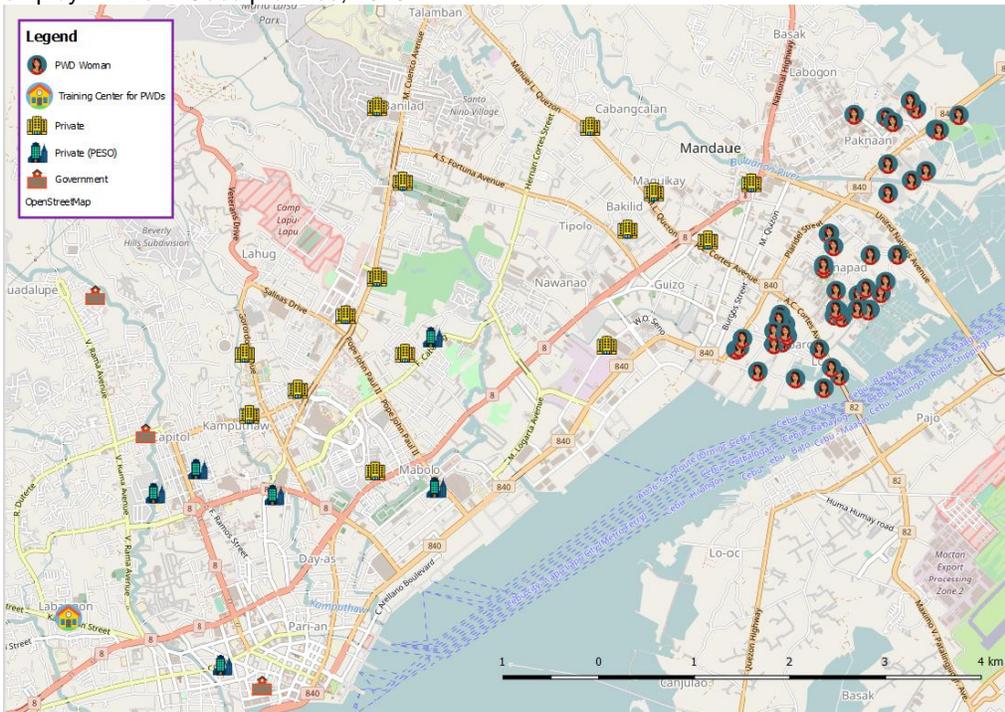
Table 8. List of employers of PWDs in Cebu, 2016

Private		Government
1. Ruiz Derma*	13. Profoods International Corp.	1. Cebu Provincial Government
2. SM Cinemas*	14. Yashao Shellcraft	2. City of Cebu
3. Sykes Asia*	15. Sarrosa Hotel	3. City of Talisay
4. Dunkin' Donuts*	16. Asahi Corporation	4. City of Mandaue
5. Lighthouse Restaurant*	17. Oncord Restaurant	5. City of Carcar
6. Grand Royal Spa*	18. Mandaue City Central School	6. Municipality of San Remigio
7. Cebu Progress Marketing*	19. Shangri-la's Mactan Resort and Spa	7. Municipality of Tabuelan
8. Laborem Management Corp.	20. Signa Modena Print Shop	8. Municipality of Sibonga
9. J Centre Mall	21. Abaca Baking Company	9. Municipality of Cordova
10. Park Mall	22. Aboitiz Power Corp.	10. Municipality of Argao
11. Grand Mall	23. Mactan Export Processing Zone (MEPZ) 1	
12. Pacific Mall	24. Orange Brutus	

* PESO partner

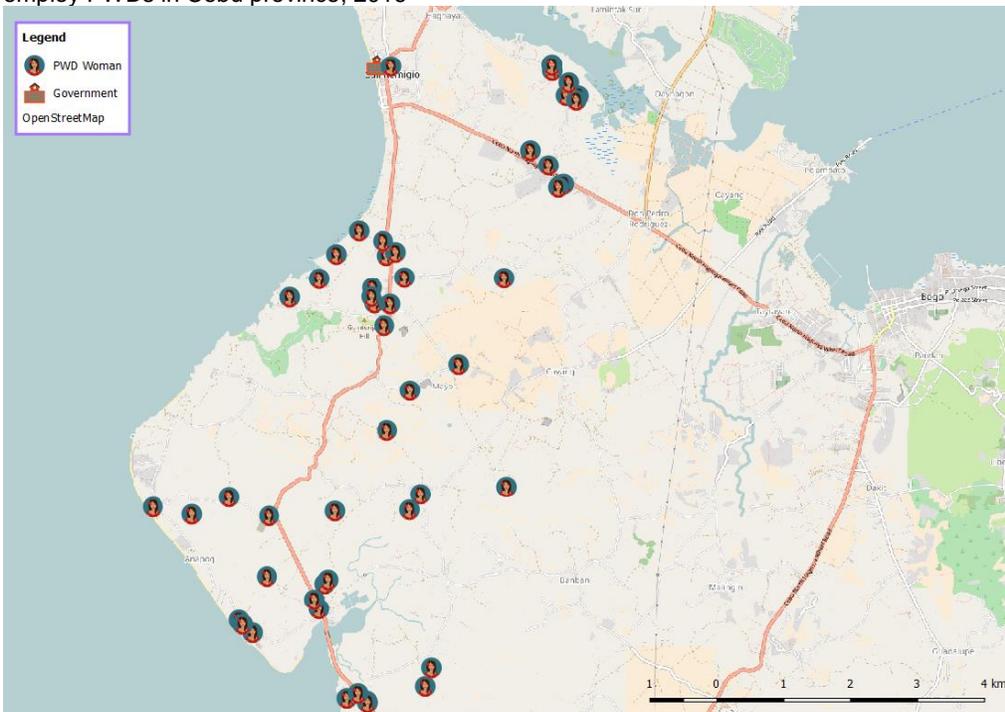
Source of basic data: Provincial Social Welfare and Development Office, PESO-Cebu, KIs with the project's enumerators

Figure 24. Distribution of sample PWD women in Mandaue City, training center/s for PWDs and organization/s that employ PWDs in Cebu province, 2016



Sources of basic data: PIDS-IDE PWD Survey, July 2016; Provincial Social Welfare and Development Office, PESO-Cebu, KIIs with the project's enumerators

Figure 25. Distribution of sample PWD women in San Remigio, training center/s for PWDs and organization/s that employ PWDs in Cebu province, 2016



Sources of basic data: PIDS-IDE PWD Survey, July 2016; Provincial Social Welfare and Development Office, PESO-Cebu, KIIs with the project's enumerators

5.4. Functioning limitations and low access to assistive devices and services

Physical condition can also be a contributory factor to low employment rate and quality. In fact, the survey data reveals that a large proportion of more-educated female PWD workers have home-based occupations or are working not very far from home primarily because of their physical conditions (Table 9).

Table 9. Distance from/to work (meters) of more-educated female PWD workers, 2016

Distance from/to work (meters)	% of more educated (female PWD) workers
0 to 5	38.7
100 to 500	27.5
>1,000	18.1
Not indicated	15.7

Source of basic data: PIDS-IDE PWD Survey, July 2016

The hearing-impaired, who are more-educated and/or have training experience, tend to have the farthest workplaces. This is understandable because this group is the most mobile among the groups. These sample PWDs also assume various occupations including factory workers, canteen helper, janitress, manicurist, farmer, ice vendor, market vendor, street vendor. Interestingly, only 27.5 percent of them are totally deaf, 24 percent have hearing aid while 35.8 percent know a sign language.

Among the mobility-impaired female PWD workers, 6 percent are running a small-scale retail store, 6 percent are engaged in dressmaking at home, while 12 percent are farmers. In terms of physical condition of this group, 11.2 percent were found to have polio, 6 percent have one missing leg while 6 percent have one leg affected by congenital defect. Only half of them have access to assistive device.

Around 9.8 percent of the visually impaired, who happened to be partially blind, are broom makers. Meanwhile, 13.5 percent of those with development/psycho-social disability are engaged in farming (9%) or are market vendors (4.5%) and have toxic psychosis (9%) and nervous breakdown (4.5%). None of them, however, are taking mind drug.

These sample PWD women also have lower access to assistive devices and/or services. Table 10 shows that this is particularly true among unemployed PWDs. Specifically, 41.2 percent and 53.3 percent of the sample PWD women in Mandaue City and San Remigio who are unemployed, respectively, reported that they need a particular assistive device but such device is not available. This finding probably explains their unemployment in the sense that many of them are not looking for work because of their functioning difficulties and at the same time, they do not have access to an assistive device that can help them overcome those difficulties.

It is also interesting to note that around 30 percent of those employed female PWDs in Mandaue City either do not have their needed assistive device/s or have the wrong assistive device/s (not really what they need). This can probably support the finding that there are PWDs who prefer to work near their places of residence due to their functioning limitations which are not appropriately addressed by the assistive device/s that are currently available to them.

Table 10. Percentage distribution of PWD adult women respondents with access to assistive device and/or personal assistant (PA) at home, by mode of labor force participation, by access status and by study area, 2016

Auxiliary aids and services	Status	Mandaue City			San Remigio		
		Employed	Unemployed	Not in the labor force	Employed	Unemployed	Not in the labor force
Assistive device	Not available, needed (%)	17.5	41.2	15.7	14.3	53.3	18.2
	Available, not the one needed (%)	12.7	0	11.8	0	0	8.7
	Available, needed (%)	10.6	0	0	15.6	0	0
	Available, not needed (%)	12.7	0	32.5	9	0	23.4
PA at home	Not available, needed (%)	0	0	4.4	0	0	0
	Available, needed (%)	12.7	0	21.1	2.8	0	26.4
	Available, not needed (%)	12.7	17.6	5.2	24.1	46.7	15.9

Source of basic data: PIDS-IDE PWD Survey, July 2016

5.5. Physical barriers and lack of PWD-friendly facilities

When we talk about the physical condition of PWDs, we cannot avoid to touch the issue of accessibility. Another reason why some PWDs are not participating in the labor force is that their physical environment has not yet been transformed into a 100-percent PWD-friendly environment.

Accessibility of workplaces can be an issue for PWDs and their family members, especially if their disabilities are severe and do not have access to assistive device/s or service/s (e.g., PA). In the cities of Cebu like Mandaue City, there are already areas like malls (i.e., SM City and Ayala Center Malls), airport and port areas, bus terminals, and new buildings that are considered as PWD-friendly because they either have ramps, side rails and/or elevator with Braille signs. In San Remigio, it has been said that only San Remigio Municipal Hall and a few newer buildings can be considered as PWD-friendly because of the presence of ramps, side rails and PWD-friendly toilet.

The next question is that: “Are there enough business establishments and government offices that have PWD-friendly facilities (e.g., ramps, side rails, elevator with Braille signs and/or auditory signals, grab bars in elevators and PWD toilets) within and around the study areas?” Cities and municipalities are required to comply with *Batas Pambansa* (BP) 344, and compliance to this law is one of the indicators that are being assessed in order to be qualified for the DILG’s “Seal of Good Local Governance” award.

Data on compliance with the indicator “PWD accessibility in support of the BP 344”, based on the results of the initial assessment conducted by the labor laws compliance officers of the Bureau of Working Conditions (BWC) of the Department of Labor and Employment (DOLE), show that 99.9 percent of the assessed establishments were found to be compliant of the said law. In 2016, only 2 out of the total 5,101 assessed establishments in Region VII have deficiencies, or had missing at least one of the required PWD facilities such as ramps, handrails, elevators, parking areas, and PWD toilet, among others. BWC admitted that they only checked for the presence of the required facilities and did not really assessed the dimensions and other specific details. On the other hand, a stricter assessment is being done by the Department of Public Works and Highways (DPWH) as it also checks on the dimensions and other specific details of the facilities. The latest compliance report of the DPWH²⁹ revealed that compliance rate among national government agencies, hospitals and schools in Region VII was only 27.6 percent (66 out of 239 assessed buildings).

²⁹ The latest available report is for the calendar year 2014 when the author visited the Department’s Planning and Design Section in mid-2017. The assigned staffer (an engineer) for the monitoring of compliance to BP 344 admitted that the 2015 and 2016 reports have not yet been prepared primarily due to her too many commitments.

These findings, although a more location-specific data (i.e., for the study areas) has not yet been available, suggest that the government (through DPWH and other concerned agencies) needs to exert more effort to encourage building administrators and other concerned officials to strictly comply with BP 344 as a way of helping PWDs to participate in the mainstream society.

5.6. Low awareness on relevant policies and programs

Awareness on employment-related policies and programs can also explain the low rate and quality of employment. The author believes that awareness to various programs and policies of the government is crucial in accessing the free assistance provided by the government. The said awareness also implies access to a larger social network because information about these policies and programs can be disseminated by organizations or groups among their members, or by relatives and friends.

The survey data, however, revealed that even among the more-educated workers, awareness on training and livelihood activities conducted in different PWD-related programs as well as on relevant policies is low. This particular finding suggests that either PWD organizations and/or LGUs are not active enough to disseminate information about the said policies and programs or the PWDs are not pro-active in knowing about or understanding these government interventions.

Table 11. Awareness on employment-related policies and programs of the government among PWD adult women respondents, by study area and by intervention, 2016

Intervention	Mandaue City	San Remigio
<i>Programs</i>		
NGO/Charitable organization	40.0	70.9
Training	0.0	29.9
Livelihood	0.0	44.7
Barangay	40.0	55.5
LGU	80.0	73.9
Livelihood and small capital	20.0	21.0
<i>Policies</i>		
Magna Carta	20.0	55.5
2007 amendments	0.0	38.2
2016 amendments	0.0	61.8

Source of basic data: PIDS-IDE PWD Survey, July 2016

6. Concluding remarks

This study found that rate and quality of employment of adult women with disabilities in Mandaue City and San Remigio were generally low. A number of factors were believed to have significant contribution to this unsatisfactory employment outcome of the respondents, including but not limited to the following: low level of education, lack of training experience, lack of employment opportunities within a community; functioning limitations and low access to assistive devices and/or services, physical barriers and lack of PWD-friendly facilities, and low awareness on relevant policies and programs.

Among the leading recommendations that the author would like policymakers to consider is to explore ways on how to intensify human capital investment among PWDs, particularly adult women. Officer (2009) argued that human capital investment has been considered as one of the most effective policies that can thwart discrimination in the labor market. Human capital is referred to as “education and training

embodied in human labor” (Officer 2009, p.33). Hence, in order for female PWDs to fairly compete with non-PWDs in the labor market, their quality of education should be improved and/or their training experience should be deepened. Many PWDs would like to be perceived as a normal individual and are willing to compete with non-PWDs in the labor market.

One specific strategy that can be adopted to improve the educational outcomes of the PWDs in the study areas is to provide educational assistance (particularly at the secondary level) to children with disabilities who belong to financially-challenged households. The government can explore the possibility of including a PWD component in the Modified Conditional Cash Transfer (CCT). To address the PWDs’ families on the safety of the PWD students, provision of school bus service (wheelmobile for the mobility-impaired) for the PWD children can be considered.

To address the supply-side challenges, there may also be a need to intensively train more Special Education (SPED) teachers (from a pool of unemployed education graduates) and integrate SPED classes in mainstream schools (at least in central schools). One of the major problems of parents/guardians of PWD children who were not attending school in the study areas had been the lack of specially trained teachers who can handle PWDs, specifically those with intellectual and psycho-social disabilities. It is important that the PWDs would attain skills that are equivalent to those possessed by a high school graduate.

In terms of trainings, AVRC II have notable good practices, including but not limited to the following: presence of multi-disciplinary team in the Center such as physical therapist, prosthesis technician, medical officer, and psychologist, aside from the trainers and placement officers; conduct of Braille and adaptive technology trainings for visually impaired and sign language skills trainings for hearing impaired; partnership with the Department of Education (DepEd) for mainstreaming of trainees to the DepEd Alternative Learning System (ALS) program; and, linkages with potential employers. Despite these good points, officials of the Center admit that there are challenges that hinder the attainment of its outcomes such as more competitive training programs, more graduates and more assisted PWDs. Among those challenges are lack of financial resources that limit their capacity to improve their facilities and equipment (that are at par with those used by private companies), hire more staff (e.g., specialized teachers and training assistants) and provide sufficient allowance to trainees as well as lack of training and employment support from LGUs. Meanwhile, the most popular vocational courses taken by PWDs in AVRC II during the period 2010-2014 were massage therapy (exclusive to visually impaired), computer technology, commercial cooking, and dress and apparel technology. These training courses, similar to those offered by the MAR Center, are limited to those commensurate to a blue-collar job. It is thus recommended that TESDA also offer occupational/skills development/livelihood trainings specifically for PWDs, but courses should not be limited to those leaning towards blue-collar jobs. In addition, TESDA can also assist various DPOs in the preparation of documentary requirements and in finding a funding agency. Officials in some DPOs may not have experience on carrying out the said tasks properly, so they need to be guided. Moreover, DPOs should be more active in disseminating employment- and training-related information to their members.

In addition, perhaps DSWD can consider the addition of a special component to its Sustainable Livelihood Program (SLP) for poor families with at least one PWD member who is unemployed, underemployed or informally employed, or not in the labor force but head of a household with high dependency ratio and low proportion of employed members. It is worth-noting that the AVRC II also accepts dependents and/or immediate family members of PWDs. This is a good strategy, specifically to those households with PWDs who cannot obtain a gainful employment either due to its low educational attainment or its functioning limitations and lack access to assistive device/s and/or service/s.

The DSWD, in partnership with NCDA and DPOs, can also develop a sorting mechanism to identify the most appropriate type of assistance—employment facilitation or microenterprise development—that can be provided to PWDs. As a supplement, relevant skills development or livelihood (i.e., financial literacy) training programs can also be provided.

Incentives for employers of PWDs (aside from tax deduction or exemption) can also be expanded. The process of claiming tax incentives should be eased to genuinely incentivize employers. In addition, is it also possible for the NCDA, in partnership of DOLE and DILG, to launch an award-giving body (similar to the DILG’s “Seal of Good Local Governance”) that is aimed at recognizing the private employers that employ PWDs and comply to the Accessibility Law? If this is feasible, a certain percentage of products and/or services needed by government offices can be purchased from these awarded establishments to further incentivize them.

Awareness must also be strengthened among various stakeholders (especially the private sector) and must be led by the government. Intensive information, education and communication (IEC) activities on various programs and policies for PWDs should be conducted by DPOs and local social welfare offices. Employers, specifically Human Resource professionals, should be educated about the rights of and the existing policies related to PWDs, and should undergo sensitivity trainings.

The NCDA also has to strictly monitor the compliance of various stakeholders to existing disability laws like BP 344 on accessibility. LGUs can be tapped to partner with DOLE and DPWH in monitoring the compliance of national and local government establishments as well as private establishments to the Accessibility Law. The NCDA should take the lead in monitoring such compliance and should take actions on non- or partial compliance of the different establishments. Other than physical accessibility, materials and other information available in websites of national government agencies such as DOLE, TESDA and DSWD, among others, should be accessible to all groups of PWDs, particularly the visually-impaired. Concerned national agencies should fulfill their obligations of adhering to the accessible website design guidelines stipulated in Article 9 of the UNCPRD (UN Convention on the Rights of PWDs). This will ensure that all of the materials that will be uploaded in the website can be accessed even by those using screen readers. For those who do not have access to computers with screen readers, local social welfare offices can perhaps make it available to visually-impaired and to those with learning disability.

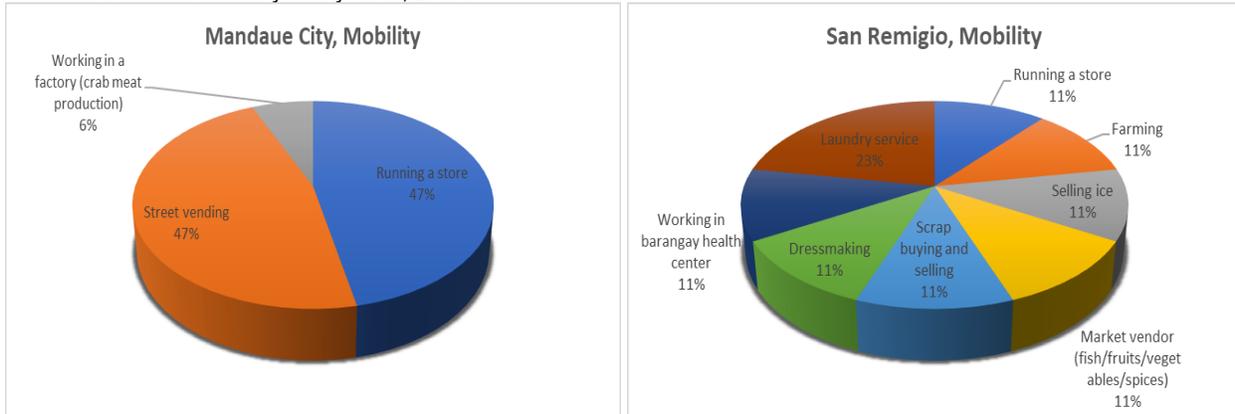
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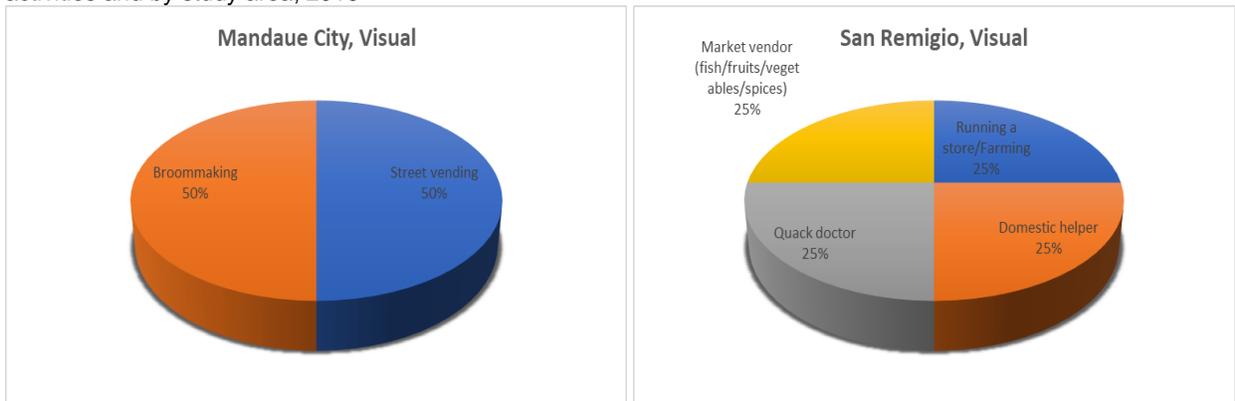
Appendices

Appendix Figure 1. Distribution of adult women respondents with mobility impairment who were employed, by economic activities and by study area, 2016



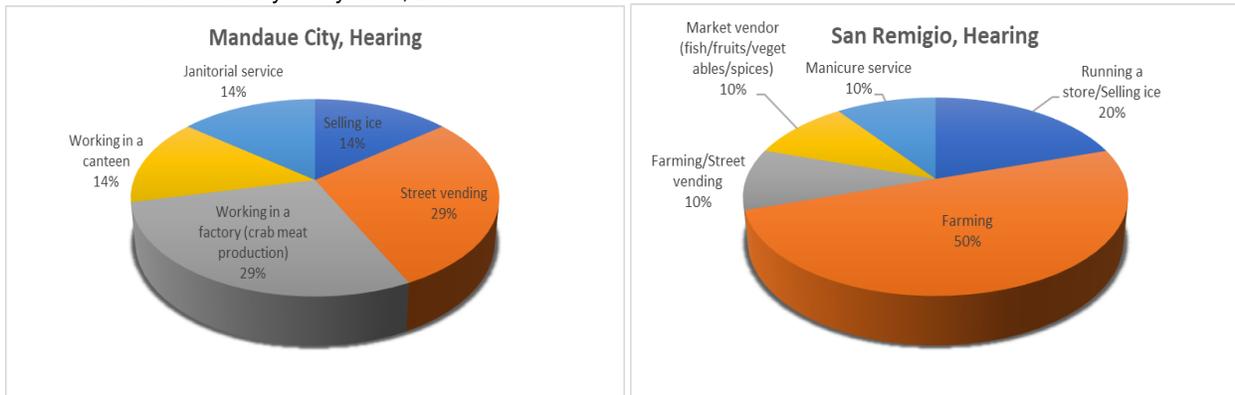
Source of basic data: PIDS-IDE PWD Survey, July 2016

Appendix Figure 2. Distribution of adult women respondents with visual impairment who were employed, by economic activities and by study area, 2016



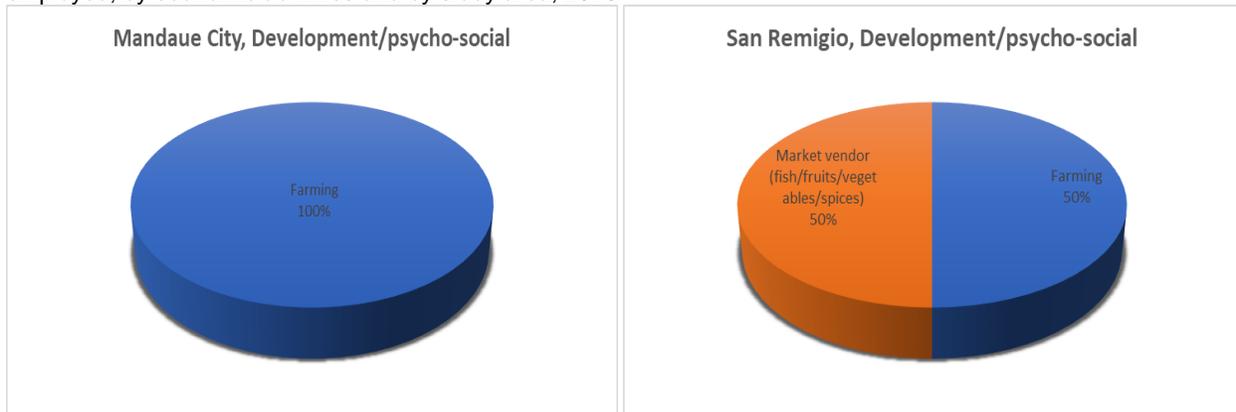
Source of basic data: PIDS-IDE PWD Survey, July 2016

Appendix Figure 3. Distribution of adult women respondents with hearing impairment who were employed, by economic activities and by study area, 2016



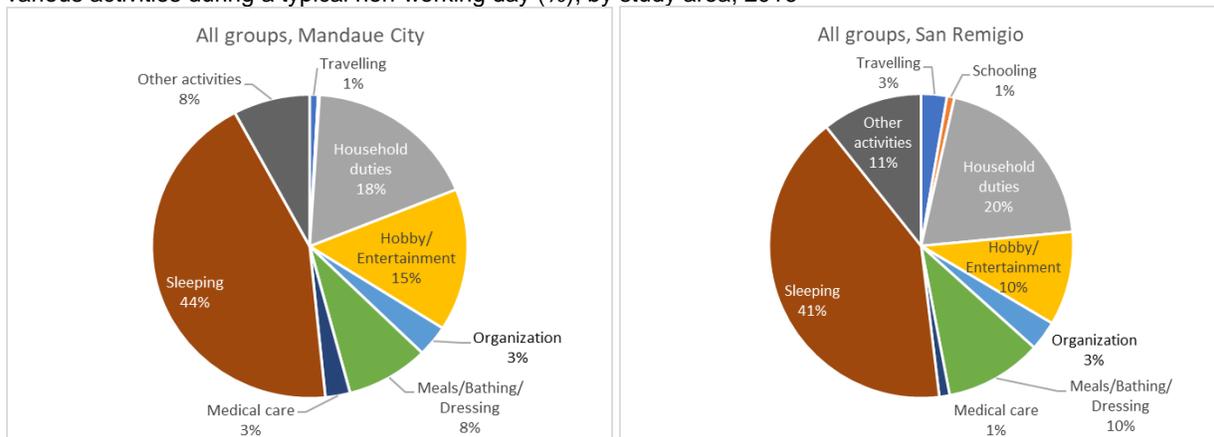
Source of basic data: PIDS-IDE PWD Survey, July 2016

Appendix Figure 4. Distribution of adult women respondents with development/psycho-social disability who were employed, by economic activities and by study area, 2016



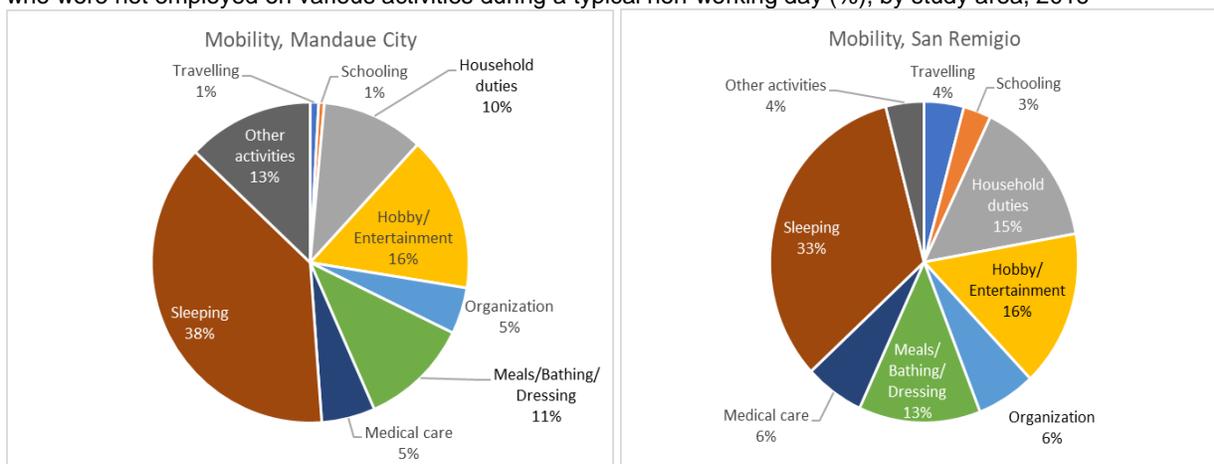
Source of basic data: PIDS-IDE PWD Survey, July 2016

Appendix Figure 5. Average percentage of time allocated by adult women respondents who were not employed on various activities during a typical non-working day (%), by study area, 2016



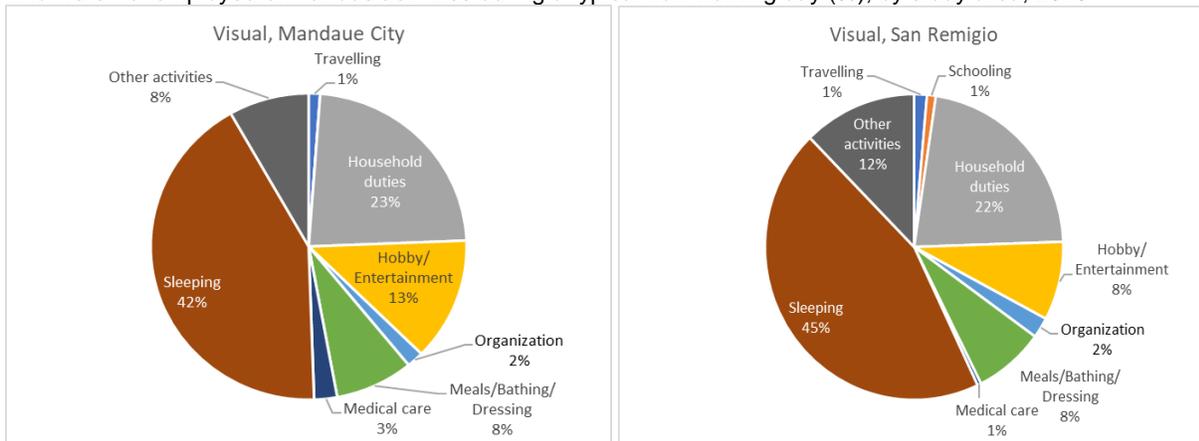
Source of basic data: PIDS-IDE PWD Survey, July 2016

Appendix Figure 6. Average percentage of time allocated by adult women respondents with mobility impairment and who were not employed on various activities during a typical non-working day (%), by study area, 2016



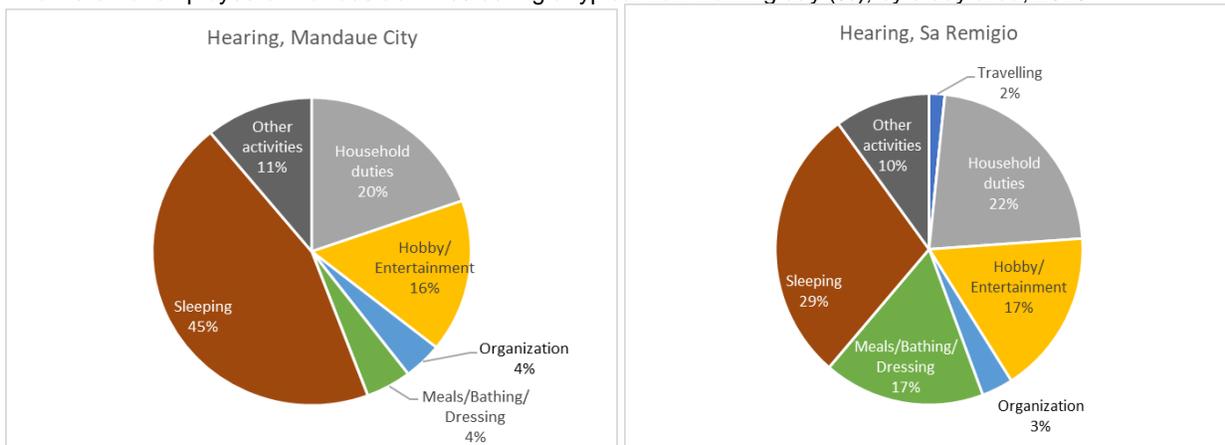
Source of basic data: PIDS-IDE PWD Survey, July 2016

Appendix Figure 7. Average percentage of time allocated by adult women respondents with visual impairment and who were not employed on various activities during a typical non-working day (%), by study area, 2016



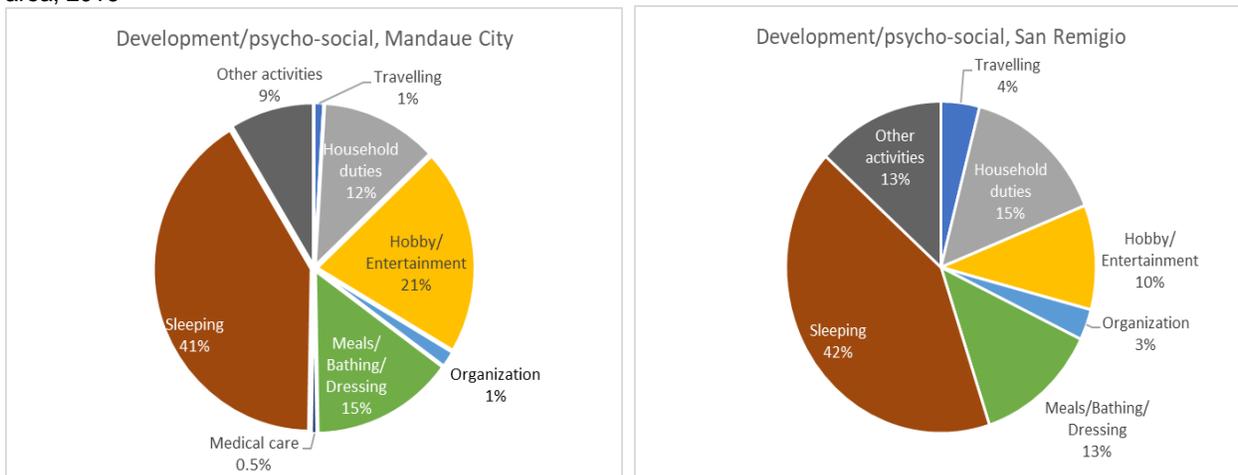
Source of basic data: PIDS-IDE PWD Survey, July 2016

Appendix Figure 8. Average percentage of time allocated by adult women respondents with hearing impairment and who were not employed on various activities during a typical non-working day (%), by study area, 2016



Source of basic data: PIDS-IDE PWD Survey, July 2016

Appendix Figure 9. Average percentage of time allocated by adult women respondents with development/psycho-social impairment and who were not employed on various activities during a typical non-working day (%), by study area, 2016



Source of basic data: PIDS-IDE PWD Survey, July 2016