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Investing in Skills to Promote Inclusive Growth in Mindanao

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I. Introduction

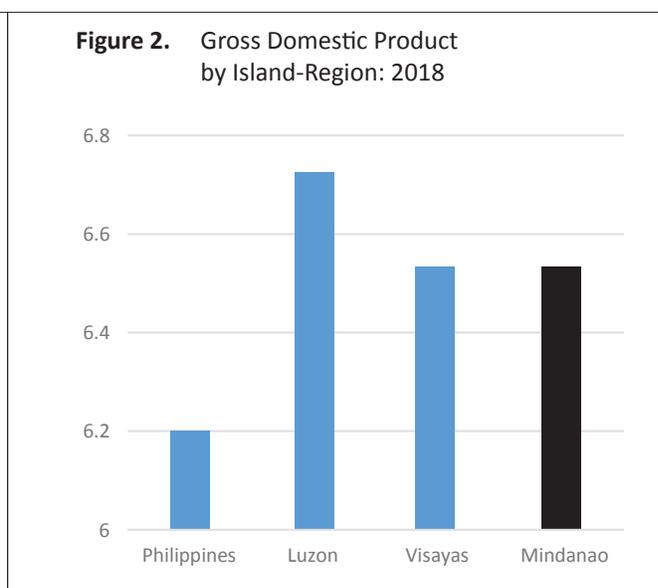
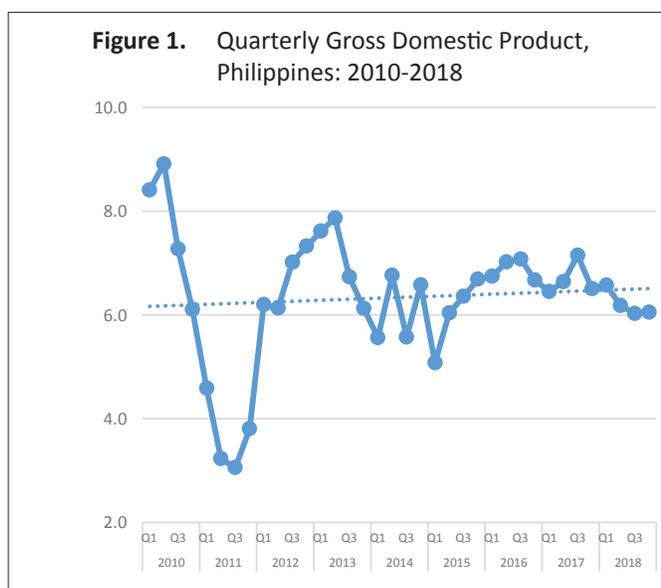
In 2015, the World Bank embarked on a collaborative effort to understand and address the jobs challenge in Mindanao through the *Mindanao Jobs Report (MJR)*¹. Good jobs — jobs that raise real income and lift people out of poverty — were needed for more than two million Mindanawons who were either unemployed or underemployed at the time of writing. In addition, large cohorts of youth would enter the labor force in the next few years and better jobs were needed for the many Mindanawons who were currently employed informally and who accounted for more than half of total employment in Mindanao. Following extensive consultations with many of Mindanao's leaders and stakeholders, the report came up with recommendations around the three areas, namely: (1) raising agricultural productivity and improving farm-to-market connectivity; (2) boosting human development; and (3) addressing drivers of conflict and fragility and building up institutions in Autonomous Region in Muslim Mindanao (ARMM) and conflict-affected areas (Box 1).

The MJR emphasized the value of looking at Mindanao island and its different subregions as a whole. The cornerstone of MJR's development strategy is in seamlessly connecting conflict and lagging regions to growth poles, so that all of Mindanao can benefit. Addressing constraints in each area will therefore improve economic activity and job creation throughout Mindanao. At the same time, a sustained inclusive growth path for the Philippines cannot leave behind an area as significant as Mindanao, in terms of population and potential.

In recent years, the Philippines has grown fast, including the Mindanao island region. Recently, the Philippines has enjoyed a buoyant economy and has been among the fastest-growing economies in Asia. It achieved a solid finish in 2018 with a record of at least six percent growth for 15 consecutive quarters, the strongest economic growth since the mid-1970s (Figure 1). The upward growth trend was shared across island-groups, with Luzon growing strongest in 2018, followed equally by both Visayas and Mindanao (Figure 2). In 2018, growth in Visayas and Mindanao accelerated by 1.4 percentage points and 0.1 percentage point to 6.5 percent. Notably, from 7.3 percent in 2017 to 7.2 percent in 2018, the record growth in the conflict-affected ARMM in the previous year was sustained.

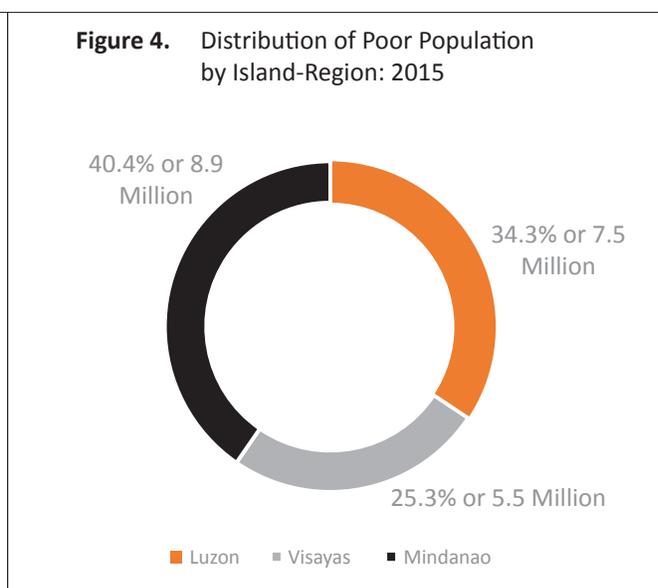
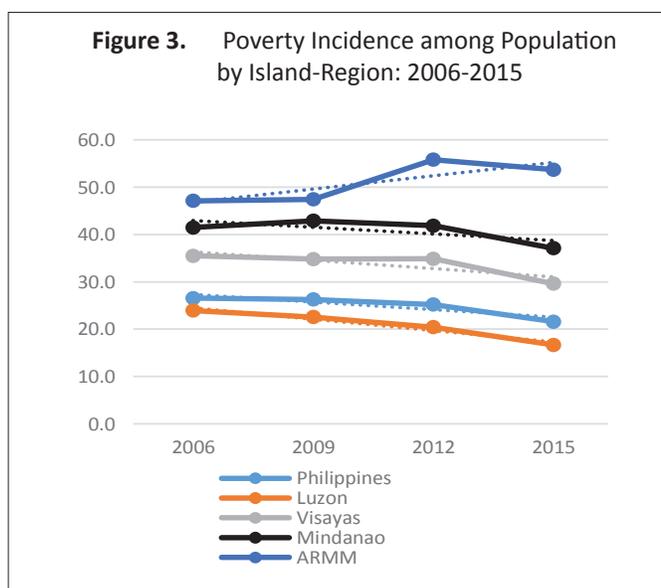
The Philippine Social Protection Note series aims to disseminate experiences, good practices, and key findings from the Philippines on the topics related to social protection. It also aims to broaden the dialogue on social protection and stimulate public engagement in moving forward the policy agenda. The views expressed here are those of the authors and do not necessarily reflect those of the World Bank.

¹ World Bank. 2017. *Philippines Mindanao Jobs Report: A Strategy for Mindanao Regional Development (English)*. Washington, DC: World Bank Group.



Source: National Income Accounts, Philippine Statistics Authority

However, poverty incidence in the Philippines has remained high – particularly in Mindanao. Over the last nine years, poverty incidence has declined across all island-groups, albeit slowly (Figure 3). The pace of extreme poverty reduction in the Philippines averaged 0.9 percentage points per year between 2006 and 2015, less than half of the 1.4 points per year decline in the developing world as a whole and much slower than the rate of poverty reduction in Indonesia and Vietnam². With an average decline of 1.4 percentage points from 2006 and 2015, the decline in poverty incidence has been slowest in Mindanao, where 8.9 million individuals or nearly 4 out of 10 (37.1 percent) Mindanawons were poor in 2015 (Figure 4). Among all of Mindanao regions, ARMM has the highest poverty incidence (53.7 percent) — half of the region’s population lives below the poverty line and its poverty incidence is twice the national average (21.6 percent). At 33.8 percent in 2015, the poverty incidence in Mindanao outside of ARMM is slightly lower than in Mindanao as a whole, but it is still higher than in Luzon (16.7 percent) and Visayas (29.6 percent). Because Mindanao holds about a quarter of the Philippines’ population (23.9 percent or 24.1 million Filipinos), but nearly half of its poor (40.4 percent), significantly reducing poverty nationwide critically hinges on reducing poverty in Mindanao.



Source: Family Income and Expenditure Survey 2015 and Census of Population 2015, Philippine Statistics Authority

² World Bank. 2018. *Making Growth Work for the Poor: A Poverty Assessment for the Philippines*. Washington, DC: World Bank Group

The MJR concluded that accelerating inclusive growth and reducing poverty in the Philippines, and particularly in Mindanao, require the creation of enough quality jobs. The Government of the Philippines aims to lower the poverty incidence from 21.6 percent in 2015 to 14.9 percent in 2022, equivalent to lifting about six million Filipinos out of poverty³. For Mindanao, a proportional contribution would translate this effort to reducing the poverty incidence from 37.1 percent in 2015 to 23.4 percent in 2022. A lack of quality jobs is a core challenge to meeting these objectives.

In turn, quality job creation requires the workforce to have the appropriate skills and knowledge. Delivering inclusive economic growth and poverty reduction through quality jobs requires investing in human capital, such as education and skills, to create gainful employment opportunities, especially among the poor and vulnerable. This includes an emphasis on improving the educational and employment prospects of those who fail to complete the full cycle of basic education⁴ or those who have dropped out. The MJR identifies human capital investment as a core driver of regional development in Mindanao, specifying basic education as well as skills and employment of Filipino youth as the two priority areas.

Building on the MJR, this study delves deeper on the challenges of sustaining human capital and building the foundations for further inclusive growth in Mindanao: investing in its people. Since 2015, the landscape of human capital in the country and in Mindanao have undergone political and economic changes. Most notably, the country experienced unprecedented economic growth in recent years and the government under President Rodrigo Duterte committed to invest in human capital development and reduce its inequalities in the Philippine Development Plan 2017-2022. Through Executive Order No. 24, the President reorganized the Cabinet clusters system to reflect his Administration's development agenda. He retained the Human Development and Poverty Reduction (HDPR) cluster which is tasked to improve the quality of life of the Filipino people through a broad-based approach in the delivery of services. Using the latest administrative and survey data from the Philippine Statistics Authority, and other administrative data from implementing government agencies, this study analyzes educational and labor market outcomes in Mindanao and assesses the performance of key employment government programs implemented in the island-region. It also expands on the set of data collected for the MJR to cover areas that are becoming increasingly important, such as preschool education, college education and youth-oriented government programs. Based on this evidence, this study highlights both progress and challenges and provides recommendations to key HDPR member-agencies on how to develop human capital in Mindanao that will support the government objective of sustained inclusive growth and accelerated poverty reduction. This report will form part of the analytical work that will feed into the Mindanao Skills Development Strategy, a medium-term roadmap for the HDPR cluster to consider in prioritizing strategic actions on education, training, employment facilitation, and workforce development initiatives in Mindanao."

Box 1. Main messages of the Mindanao Jobs Report: A Strategy for Mindanao Regional Development

Driving down poverty and delivering on the government's Strategic Framework for Mindanao Peace and Development will demand a new approach to engagement in Mindanao. To support this, a strategy for regional development in Mindanao was drawn up. The three main components are: (1) raise agricultural productivity and improve farm-to-market connectivity; (2) boost human development; and (3) address drivers of conflict and fragility and build up institutions in ARMM and conflict-affected areas.

The strategy will build on Mindanao's comparative advantage and tighten its links with the rest of South East Asia. It identifies three priorities for interventions to unlock agricultural potential: (1) raise farm productivity through agrospatial approaches and productive alliances; (2) build up logistics services, improve roads from fields to markets; and (3) develop key ports and modernize customs procedures.

Connectivity bottlenecks are compounded by limited human capital, especially skills deficits. Over 80 percent of Mindanao's farmers and fishermen are poor or near-poor and lack scale and skills to compete. To maximize productivity in Mindanao, a number of interventions are planning to address shortfalls in the inter-locking areas of basic education and skills and job creation. The plan gives special attention to youth in conflict-affected areas.

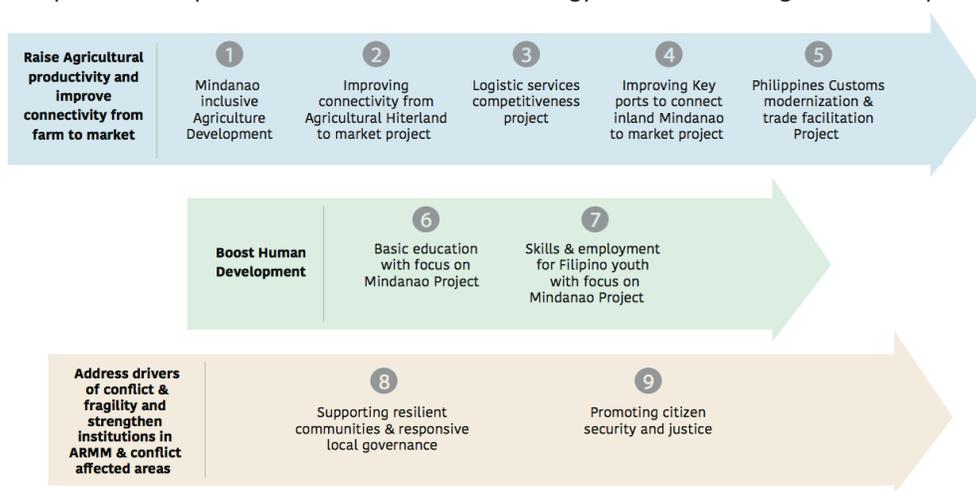
Policy recommendations are made in four separate categories: (1) increasing agricultural productivity by improving extension and irrigation services, along with price reforms to realize Mindanao's agriculture potential; (2) building up logistics and transport connectivity by improving road networks and the efficiency of shipping services to reduce trade costs; (3) improving the supply of reliable power and the speed, affordability, and quality of information and communications technology (ICT) services by fostering competition; and (4) supporting private investment by addressing the growing skills gap, the high regulatory burden for businesses, and by improving financial inclusion and the governance of land. A separate section considers economic policy measures to support the resolution of Mindanao's longstanding violent conflicts.

³ National Economic and Development Authority. 2017. *Philippine Development Plan 2017-2022*.

⁴ Basic education in the Philippines comprises one year of kindergarten, six years of elementary school, four years of junior high school and two years of senior high school.



Figure B.1. Components and planned interventions of the strategy for Mindanao Regional Development

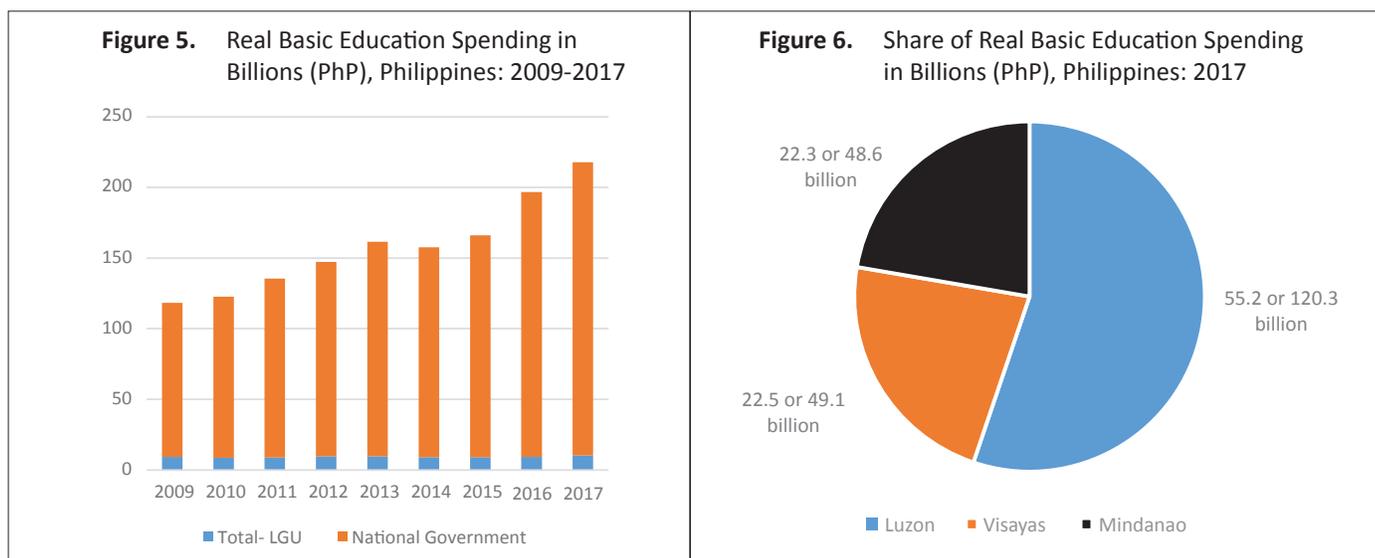


Source: World Bank (2017), "Mindanao Jobs Report".

II. Education and Skills

A. Basic Education

Government spending on basic education has increased significantly, including in Mindanao. Primarily funded by the national government, total real basic education spending has nearly doubled from P118 billion in 2009 to P218 billion in 2017, partly due to the introduction of K to 12 Program in 2013 (Figure 5). The major funding from national government uses the number of students in proportioning the budget across regions. By island-group, Luzon benefitted the most with more than half or 55 percent of the total spending in 2017, followed by Visayas and Mindanao with 23 percent and 22 percent shares, respectively (Figure 6). The other component of the basic education spending came from Local Government Units (LGUs), specifically from the Special Education Fund comprising 1 percent of the property tax. This drives the differences in the total basic education spending across regions, allowing urbanized areas to push up their spending. Within Mindanao, given the higher taxes accumulated from the vibrant economic activity, Region X and Region XI have the highest LGU and total spending on basic education, while ARMM and Caraga have the lowest.



Source: LGU Fiscal Data Statement of Receipts and Expenditures; Department of Education’s Statement of Appropriations, Allotments, Obligations, Disbursements and Balances (SAAODBs).

Note: Real Basic Education Spending in Figure 6 accounts for both NG and LGU spending.

Despite the huge investment, school enrollment and completion rates in Mindanao have improved but have remained below the national average especially for secondary school. Similar to other island-groups, more and more students in Mindanao are enrolled in and completing elementary and secondary school. Net enrollment rates in Mindanao have risen over time (to 91 percent for elementary and 67 percent for high school in 2017) but have remained below the national average which in 2017 stood at 94 percent for elementary and 76 percent for secondary education (Figure 7 and Figure 8). Elementary completion rates have grown particularly fast. However, even after this progress, Mindanao still lagged behind Luzon and Visayas, where completion rates exceeded 90 percent and 80 percent at the elementary and secondary level, respectively (Figure 9 and Figure 10).

Figure 7. Elementary Net Enrollment Rate by Island-Region: 2009-2017

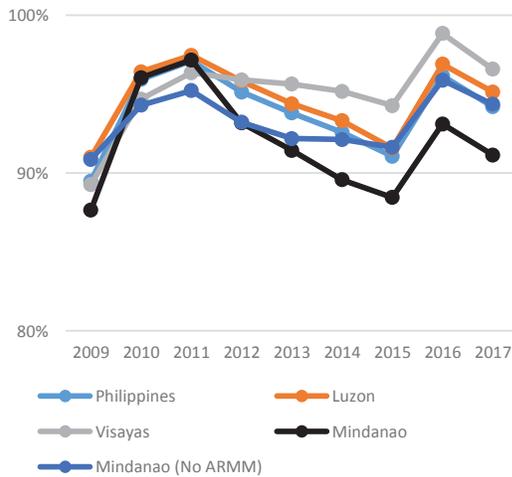
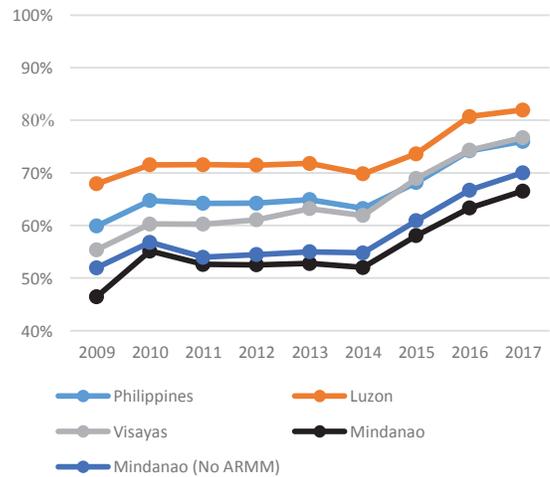


Figure 8. Secondary Net Enrollment Rate by Island-Region: 2009-2017



Source: Department of Education

Figure 9. Elementary Completion Rate by Island-Region: 2009-2017

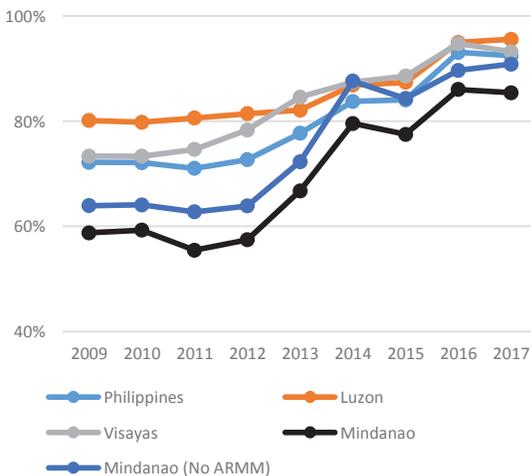
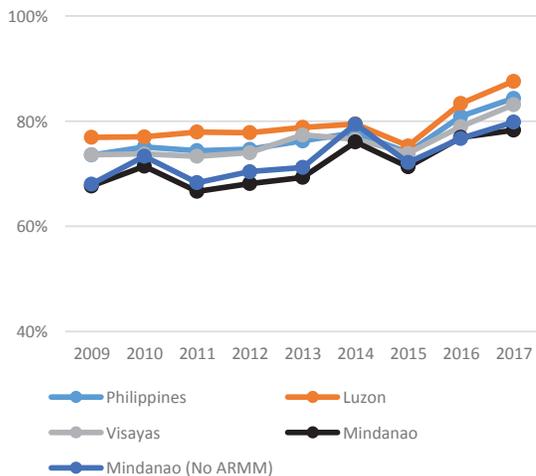


Figure 10. Secondary Completion Rate by Island-Region: 2009-2017



Source: Department of Education

Among all regions in Mindanao, school enrollment and completion rates were lowest in ARMM. In 2017, the elementary school completion rate was 54 percent in ARMM but above 80 percent in all other regions in Mindanao. In the same year, ARMM's secondary level net enrollment rate was 30 percent while it was above 60 percent in all other regions (Figure 11 and Figure 12). Even excluding ARMM, the average enrollment and completion rates in Mindanao were still lower than in other island-groups.



Figure 11. Selected Elementary Education Indicators by Mindanao Region: 2017

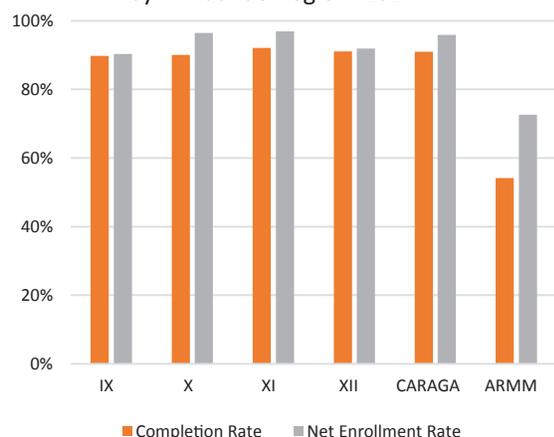
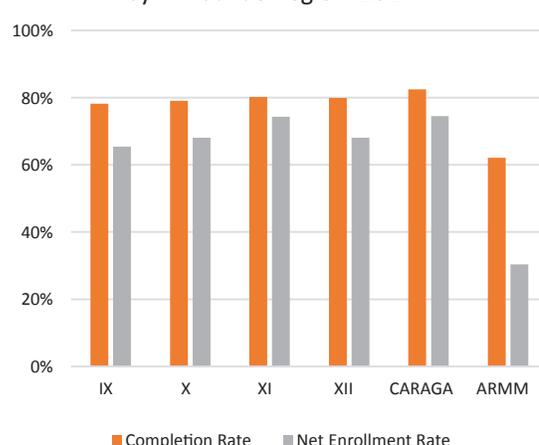


Figure 12. Selected Secondary Education Indicators by Mindanao Region: 2017



Source: Department of Education

Secondary education dropout rates were high in Mindanao and more pronounced among males than females. The progress made in completion rates is accompanied by an overall decline in dropout rates. Similar to other island-regions, elementary dropout rates in Mindanao more than halved from 10 percent in 2010 to four percent in 2017 (Figure 13). However, the bigger concern was in secondary education where the decrease was much slower. In Mindanao, the secondary dropout rate decreased from 9 percent in 2010 to 8 percent in 2017 (Figure 14). Notably, while the secondary dropout rate declined for other island-regions between 2016 to 2017, it increased slightly for Mindanao in the same period. This challenge with secondary students mirrors the lower completion rates observed for secondary education relative to elementary education. By sex, dropout rates have been consistently more pronounced among boys than girls. Using the average of rates from 2010 to 2017, males in secondary school recorded a dropout rate of 11 percent, whereas females of the same level recorded only 8 percent (Figure 15). Generations of under-educated boys may translate to social imbalances that could be harmful for women⁵.

Figure 13. Elementary Dropout Rate by Island-Region: 2010-2017

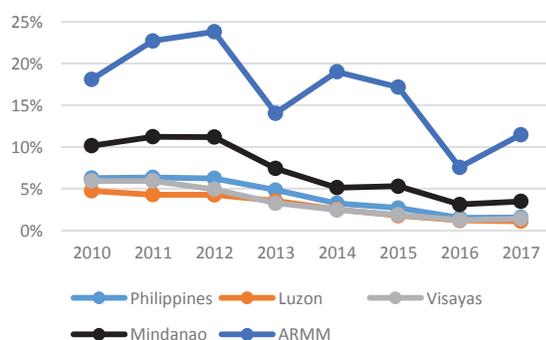
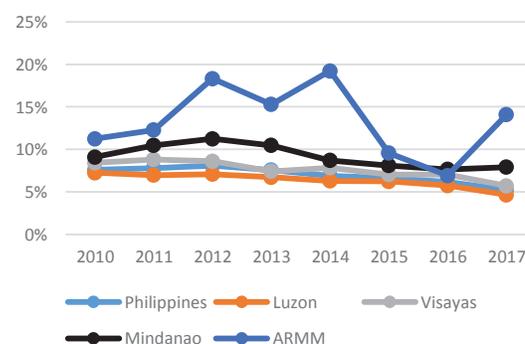
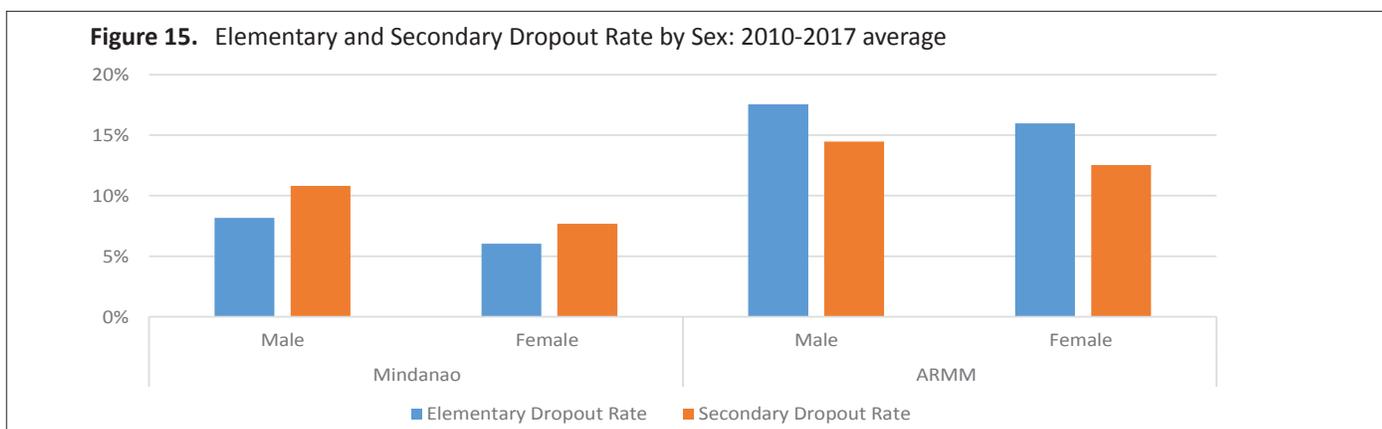


Figure 14. Secondary Dropout Rate by Island-Region: 2010-2017



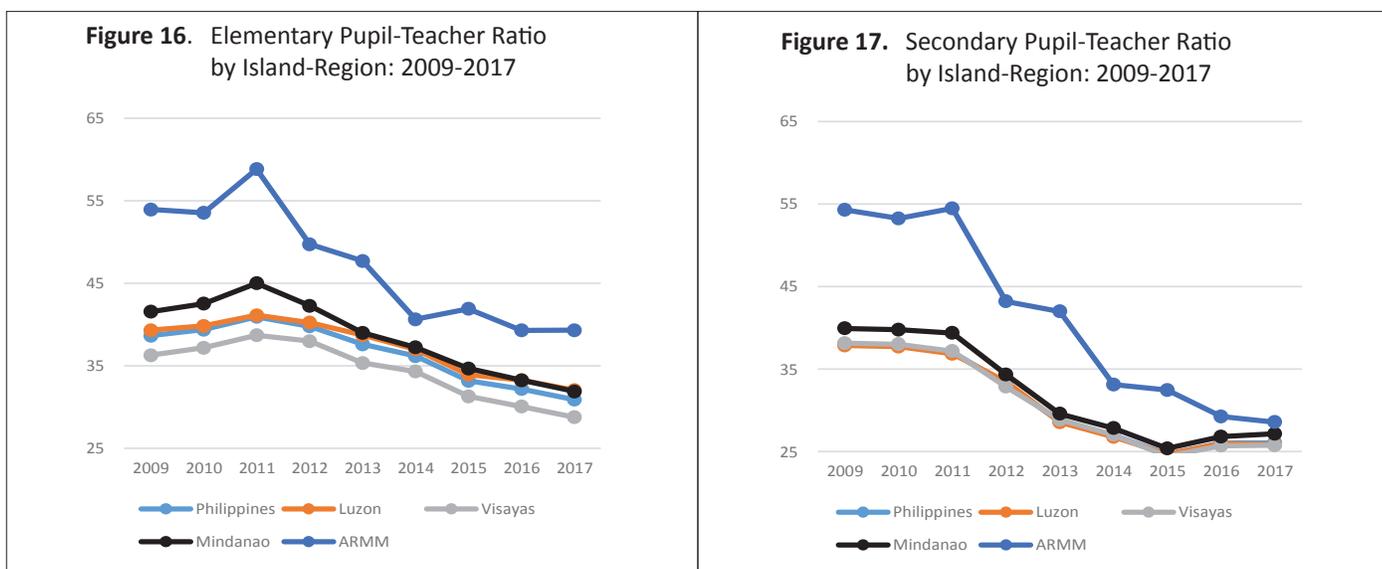
Source: Department of Education

⁵ Clarissa, David; Albert, Jose Ramon. 2015. *Boys Underperforming in School: What can be done?* Rappler



Source: Department of Education

In terms of the learning environment, pupil-teacher ratios have generally decreased, but they remain high in some regions. The average number of pupils per teacher (the pupil-teacher ratio) has declined for both elementary and secondary levels across all island-regions. In Mindanao, it fell impressively from 41 in 2009 to 30 in 2017 (Figure 16 and Figure 17). In 2017, pupil-teacher ratios for elementary and secondary schools remained unequal in Mindanao. The rates were elevated in ARMM to 34 and in Region XI to 30, while the rates in CARAGA were low at 27 and Region IX at 28. This may be a sign of significant inefficiencies as teachers from regions with low pupil-teacher ratios could be redeployed to regions with high ratios.



Source: Department of Education

Teachers' competencies in Math and Science appeared lower than in English. The Teachers' English Proficiency Test and the Process Skills Test in Science and Mathematics (TEPT-PSTM) measures competencies in English, Science and Mathematics. Delivered to teachers of grades nine and ten, the overall mean percentage in all island-regions fell within the above average range (50% to 75%) with Mindanao marginally lagging behind. However, performance in Process Skills, such as Science and Math, was lower than English, including in Mindanao (Figure 18). Similarly, a Public Education Expenditure Tracking and Quantity Service Delivery Study (PETS-QSDS) found that elementary and high school teachers have a higher level of knowledge in English than in Math and Science.⁶ Within Mindanao, ARMM trailed behind all the other regions in all components and overall (Figure 19).

⁶ Al-Samarrai, Samer. 2016. *Assessing basic education service delivery in the Philippines: public education expenditure tracking and quantitative service delivery study (English)*. Washington, D.C.: World Bank Group.



Figure 18. TEPT-PST Scores of Gr. 9 and Gr. 10 Teachers by Island-Region: 2017

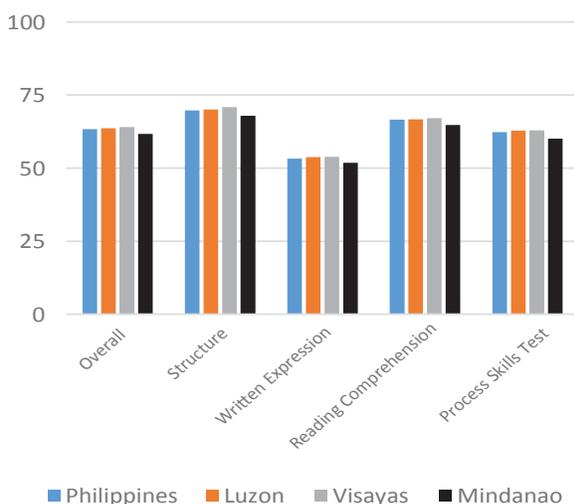
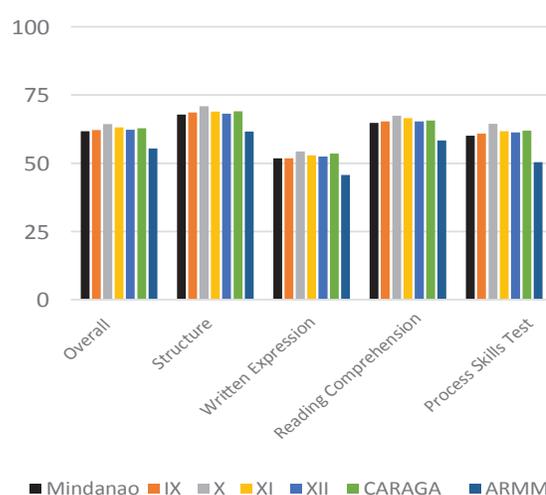


Figure 19. TEPT-PST Scores of Gr. 9 and Gr. 10 Teachers by Mindanao Region: 2017



Source: Bureau of Education Assessment, Department of Education

In terms of classroom practice, Mindanao teachers have strong ability in Classroom Culture, but exhibit weaker ability in Instruction and Socio-emotional Skills. Recent education research found that variation in student learning may be better explained by teachers' practices in the classroom⁷. The World Bank developed a classroom observation tool "TEACH" to observe the classroom practices of 140 teachers in Region 10 in Mindanao⁸. Results suggested that teachers do well in terms of classroom management (supportive learning environment, opportunities to learn etc.) but struggle with key aspects of instruction (providing quality feedback, asking thinking questions or prompt critical thinking) and fostering socio-emotional skills (autonomy, social and collaborative skills etc.) (Figure 20). Teachers also rated themselves more positively in terms of their teaching practices and skills compared to the observation results. They tended to think that their top priority should be arriving at school on time (50 percent) rather than improving student learning (14 percent) and have limited access to professional development opportunities.

Figure 20. Distribution of Average TEACH Scores by Element, Region 10: 2018



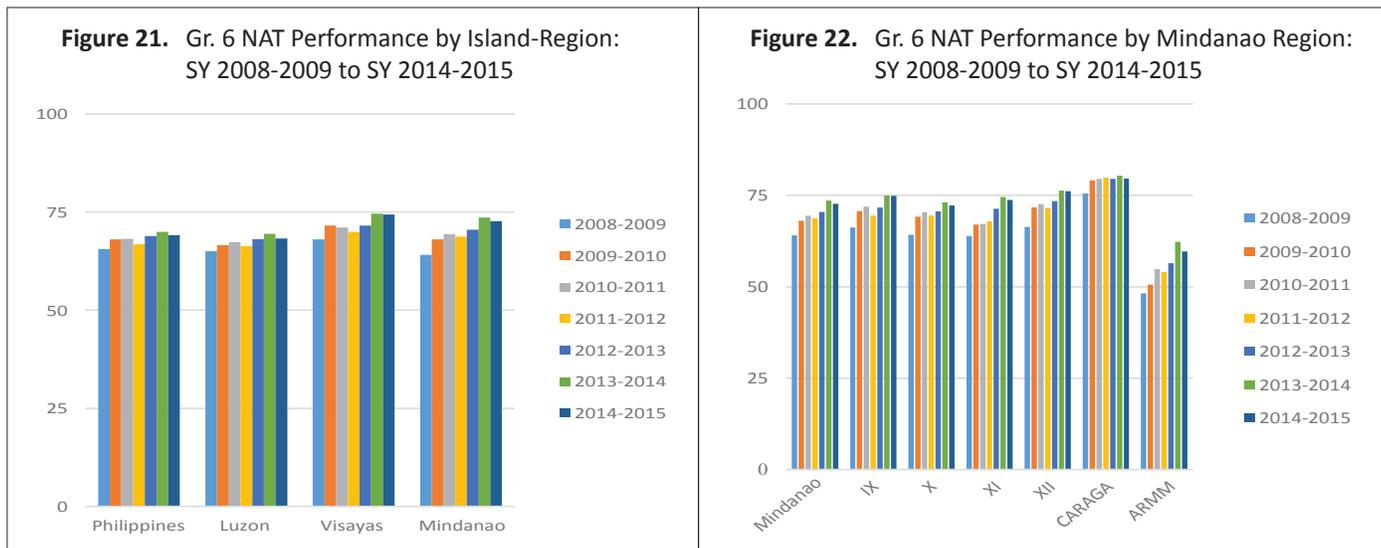
Source: World Bank. 2018. Teacher Practices in Mindanao: Results of the Teach Classroom Observation Study

Note: Results of the TEACH tool are based on a scale of 1 to 5, with 5 being the highest quality score.

⁷ Araujo, Caridad, Pedro Carneiro, Yyannu Cruz-Aguayo, and Norbert Schady. 2016. *Teacher-Quality and Learning Outcomes in Kindergarten*. Quarterly Journal of Economics: 1415-53.

⁸ World Bank. 2018. Teacher Practices in Mindanao: Results of the Teach Classroom Observation Study.

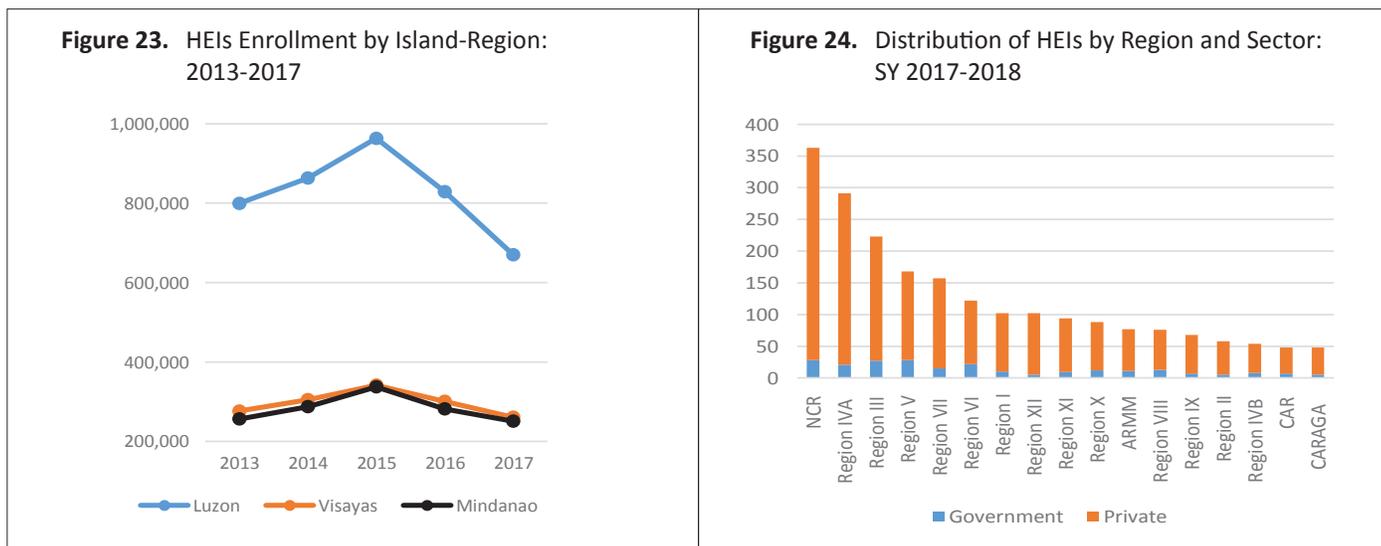
Learning outcomes as measured by the NAT scores have shown modest improvements over a seven-year period. The NAT, a Philippine-made standardized test, is a core indicator used by the Department of Education to measure the quality of basic education. From SY 2008-2009 to SY 2014-2015, the NAT scores at the elementary level have been rising yet at a slow pace. Across islands, the differences were minimal as they all have stayed within the range of upper average scores (50% to 75%) (Figure 21). Within Mindanao, CARAGA garnered the highest scores, which hovered the superior level (76% to 100%), while ARMM recorded the lowest scores (Figure 22).



Source: Department of Education

B. Tertiary Education

Enrollment opportunities and access to tertiary education are also more limited in Mindanao. For the school year 2017-2018, enrollees in State Universities and Colleges (SUCs) in Mindanao were less than half of Luzon – nearly the same as the number of enrollees in Visayas (Figure 23). While it may be reasonable as Luzon comprises more than half of the population, the low number of Higher Education Institutions (HEIs) in Mindanao areas plays a role in its low number of SUCs enrollees. For the same school year, the highest number of HEIs from both government and private sector in Mindanao was Davao with 94 HEIs (Figure 24). This starkly contrasted with the total in NCR, Region IV-A and Region III with 363, 291 and 223 HEIs, respectively.



Source: Commission on Higher Education

Note: Enrollment data in the CHED website are only in absolute numbers. A better alternative would be in terms of rates but are unavailable. The HEIs in Figure 24 exclude satellite campuses.

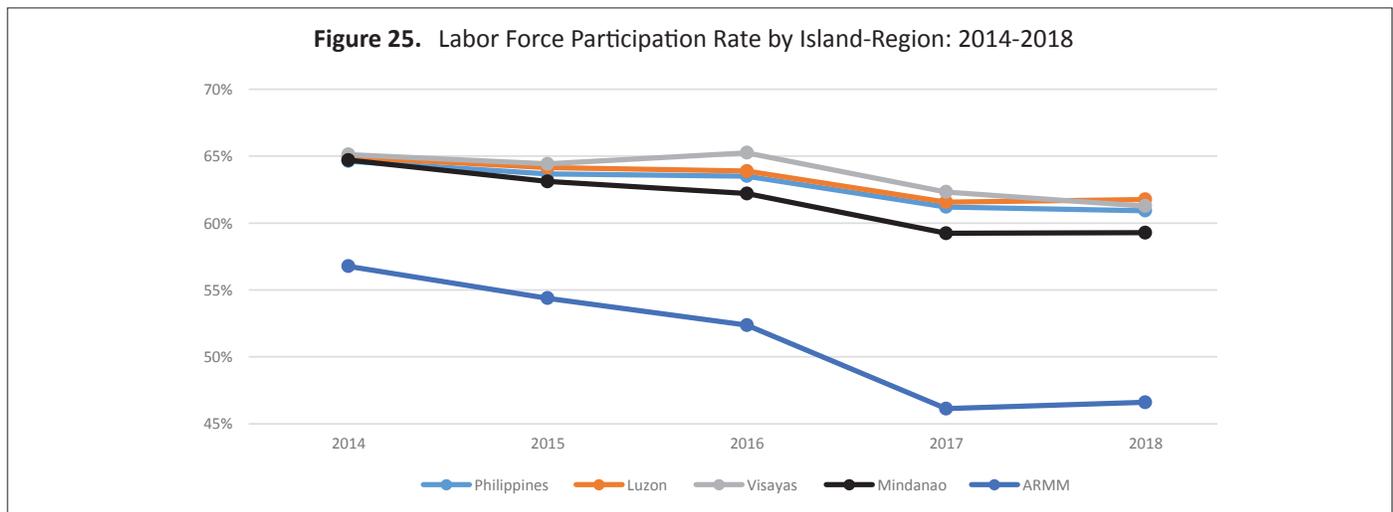


Educational reforms will likely increase preference for tertiary level. Recent educational policy reforms such as the “Unified Financial Assistance System for Tertiary Education Act” (or UNIFAST) in 2015⁹, and the “The “Universal Access to Quality Tertiary Education Act” in 2017¹⁰, are aimed at improving access to tertiary education. The former provides a comprehensive and unified financial assistance system to tertiary students, while the latter provides free tuition in 112 state universities and 122 local universities and colleges starting in the academic year 2018-2019. These will likely increase the preference for continued schooling among the first batch of Senior High School (SHS) graduates in 2018 and thus delay their entrance into the labor market. In fact, according to Department of Education data¹¹, 60 percent of SHS graduates were anticipated to enroll in college and 39 percent in Technical-Vocational-Livelihood (TVL). This is consistent with the evidence from the Philippine Institute for Development Studies (PIDS) that suggests that three out of four SHS students plan to proceed to higher education. This is the case even for students in the TVL track¹². This suggests that there will be increased aspirations for quality jobs in the labor market since more people, including the Mindanawons, are set to become better-educated.

III. Labor and Employment

A. Structure of the Labor Market

Labor force participation rates have recently dropped as a higher share of students attend Senior High School program. From 2014 to 2017, the labor force participation rate fell across all island-regions (Figure 25). This is mostly due to the expansion of education opportunities. In Mindanao, the rate fell by 5 percentage points which was faster than the national average of 4 percentage points. From 2016 to 2017, both the Philippines as a whole and Mindanao experienced a particularly pronounced drop of the labor force participation rate. Within one year, it fell from 63.5 percent to 61.2 percent. This pronounced drop was primarily due to the implementation of the SHS stage of the K to 12 Program in 2016, which extended secondary schooling by two years. The take-up of the SHS program was high, with about 90 percent of Grade 10 students proceeding to Grade 11 in 2017¹³. Particularly for ARMM, the labor force participation rate was significantly lower by 12 percentage points from the Mindanao average. This may indicate a lack of opportunity in the region as half of the population choose to be economically inactive.



Source: Labor Force Survey, Philippine Statistics Authority

⁹ See Republic Act No. 10687.

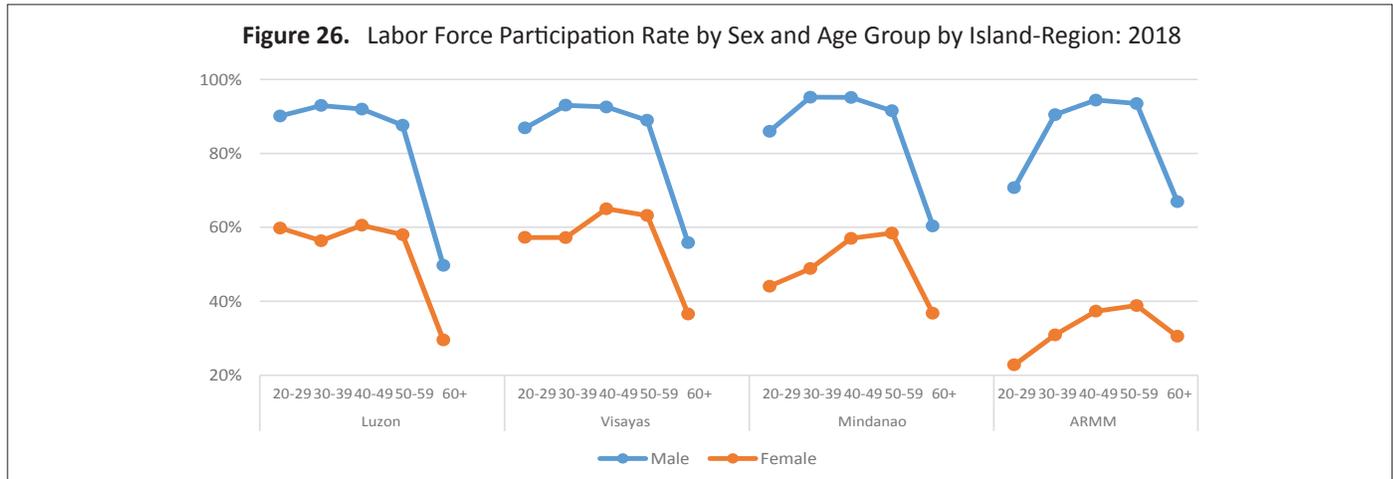
¹⁰ See Republic Act No. 10931.

¹¹ Department of Education’s Learner Information System (LIS) Quick Count as of August 05, 2017.

¹² See Ortiz, M., Lagarto, M., Ortiz, D., Orbeta, A., & Potestad, M. (2018). “Senior High School and the Labor Market: Perspectives of Grade 12 Students and Human Resource Officers,” Discussion Papers DP 2018-49 (Revised), Philippine Institute for Development Studies.

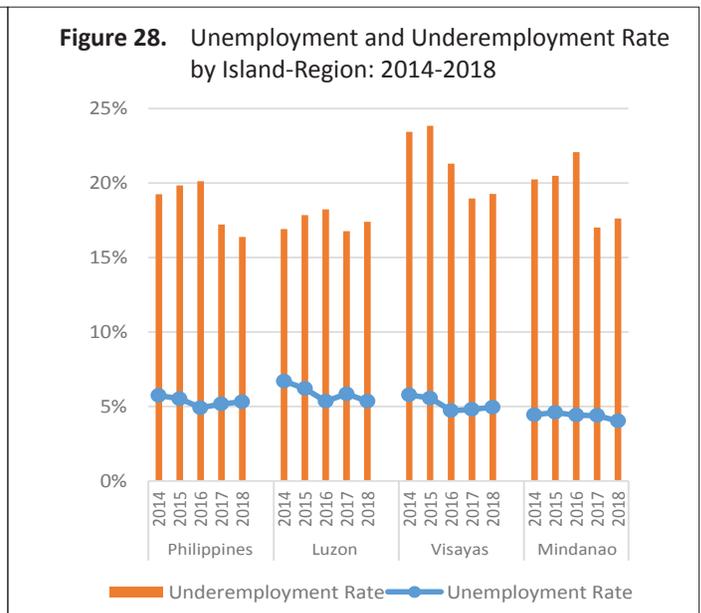
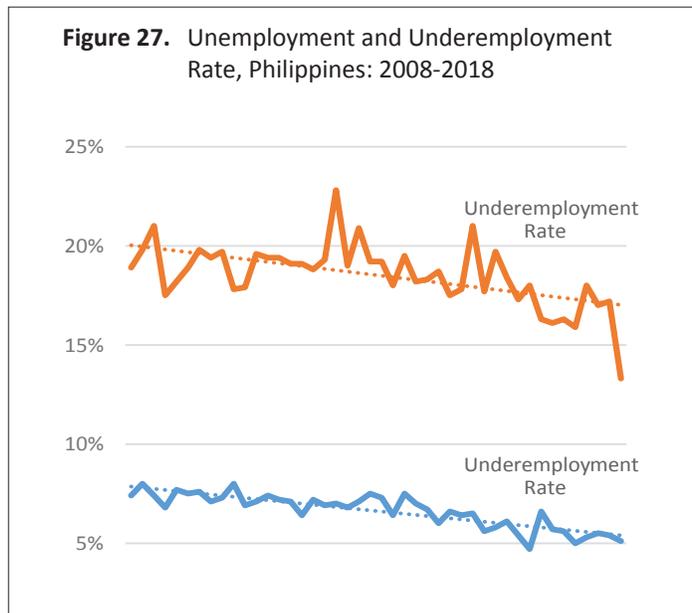
¹³ Transition Rate Data from Department of Education as of April 30, 2018.

Only half of younger women in Mindanao are part of the labor force. While nearly 90 percent of men ages 20-29 are economically active, this is the case for only 44 percent of women in the same age group (Figure 26). Labor force participation rates among women in their twenties are much lower in Mindanao than in Luzon and Visayas, where they stand at 60 percent and 57 percent, respectively. Much more, such rate is significantly lower in ARMM where 23 percent of women in their twenties participate in the labor force. Women in Mindanao may face limited economic opportunities and are likelier to work in the home especially during armed conflicts when the husbands are fighting in war or when their children are drawn into battle¹⁴.



Source: Labor Force Survey, Philippine Statistics Authority

In the Philippines including Mindanao, unemployment and underemployed rates have declined over time. From 2008 to 2018, unemployment and underemployment rates have exhibited a downward trend both nationally and in all island-groups (Figure 27). At 4.0 percent, in 2018, the unemployment rate was lower in Mindanao than in any other island-group (Figure 28). Meanwhile, in 2018, the underemployment rate for Mindanao stood at 17.6 percent. This was higher than in Luzon and the national average of 16.1 percent. Within Mindanao, urbanized areas like Region X (4.1 percent) and Region XI (4.3 percent) have the highest unemployment rates (Table 1). This is to be expected since these regions attract many jobseekers from adjacent regions. At the same time, CARAGA (25.4 percent) and Region X (20.8 percent) have the highest underemployment rates. Very high underemployment rates are a first indicator that the key labor market challenge for the Philippines, including Mindanao, is the lack of quality jobs.



Source: Labor Force Survey, Philippine Statistics Authority

¹⁴ Santiago, C. 2008. *Philippines: Country Gender Profile*. Japan International Cooperation Agency.



Table 1. Key Labor and Employment Indicators by Mindanao Region: 2018

Region	Labor Force Participation Rate	Unemployment Rate	Underemployment Rate
Region IX	56.3	4.1	18.9
Region X	66.3	4.1	20.8
Region XI	60.3	4.3	15.4
Region XII	61.7	3.9	17.0
CARAGA	64.4	4.0	25.4
ARMM	46.6	3.7	8.4

Source: Labor Force Survey, Philippine Statistics Authority.

The proportion of youth and young adults aged 16-24 who are neither in employment or education is high in Mindanao. In 2018, 22 percent of youth and young adults aged 16-24 in Mindanao were NEET (Figure 29). This was a higher share than in any other island-regions. It should be of grave concern as prolonged periods spent neither in education nor training may not only increase the poverty risk in the short term but also damage labor market prospects in the medium and long run. In fact, compared to all regions in the Philippines, some parts of Mindanao have among the highest shares of out-of-school youth (OSY) (Figure 30). Nationwide, this share is highest in ARMM where 36 percent of all 16-24 years old (or 270,000 youth and young adults) are OSY. Among other regions in Mindanao, the share is also elevated in Region XII (at 34 percent) and Region X (at 25 percent). The most common reasons that youth and young adults give for not attending school or being employed are marriage or family matters, a lack of personal interest, and the high cost of education or other financial concerns.”

Figure 29. Youth Unemployment, Underemployment and NEE Rates by Island-region: 2018

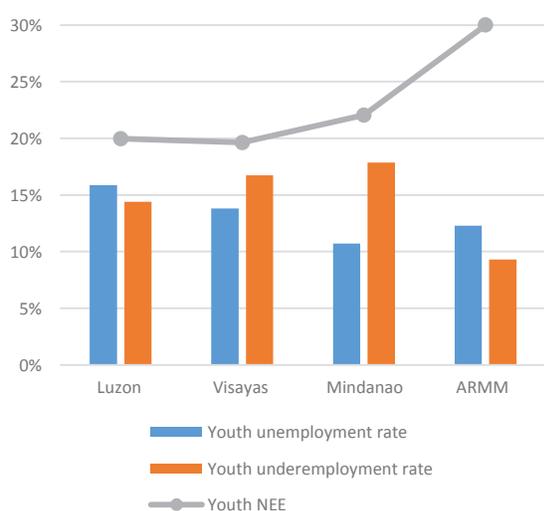
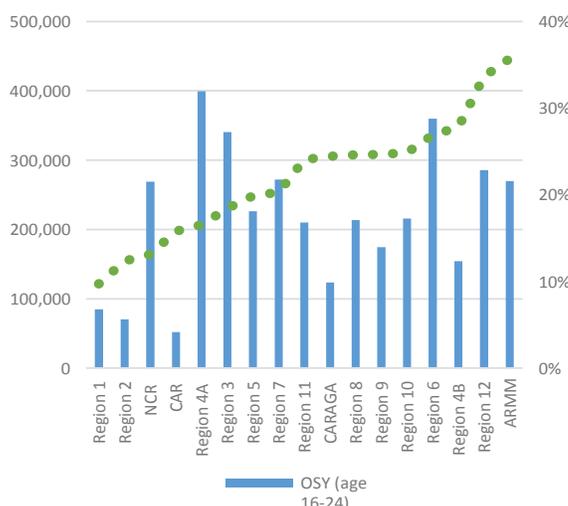


Figure 30. Magnitude and Share of OSYs (Age 16-24) by Region: 2017

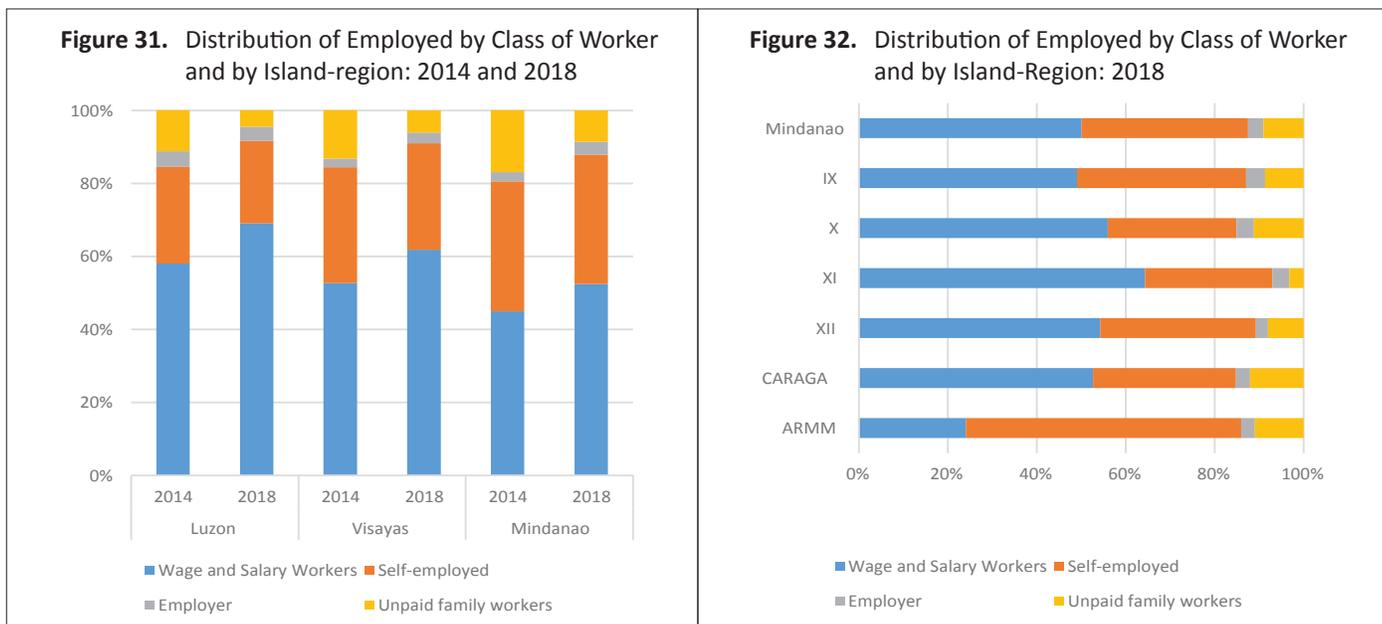


Source: Labor Force Survey and Annual Poverty Indicators Survey, Philippine Statistics Authority

Note: Youth is defined as persons aged 15 to 24. Computation of NEE follows the formula of the International Labor Organization.

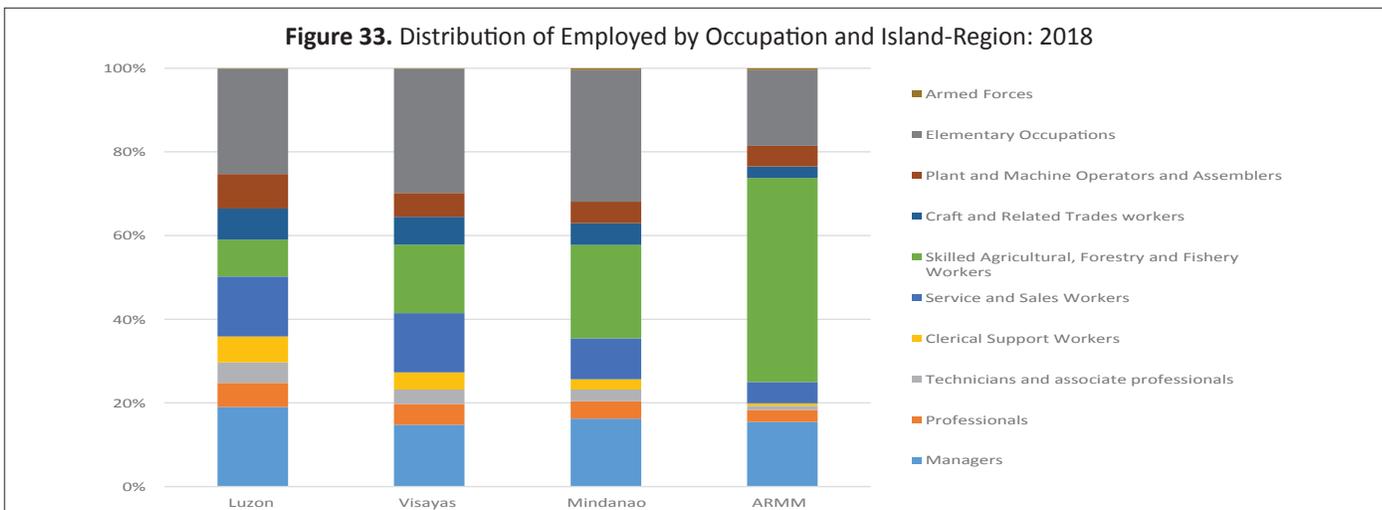
Youth unemployment and underemployment rates are also high in Mindanao. Eighteen percent of the 5 million youth and young adults aged 15-24 in Mindanao characterized are underemployed (Figure 29). This is a higher rate than the island-region’s youth unemployment rate at 11 percent or around 196,000 youths. At the same time, it is worth noting that while underemployment is prevalent among most age groups in Mindanao, unemployment is largely a problem of the youth and young adults. In the island, the youth unemployment rate is more than twice the overall unemployment rate. Unlike Mindanao, youth unemployment rate is higher than underemployment rate in ARMM. Possible explanations include the job search behavior and career aspirations of youth and young adults but also a potential gap between employers’ demands and graduates’ skills.

Almost half of all workers in Mindanao are engaged in vulnerable work but this share has been decreasing. In 2018, 44 percent of workers in Mindanao were vulnerable workers, defined as the self-employed (mainly consisting of low-level producers of goods and services such as ambulant vendors, jeepney drivers and domestic helpers) and the unpaid family workers (common in farming and retail trade) (Figure 31). Both types of workers are not covered by labor laws and standards, making them highly vulnerable. One manifestation of the vulnerability is the lack of adequate social protection from various risks, particularly, health- and unemployment-related risks. The share of these vulnerable workers was higher in Mindanao than in Luzon or Visayas. A comparison of different regions in Mindanao yields that the share of vulnerable work is highest in Region IX and particularly in ARMM, where 73 percent of workers are vulnerable (Figure 32). More encouragingly, over the four-year period from 2014-2018, there was progress in reducing the share of vulnerable work across Mindanao which had been 53 percent as recently as 2014. The largest decrease was seen in the share of unpaid family workers.



Source: Labor Force Survey, Philippine Statistics Authority

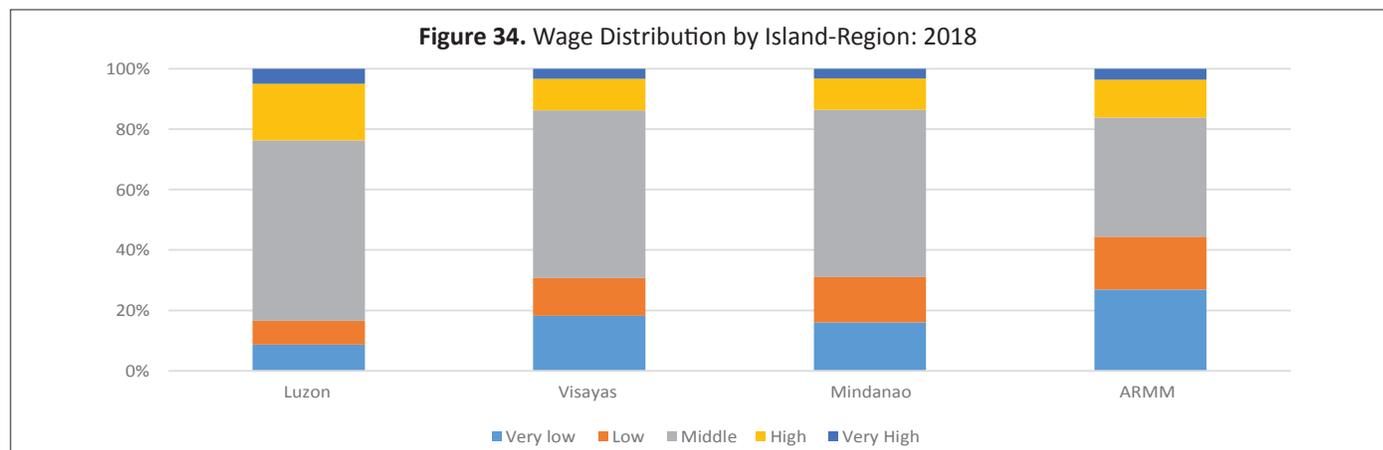
Many workers in Mindanao are engaged in elementary occupations. In 2018, three out of 10 workers in Mindanao were engaged in elementary occupations. These occupations are generally associated with unskilled labor and include jobs such as street vendors, construction workers, cleaners, domestic helpers, and farm hands (Figure 33). At 22 percent of overall employment, skilled agricultural, forestry, and fishery workers were also widespread in Mindanao. This was consistent with the island-region's relatively large agriculture sector. While Mindanao has a higher share of workers in elementary occupations and skilled agriculture workers than Luzon and Visayas, the prevalence of managers or professionals in Mindanao is lower than Luzon but equal with Visayas. Meanwhile, half of workers in ARMM are engaged in skilled agricultural, forestry and fishery occupations.



Source: Labor Force Survey, Philippine Statistics Authority



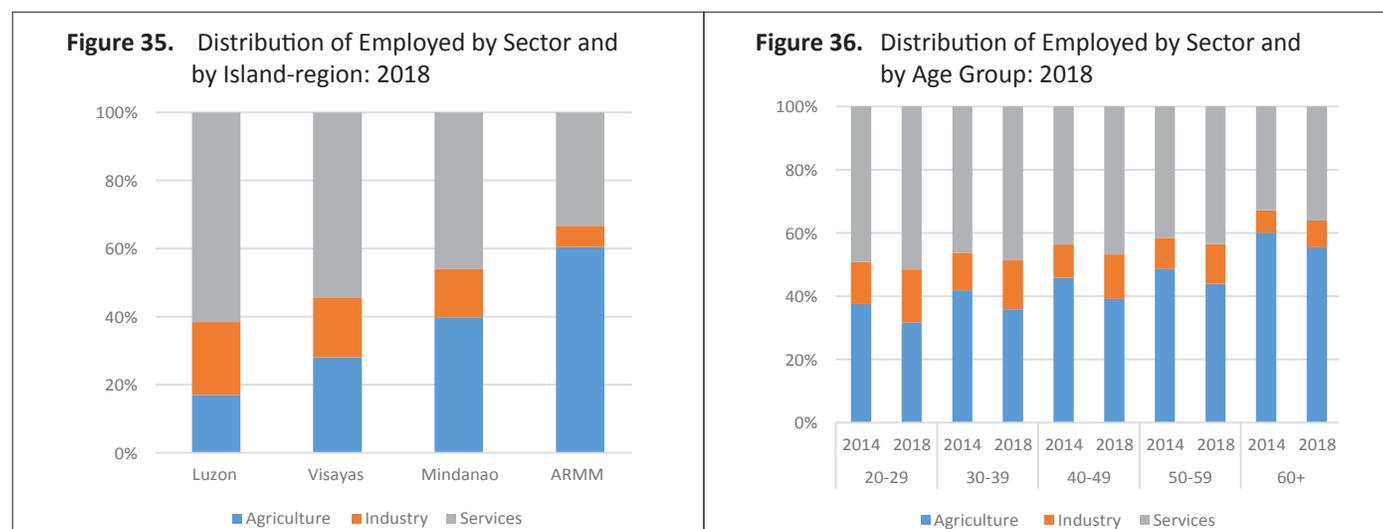
Low wages are more common in Mindanao and Visayas than in Luzon. When workers' wages are classified into five different wage groups (very low, low, middle, high, very high), 31 percent of workers in Mindanao and in Visayas have either very low or low wages – defined as wages less than 50 percent of the median wage and less than 67 percent of the median wage, respectively (Figure 34). In comparison to Luzon where only 17 percent of workers earn low or very low wages, respectively, this is a considerably higher share of low-wage work. In addition, consistent with the high share of vulnerable work in terms of class of worker and occupation, 44 percent or nearly half of workers in ARMM receive low pay.



Source: Labor Force Survey, Philippine Statistics Authority

Note: Very Low: less than 50% of median wage, Low: less than 67% of median wage, Middle: less than 150% of median wage, High: less than 3 times the median wage, Very High: 3 times or higher than median wage.

Agriculture provides many jobs in Mindanao but younger workers are increasingly active in services and industry. In 2018, two-fifths (40 percent) of workers in Mindanao were in the agriculture sector (Figure 35). In ARMM, nearly two-thirds of workers are in the same sector. These workers are considered vulnerable given the sector's susceptibility to external shocks and economic downturns. However, over time, a lower share of young workers has engaged in agriculture work while a higher share of young workers has taken up work in services and industry. The share of workers ages 20-29 in the services sector increased from 49 percent in 2014 to 51 percent in 2018 (Figure 36). The share of young workers in the industry sector likewise increased by four percentage points to 17 percent in 2017. Over the same time span, the share of young workers in agriculture declined by six percentage points. Nevertheless, at 32 percent of jobs for youth in 2018, agriculture remained the second largest employer of youth and young adults.



Source: Labor Force Survey, Philippine Statistics Authority.

B. Labor Market Outcomes and Poverty

Poor labor market outcomes, particularly underemployment, are closely linked to poverty. In the Philippines, having a job does not always provide a pathway out of poverty. Among different groups of labor market participants, the underemployed, defined as those who want to work more hours, and not the unemployed face the highest risk of poverty. This is because the unemployed are often well-educated young persons from better-off families looking for jobs that meet their professional aspirations¹⁵. A regional snapshot that juxtaposes poverty incidence and underemployment rates in 2015 clearly confirms this link (Table 2). Underemployment rates are generally highest in the regions with the highest poverty incidence – including those in Mindanao – such as CARAGA, Region XII and Region X. In contrast, unemployment rates are highest in the regions with the lowest poverty incidence. While ARMM is a noteworthy exception to this pattern, pursuing inclusive growth first and foremost requires reducing in-work poverty, particularly by removing both supply-side and demand-side constraints to quality job creation.

Table 2. Poverty, Underemployment, and Unemployment by Region: 2015

Country or Region	Poverty Incidence	Underemployment Rate	Unemployment Rate
Philippines	3.9	9.97	6.3
<i>Richest Regions</i>			
NCR	9.1	18.2	8.5
Region IV-A	11.2	13.5	8.0
Region III	13.1	16.9	7.8
Region I	15.8	11.1	8.4
Region II	19.7	20.8	3.2
<i>Poorest Regions</i>			
ARMM	53.7	11.1	3.5
Caraga	39.1	26.2	5.7
Region VIII	38.7	31.8	5.4
Region XII	37.3	23.2	3.5
Region X	36.6	24.9	5.6
<i>Mindanao Regions from Richest to Poorest</i>			
Region XI	22.0	19.0	5.8
Region IX	33.9	18.5	3.5
Region X	36.6	24.9	5.6
Region XII	37.3	23.2	3.5
CARAGA	39.1	26.2	5.7
ARMM	53.7	11.1	3.5

Source: 2015 Family Income and Expenditure Survey and 2015 Labor Force Survey, Philippine Statistics Authority.

In-work poverty is higher in Mindanao than in any other island-region. Given the prevalence of underemployment in Mindanao, it is no surprise that the poverty incidence among employed workers (in-work poverty) is higher in Mindanao than other island-regions. In fact, the incidence is more than twice as high in Mindanao than in Luzon (Figure 37). Though over the last years in-work poverty has declined in parallel with overall poverty incidence, in 2015 nearly 32 percent of workers in Mindanao lived below the poverty line. Within Mindanao, ARMM, Region X and Region XII have the highest incidence of in-work poverty (Figure 38).

¹⁵ Chua, Karl Kendrick; Mylenko, Nataliya; Chaudhury, Nazmul; Figueroa-Geron, Carolina; Hayakawa, Motoky; Enerva, Moira. 2013. *Philippines Development Report: Creating More and Better Jobs (English)*. Washington, DC: World Bank Group.



Figure 37. Poverty Incidence among Population and Employed Workers by Island-region: 2012 and 2015

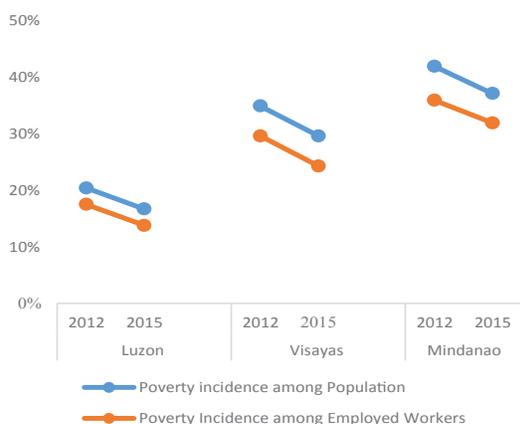
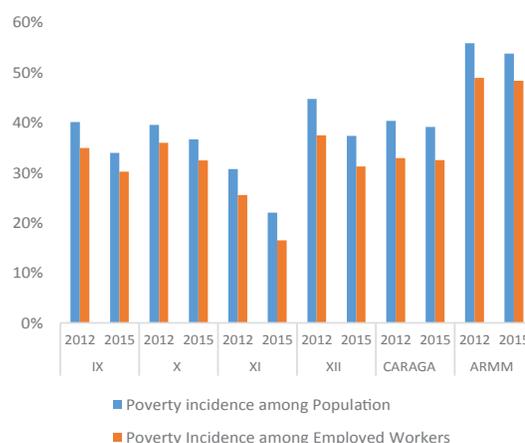


Figure 38. Poverty Incidence among Population and Employed Workers by Mindanao Region: 2012 and 2015



Source: Family Income and Expenditure Survey-Labor Force Survey 2015, Philippine Statistics Authority.

The working poor in Mindanao are likely to be low-educated, a wage worker and self-employed. Across all island-regions, the incidence of in-work poverty is associated with low levels of educational attainment (Figure 39). In Mindanao, 64 percent of working poor are workers with primary education or less. Conversely, most workers with tertiary education attain sufficiently productive and high-paying work. The share of the working poor among this group is 2 percent. In terms of class of workers, wage workers and the self-employed each comprise two-fifths of the working poor in Mindanao. The share of the self-employed among all working poor is higher in Mindanao than in other island-groups (Figure 40). In ARMM, more than three-fourths of the working poor are engaged in self-employment and unpaid family work. Self-employed workers comprised 60 percent of the working poor, followed by unpaid family workers that covered 28 percent. For the most part, self-employment reflects lack of opportunity rather than entrepreneurial drive.

Figure 39. Distribution of Working Poor by Educational Attainment and by Island-Region: 2015

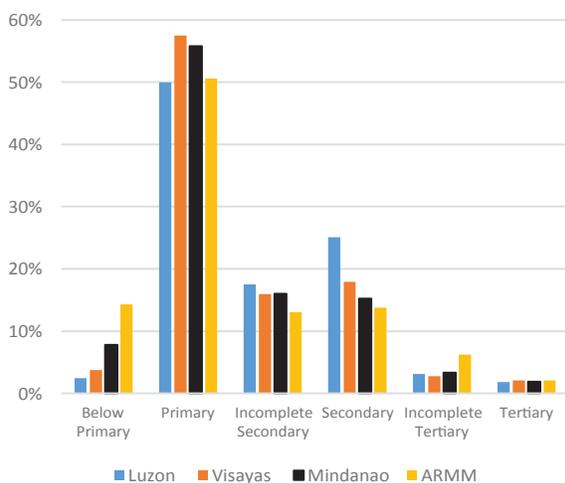
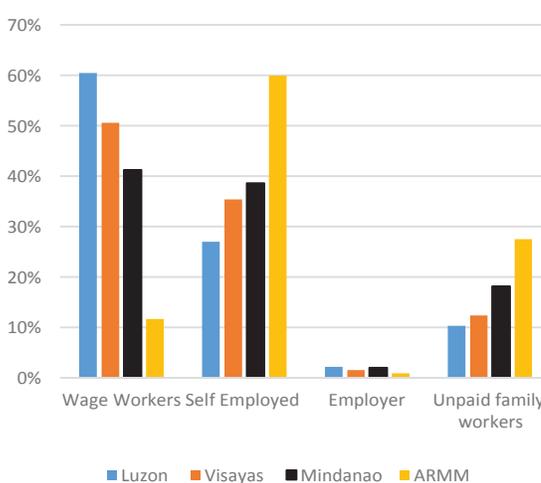
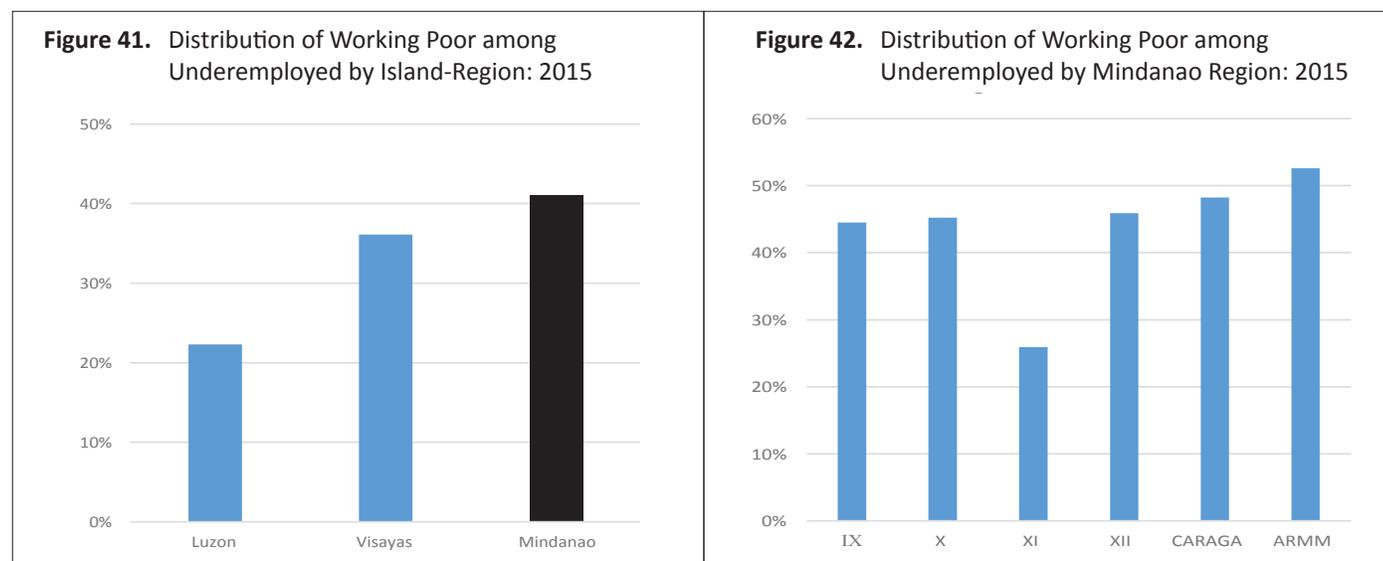


Figure 40. Distribution of Working Poor by Class of Worker and by Island-Region: 2015



Source: Family Income and Expenditure Survey-Labor Force Survey 2015, Philippine Statistics Authority.

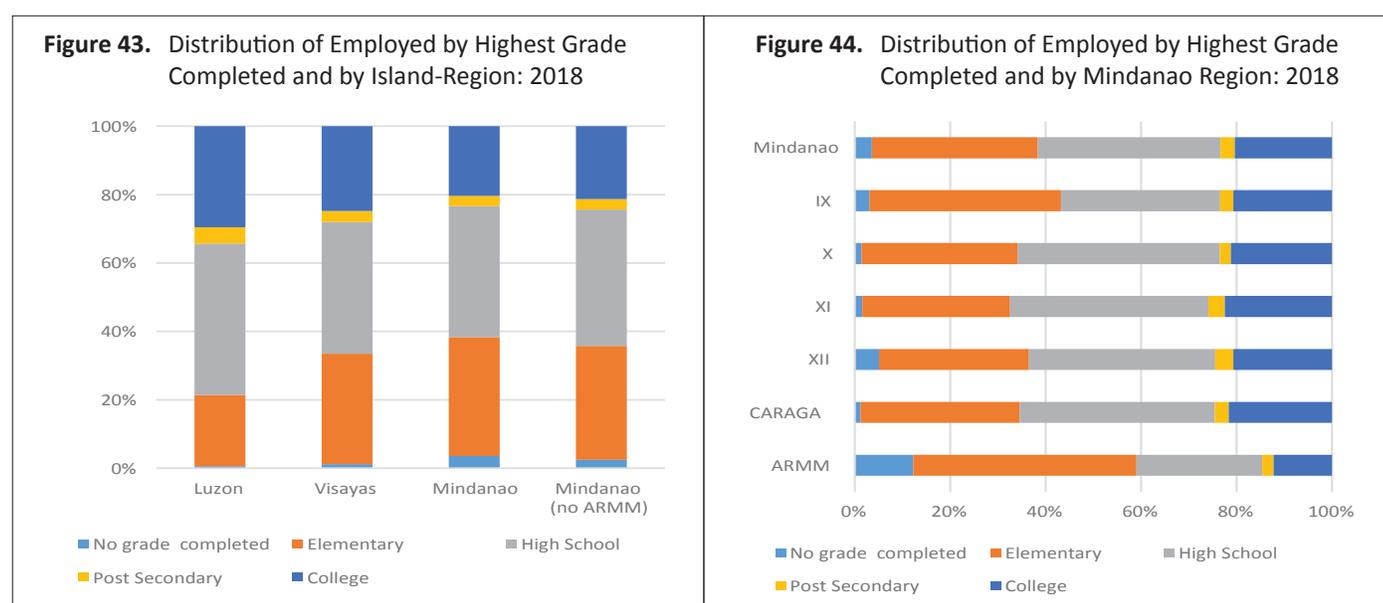
Close to half of the underemployed in Mindanao are working poor. In Mindanao, 41 percent of underemployed workers are classified as working poor. This is a larger share than in Luzon and Visayas where 22 percent and 36 percent of the underemployed are working poor, respectively (Figure 41). Within Mindanao, ARMM, and Region XIII have the largest shares of working poor among the underemployed, at 53 percent and 48 percent, respectively (Figure 42).



Source: Family Income and Expenditure Survey-Labor Force Survey 2015, Philippine Statistics Authority.

C. Education and Labor Market Outcomes

The level of education of workers in Mindanao lags behind Luzon and Visayas, and has barely improved in recent years. In 2018, more than one third (35 percent) of workers in Mindanao had completed elementary education, and another third (38 percent) reached high school (Figure 43). In contrast, just one fifth of workers were college-educated. In comparison, in Luzon and Visayas the majority of workers were at least high-school-educated and more than a fifth of workers have a college education. This lackluster trend remains even when ARMM, where educational outcomes are worse than average, is excluded. The workforce of most regions in Mindanao are dominated by high-school-educated workers, except for Region IX and ARMM where there are more workers with elementary education than with high school education. Meanwhile, Region XI and CARAGA Region have the highest percentage of college-educated workers (Figure 44).

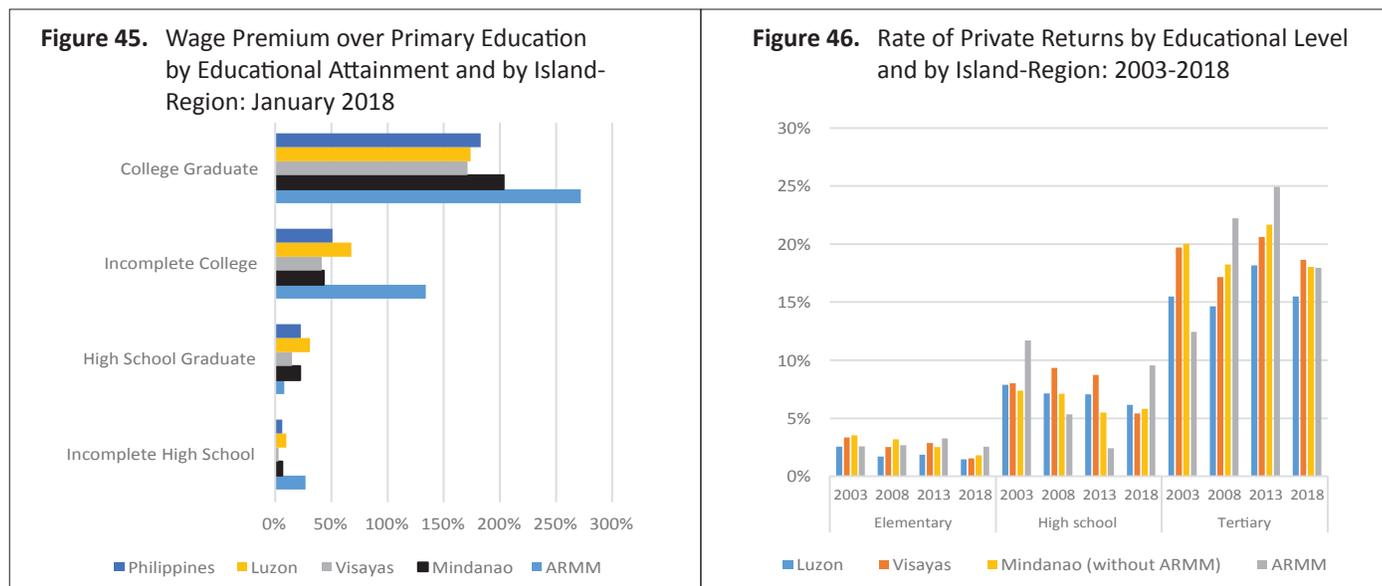


Source: Labor Force Survey, Philippine Statistics Authority

Note: Elementary includes SPED undergraduates and graduates. College includes post baccalaureate undergraduates and graduates.

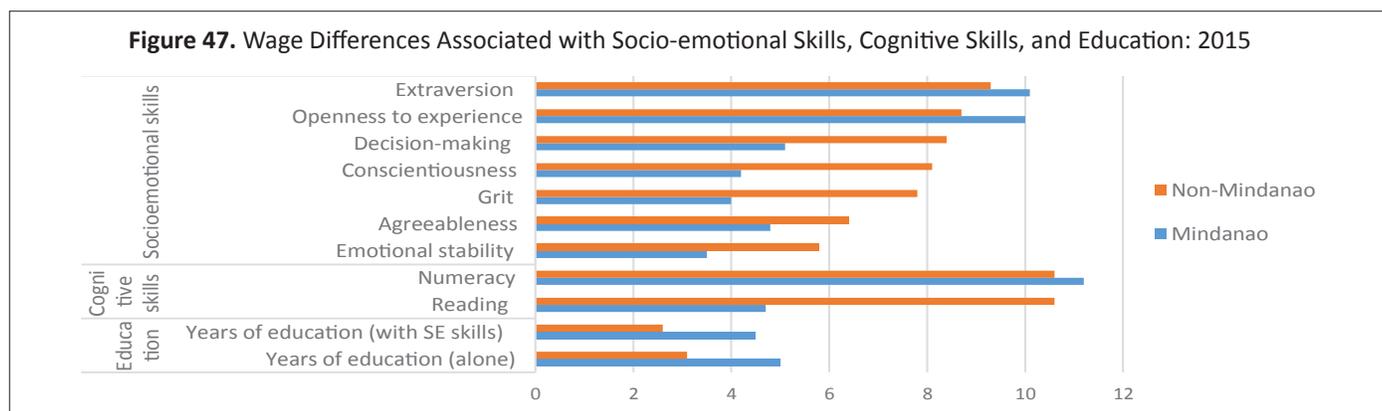


Education provides an avenue for building skills that improves outcomes for both the individual and society. On a societal level, higher educational levels create an enabling environment for investments and innovation that relies on skilled human resource as a key ingredient of employable labor force. On an individual level, education is closely associated with labor market outcomes. On average, workers with higher educational attainment have significantly higher wages than those with little or no education. “In Mindanao, the wage gap between workers with tertiary education and those with primary education amounts to 203 percent, compared to 174 percent nationally” (Figure 45). In fact, significant educational wage premia are not a recent phenomenon but have existed both in Mindanao and the rest of the Philippines throughout the last 15 years. This implies that access to education provides an important pathway to benefit from growth and escaping poverty (Figure 46).

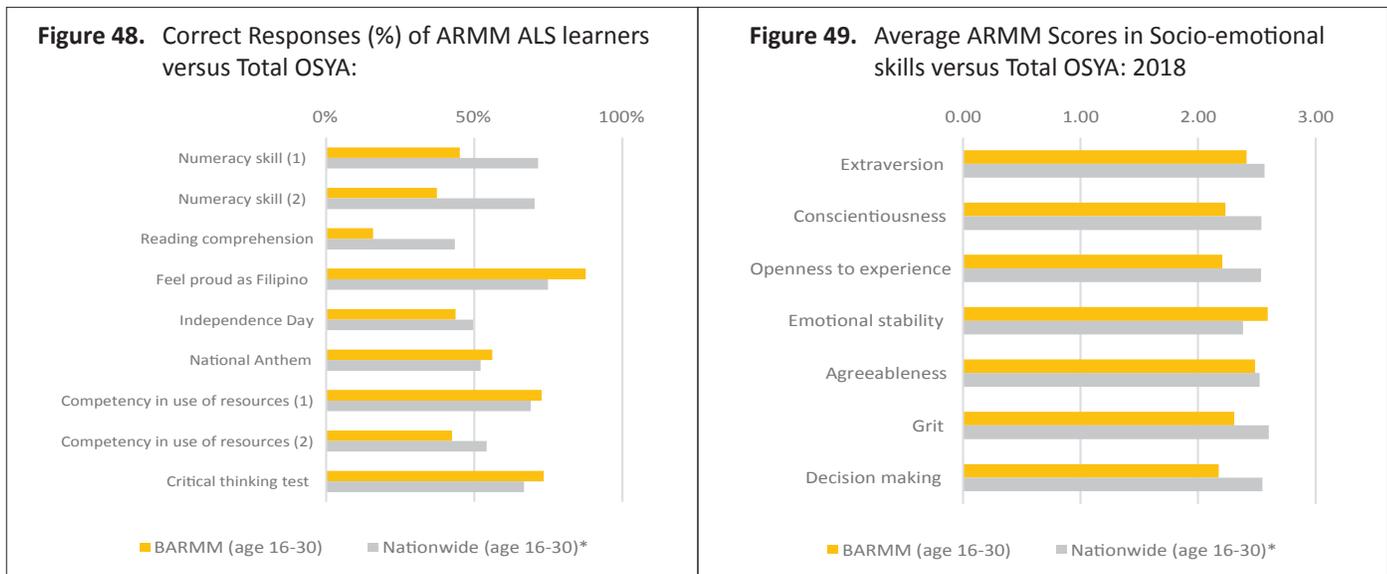


Source: Labor Force Survey, Philippine Statistics Authority; 2019 Basic Education Public Expenditure Review
 Note: Only January 2018 round is used because succeeding rounds adopt exclusively the K to 12 levels, leaving out the HS graduate category.

Recent surveys suggest a large skills gap in Mindanao, including ARMM. Covering Mindanao except ARMM, the Skills Toward Employability and Productivity (STEP) survey conducted to examine the role of various skills in the labor market indicated large skills constraints in Mindanao. Controlling for other factors, an additional year of education increased earnings by 5 percent in Mindanao in comparison to non-Mindanao areas where it only increases by 3 percent. In addition, compared to the rest of the Philippines, neither higher cognitive nor socio-emotional skills seem generally relevant to earnings in Mindanao (Figure 47). This may be attributed to the economy being more agriculture-oriented and less service-oriented as in the rest of the country. Nonetheless, as the economy gradually shifts towards services and industry, cognitive skills and socio-emotional skills would be increasingly important. For ARMM, results of the Alternative Learning System (ALS)-ARMM Survey in 2018 suggested a similar skills gap. Compared to the nationwide average, ALS learners aged 16-30 years old in ARMM have lower scores in both assessments of cognitive (Figure 48) and socio-emotional skills (Figure 49).



Source: World Bank STEP Household Survey 2015
 Note: The STEP survey was conducted to nationally-representative urban households in the Philippines between August and December 2015. ARMM is not included in the sample. SE= socio-emotional.



Source: World Bank ALS-ARMM Survey 2018

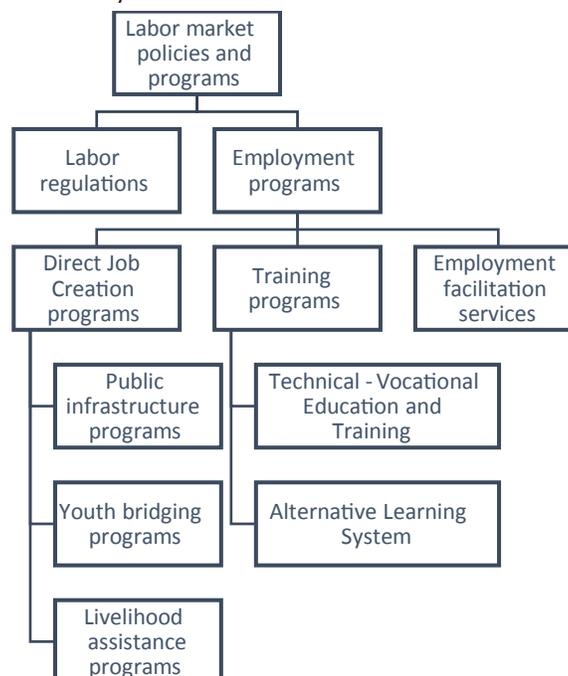
Note: All provinces except for Tawi-Tawi were covered and the fieldwork was undertaken between November and December 2018. OSYA are Out-of-school Youths and Adults of age 16-30. ARMM has been identified as BARMM with the signing of Bangsamoro Organic Law in July 2018; ARMM and BARMM will be used interchangeably in this study.

IV. Employment and Training Programs

A. Overview

Labor market policies and programs can generally be divided into two categories: labor regulations and employment programs¹⁶. Labor regulations are meant to protect workers against risks arising from imperfections in the labor market while employment programs are meant to address immediate labor demand and supply problems also arising from imperfections in the labor market (Figure 50). This section focuses on the second category of labor market policies and programs and assesses the coverage and performance of various employment programs in Mindanao.

Figure 50. Hierarchy of Selected Labor Market Policies and Programs



¹⁶ Olfindo, R. 2016. *Labor Regulations and Employment Programs in Mindanao*. World Bank Report.



In Mindanao, training programs are the employment program with the largest number of beneficiaries, while direct job creation programs and employment facilitation services are less developed. Training programs in Mindanao primarily include TVET programs and served about 513,000 enrollees in 2017, equivalent to 5.2 percent of the labor force. In the same year, other programs such as the livelihood assistance, youth bridging, and public infrastructure programs only had relatively small numbers of beneficiaries, equivalent to 1.0 percent, 1.7 percent and 0.2 percent of the labor force, respectively (Table 3).

Table 3. Number of Beneficiaries of Employment Programs in Mindanao, 2017.

Employment Programs	Objective	Beneficiaries	
		No.	% of target group*
Public infrastructure programs	Short-term income support	17,000	0.2
Training programs	Enhancement of technical-vocational skills	513,000	5.2
Livelihood assistance programs	Support for self-employment	99,000	1.0
Youth bridging programs	Short-term income support and on-the-job training	69,000	1.7

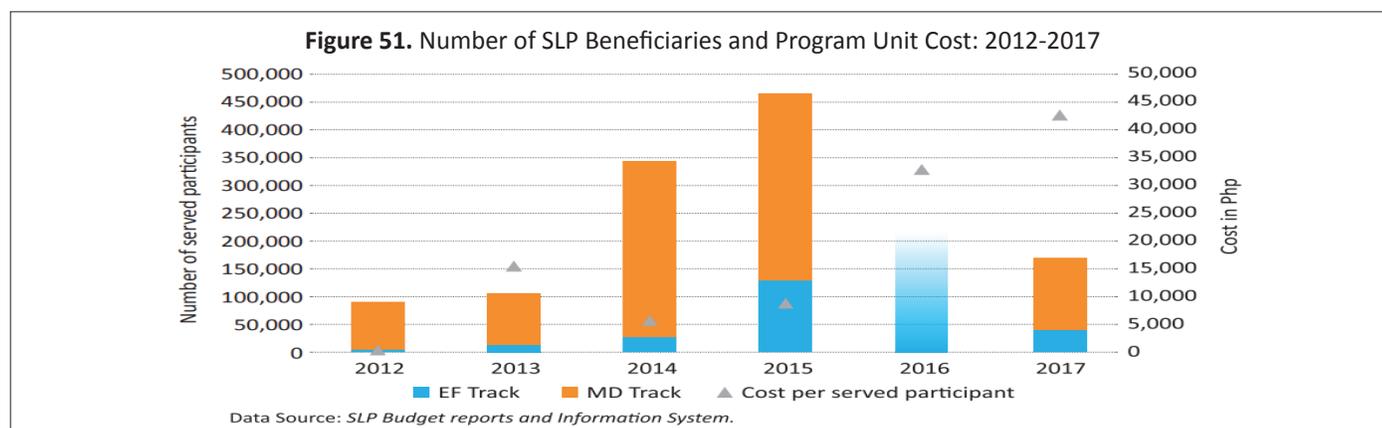
Source: Community-Based Employment Program, DOLE; TESDA; Labor Force Survey 2017; World Bank staff calculations.

*Target groups are the economically active population; for youth bridging programs, the target group is the same except the age is 15-30.

B. Direct Job Creation

In Mindanao, public infrastructure programs attract a relatively large share of poor workers. It is worth highlighting that different types of programs serve different groups of workers. In the Philippines, public infrastructure programs usually pay beneficiaries the statutory minimum. Therefore, participation in the programs might be attractive for all workers earning below the minimum. While not all workers earning below the minimum wage are poor, a larger proportion of these workers are poor in Mindanao than in Luzon¹⁷. However, it is small in scale and targets only 2% of the target group as previously mentioned.

Livelihood programs have increased coverage from 2011 to 2015 but declined substantially after. The Sustainable Livelihood Program (SLP) focused on Pantawid conditional cash transfer (CCT) beneficiaries has grown from serving 46,000 families in 2011 to 340,000 in 2015, and 166,000 families in 2017. The 166,000 families in 2017 are only 4 percent of the roughly 4 million household beneficiaries of the CCT Program. The decreasing number of beneficiaries coupled with increasing obligation has led to a considerable increase in program cost per beneficiary family (Figure 51). The number of participants served through the Employment Facilitation (EF) track in 2017 also declined after the spike from 2014 to 2015 and 2016. A possible explanation for this overall decline could be the saturation of the Listahanan registry (the registry used to target Pantawid), considering beneficiaries cannot repeat participation in SLP. In addition, participant qualities (such as educational qualifications, age, and confidence) and effective support from job intermediation service providers such as PESO) are seen as key factors to EF success. On the other hand, effective utilization of funds by Microenterprise Development (MD) Track participants depends on the level of vulnerability of the households. This poses challenges on the sustainability of the MD track, given that the repayment performance is far from ideal¹⁸.



Source: SLP Budget Reports and Information Systems.

¹⁷ Olfindo, R. 2016. *Labor Regulations and Employment Programs in Mindanao*. World Bank Report.

¹⁸ Acosta, Pablo Ariel; Avalos, Jorge. 2018. *The Philippines Sustainable Livelihood Program: Providing and Expanding Access to Employment and Livelihood Opportunities*. Social Protection Policy Note; May 2018, No. 13. Washington, DC: World Bank Group.

Youth bridging programs generally target relatively well-educated young workers. One selection criteria for participation in youth bridging programs, such as the Special Program for the Employment of Students (SPES) and the Government Internship Program (GIP), is the completion of secondary education. Given these selection criteria, it should not be surprising that out of the total youth in Mindanao 51 percent are ineligible to benefit from SPES and 84 percent are ineligible to participate in GIP (Table 4). In addition to these formal criteria, most employers who participate in GIP have a strong preference for students who have already completed tertiary education. As in Mindanao, poverty incidence is highest among youth who did not complete secondary and tertiary education. Thus, this calls for more youth bridging programs in Mindanao that target less-educated youth. In ARMM, 1,411 summer jobs were made available to students and out-of-school youth in 2018 as part of the SPES program¹⁹. However, this only covers a small percentage of OSYs which are estimated to be around 270,000 in the region. A recent impact evaluation study puts forward adjustment of SPES targeting to those who benefit from it the most. The study finds that SPES increases enrollment for males, who are at a higher risk of dropping out of school, and low-income students, whose main concern is financial constraints²⁰.

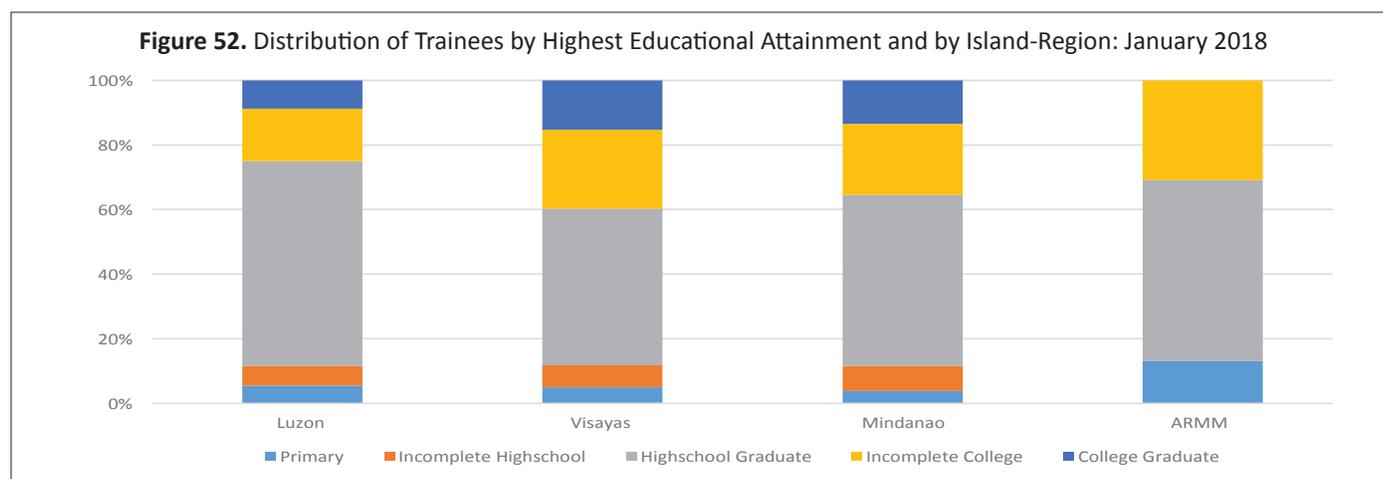
Table 4. Percentage of Youth Who Are Not Eligible for Youth Bridging Program

Youth Group	Luzon	Visayas	Mindanao
Special Program for the Employment of Students			
Youth (15-25) without secondary education	36%	46%	51%
Those who belong to poor households	19%	37%	46%
Government Internship Program			
Youth (18-35) without tertiary education	76%	80%	84%
Those who belong to poor households	12%	27%	35%

Source: Family Income and Expenditure Survey-Labor Force Survey 2015; DOLE; World Bank Staff Calculations.

C. Training Programs

Those whose levels of education are below high school completion rarely benefit from skills training. About 88 percent of formal TVET trainees in Mindanao have completed secondary education or higher while only 12 percent have not (Figure 52). In ARMM, the share is roughly the same at 87 percent. This is mainly because TVET in the Philippines is mainly regarded as a complement to basic education; thus, provided after trainees have completed secondary education. Oftentimes, to be eligible for participation in training programs prospective trainees are required to first complete secondary education first, through either formal or informal channels (that is the ALS). In contrast, there are only very few programs that cater to trainees with less than secondary education; an example is TESDA's Special Training for Employment Program (STEP). STEP is a community-based specialty training program catering to OSYs as it is open to those at least 15 years old, regardless of whether they completed high school or not. However, this program is not regular like other TVET programs and the training courses that lead to certificates of competency tend to be honored by few employers.



Source: Labor Force Survey, Philippine Statistics Authority.

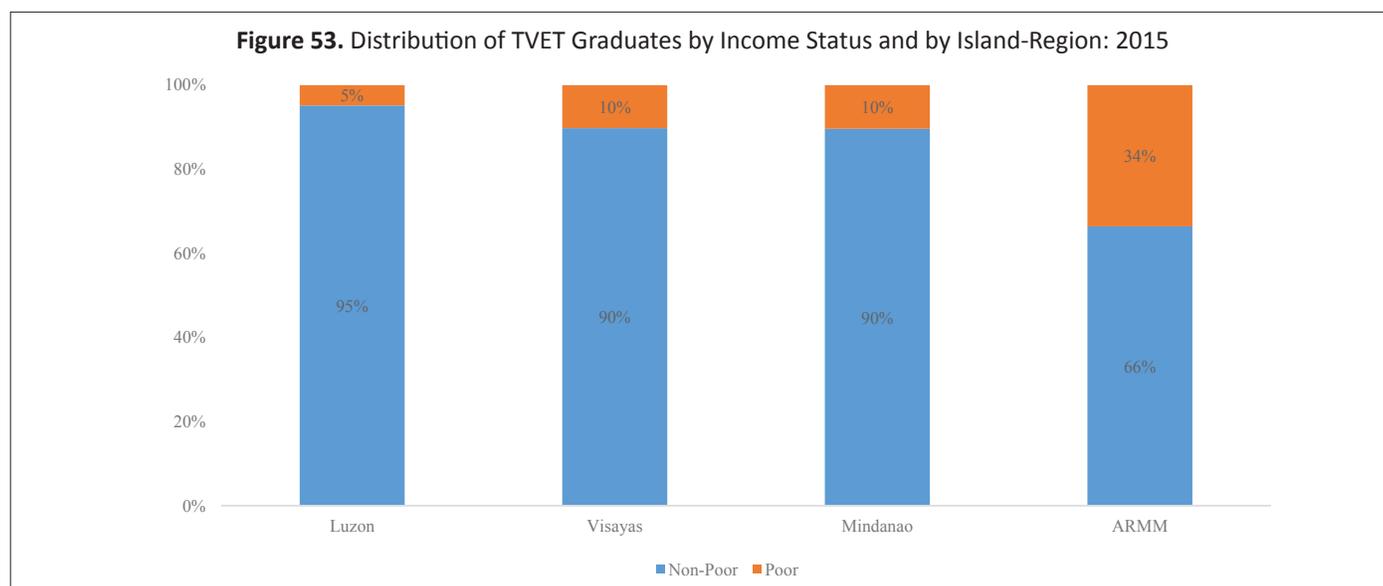
Note: Only January 2018 round is used because succeeding rounds adopt exclusively the K to 12 levels, leaving out the HS graduate category.

¹⁹ <https://news.mb.com.ph/2018/03/18/dole-armm-opens-1411-summer-jobs-for-students-osys/>

²⁰ Beam, Emily et al. 2015. Evaluation of the DOLE Special Program for the Employment of Students (SPES). AEA RCT Registry. November 16. <https://www.socialscicenter.org/trials/949/history/28932>.



Only a small percentage of trainees in Mindanao are from poor households but this share is even smaller in Luzon. About 10 percent of the graduates from training programs in Mindanao are from households whose per capita income is below the poverty line. For ARMM, 34 percent of the trainees are poor. At five percent, graduates from poor households represented an even smaller share of total graduates in Luzon (Figure 53). This might be because poor workers in Mindanao have relatively better access to training courses than in Luzon. This could also simply be a reflection of the generally higher poverty rates in Mindanao, particularly in ARMM. In any case, the poor generally struggle to access training programs in the Philippines.



Source: Family Income and Expenditure Survey- Labor Force Survey 2015, Philippine Statistics Authority.

Training raises wages of low-educated workers. Training does not necessarily improve the employment rates among workers with less than secondary education as these are very high for both workers with and without training. In Mindanao, 97 percent of workers who have not completed secondary education but undergone training are employed. This is almost the same employment rate as low-educated workers without training. However, low-educated workers that have completed training programs often get access to better and higher-paying jobs. In Mindanao, for low-educated workers that have received training, the average basic daily wage amounts to P334 which is much higher than the average basic daily wage of P235 for low-educated workers without training. These results imply that most low-educated workers will be able to find some kind of job even without training, but low-educated workers who have undergone training can find jobs that pay considerably higher wages (Table 5).

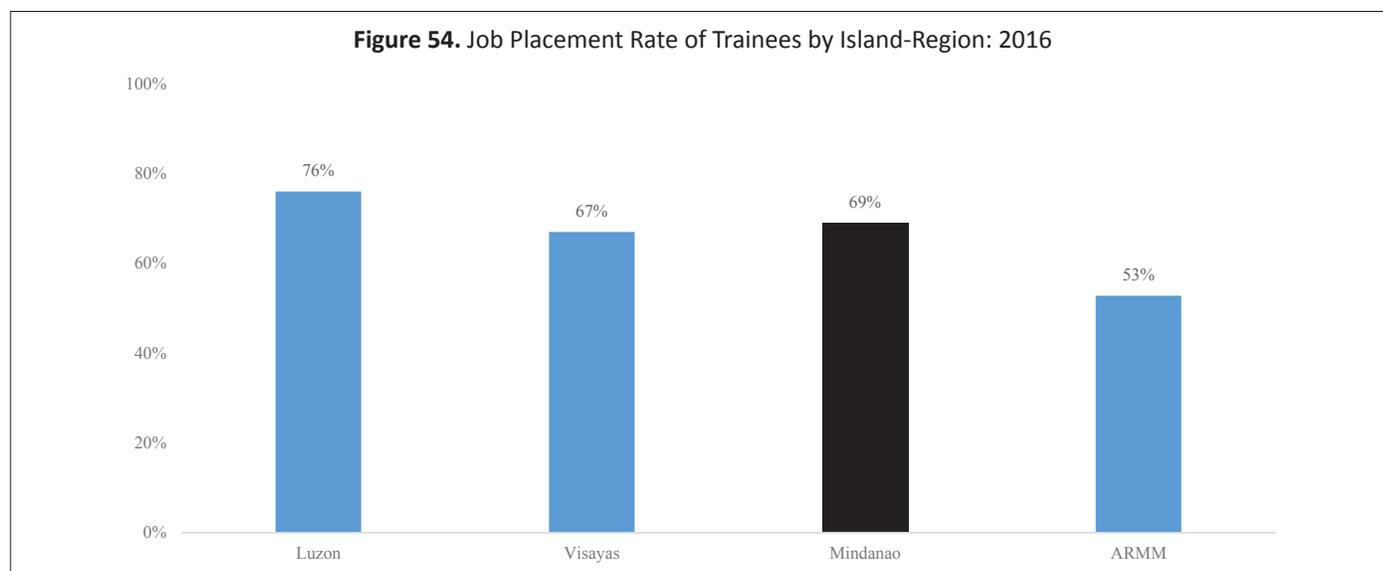
Table 5. Average Basic Daily Wages of Low-educated Workers (Php): January 2018

Training access	Luzon	Visayas	Mindanao	ARMM
Employment rates (%)				
With training	94.6	92.1	97.4	100
Without training	95.6	96.4	97.5	97.3
Average daily basic pay per day				
With training	346	296	334	-
Without training	293	245	235	207
Training wage premium	16	25	25	-

Source: Source: Labor Force Survey, Philippine Statistics Authority.

Note: Only January 2018 round is used because succeeding rounds adopt exclusively the K to 12 levels, leaving out the HS graduate category. No pay data is provided for low-educated trainees in ARMM.

Trainees in Mindanao are less likely to find jobs immediately after training than those in Luzon. In 2016, 69 percent of TVET graduates in Mindanao found jobs within six months of their graduation. This rate was slightly higher than the rate of 67 percent in Visayas but lower than Luzon’s rate of 76 percent and the national average of 72 percent (Figure 54). Within Mindanao, job placement rates are particularly high in Davao and CARAGA where rates exceed the national average. These rates are the lowest in ARMM at 53 percent.



Source: TESDA Impact Evaluation Study 2016 (latest)

Note: Number of TVET trainees who secured employment 6 months after graduation.

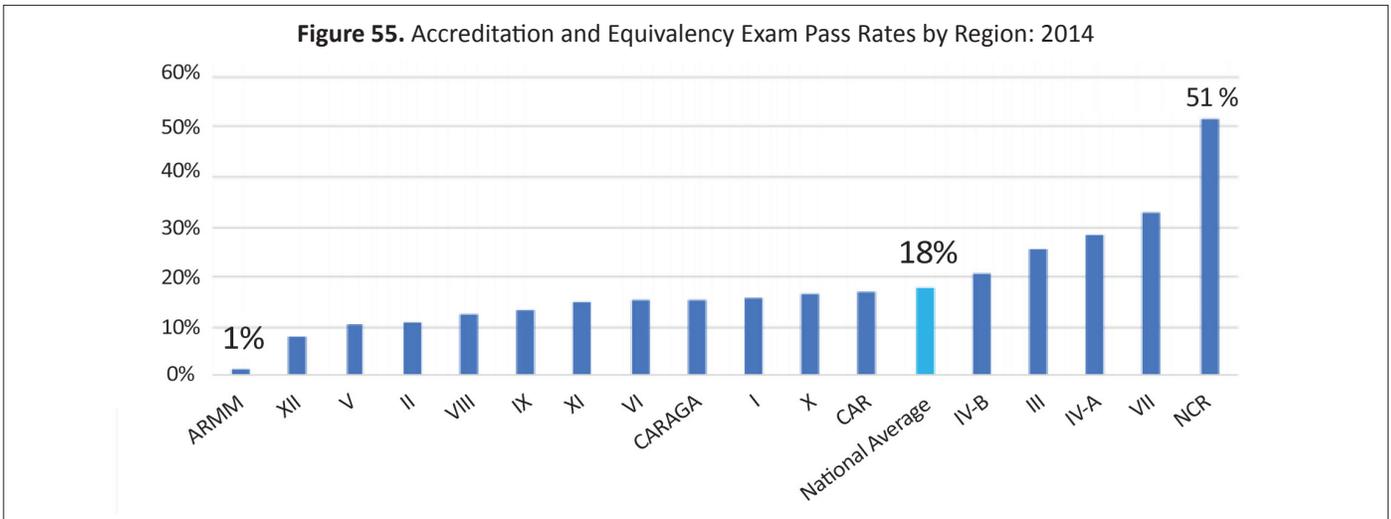
The dual education track is shown to have a significantly higher impact on earnings, but comprises only a small percentage of graduates and enrollees. The Dual Training System (DTS) is a form of enterprise-based TVET that combines classroom instruction and practical skill training implemented by TVET institutions and companies. Evidence²¹ suggests that the DTS has a significantly higher rate of return on labor market earnings compared with regular, classroom-only vocational training programs, particularly among high school graduates who struggled academically during basic education. The magnitude of the impact of DTS is also likely to increase in correlation with the intensity of the on-the-job component. However, enterprise-based programs account for only a very small proportion for both enrollment and graduation. In 2014, only three percent of enrollees and graduates come from the enterprise-based delivery mode.

In terms of high-school completion, Mindanao has the lowest passing rates in the Accreditation and Equivalency (A&E) exam of the ALS which is correlated with increased future earnings and employment probability of dropouts. The Department of Education leads the delivery of a “second-chance” program to build human capital of out-of-school youth and adults through the implementation of the ALS. ALS is comprised of the Basic Literacy Program (BLP) and A&E program offered for both elementary and secondary levels. Learners can earn an official certificate which is equivalent to junior high school diploma if they pass the A&E exam. This certificate can be used in application for the formal sector employment which requires junior high school graduation or scholarships or grants to pursue post-secondary education or training or tertiary education. Evidence²² suggests that ALS enrollees who pass the A&E exam have positive long-term educational outcomes and employment prospects relative to just being enrolled in the program per se. However, given the low pass rates, only a small portion is seeing benefits especially in Mindanao. In 2014, all regions in Mindanao observe below-average pass rates, with the lowest seen in ARMM at one percent²³ (Figure 55).

²¹ Igarashi, Takiko; Acosta, Pablo Ariel. 2018. *Who Benefits from Dual Training Systems? Evidence from the Philippines*. Policy Research Working Paper; No. WPS 8429. Washington, DC: World Bank Group.

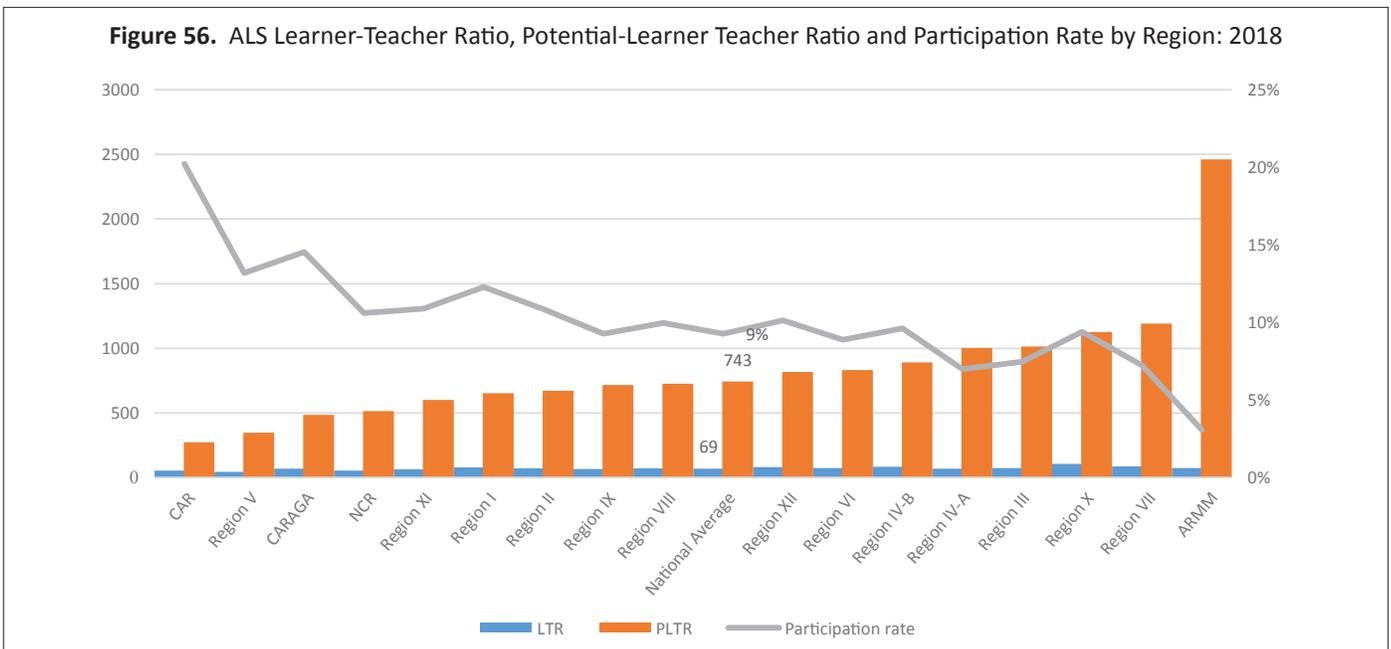
²² Yamauchi et. al (2016); Igarashi (2017)

²³ Igarashi, Takiko. 2018. *A Second Chance to Develop the Human Capital of Out-of-School Youth and Adult: The Philippines Alternative Learning System* (English). Washington, DC: World Bank Group.



Source: Administrative Data 2014; Department of Education.

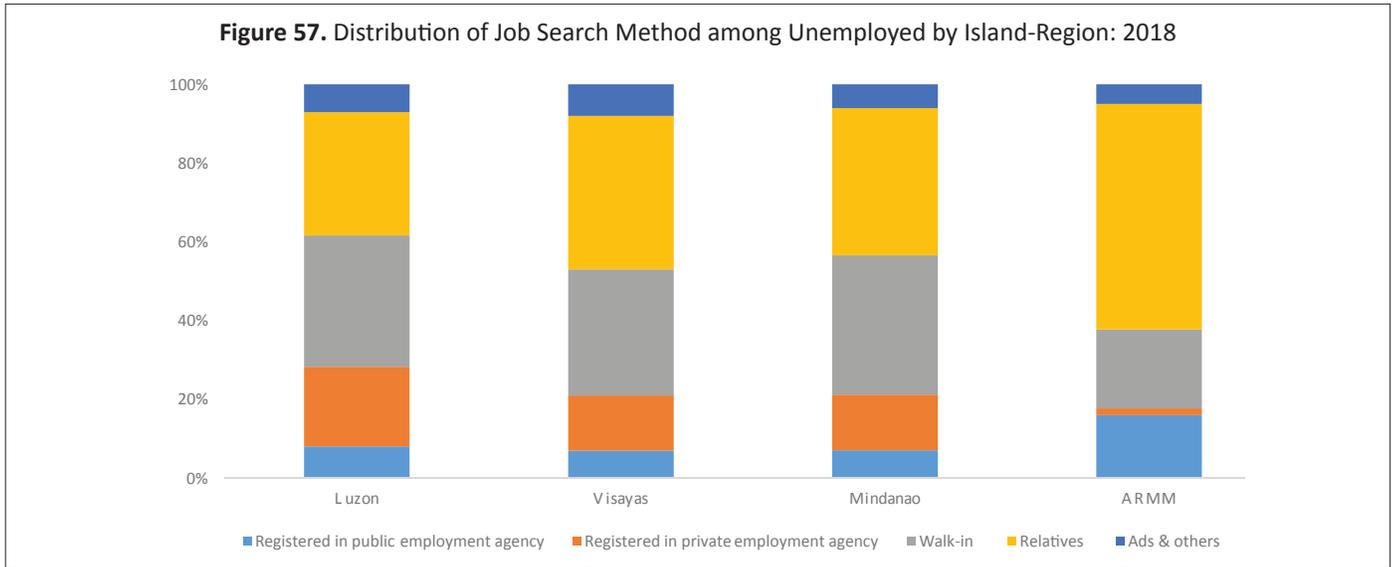
Wide disparities exist in ALS participation rates, suggesting inconsistent service quality. Learner-teacher ratio (LTR) concentrates around 65-75 across regions while Potential Learner-teacher ratio (PLTR) varies significantly. ALS facilitators need to have minimum of 75 learners annually. Within Mindanao, Caraga, Region XI and Region IX the PLTRs are below the national ratio with an average of 601 students per teacher. This contrasts with Region XII, Region X and ARMM, which recorded above-average ratios and have a combined average of 1,468. As in the past, ARMM posted a significantly higher PLTR than other regions at 2,461 students per teacher (Figure 56). All these imply that the distribution of teachers is not proportional to the size of ALS prospective learners. High PLTRs mean that the participation rate or catchment rate remains low.



Source: Labor Force Survey, Philippine Statistics Authority; LIS/EBIES 2018, Department of Education; WB Staff Calculations
 Note: Participation rate is actual learners (under age 30) divided by estimated ALS potential learner size.

D. Employment Facilitation Services

In Mindanao, only a small share of the unemployed access public employment service offices. At 37 percent and 34 percent of all job search methods, respectively, the two most common job search methods among the unemployed in Mindanao are seeking referrals from relatives and friends or approaching employers directly ('walk-ins'). In contrast, only nine percent of the unemployed in Mindanao rely on PESOs. Patterns are qualitatively similar in Luzon and Visayas (Figure 57).



Source: Labor Force Survey, Philippine Statistics Authority

There are only relatively few PESOs and even fewer institutionalized PESOs in Mindanao. There are only about 300 PESOs in Mindanao, compared to about 800 in Luzon and about 400 in Visayas. In Mindanao, 32 percent of PESOs are institutionalized (a low rate that is nevertheless similar to the rates in Luzon and Visayas). An institutionalized PESO is a PESO that is able to perform its core functions as it has its own budget for personnel, office space, and employment facilitation services. Among all the regions in the Philippines, ARMM is the only one without a single institutionalized PESO.

While PESOs are not widely used and cannot be found everywhere, their job placement rates are in fact high. About 83 percent of jobseekers who register with PESOs in Mindanao are successfully placed into jobs. PESOs in Luzon achieve almost the same job placement rate (84 percent) and the rate in Visayas is only slightly lower (78 percent). However, PESOs apparently struggle to solicit vacancies in sufficient numbers. In Mindanao, PESOs have managed to solicit 95,000 vacancies while in parallel 633,000 job seekers registered with PESOs. This implies that there is great need for PESOs to recognize employers as part of their core client base and to develop in-depth industry partnerships (Table 6).

**Table 6.** PESO Statistics by Island-Region: 2017

Items	Luzon	Visayas	Mindanao
No. of PESOs	809	424	359
Operational (%)	81	64	83
Institutional (%)	31	30	32
No. of job vacancies solicited ('000)	348	76	95
% of est. no of unemployed* (%)	22	18	21
No. of jobseekers who registered with PESOs ('000)	1,324	553	633
% of est. no. of unemployed (%)	26	14	15
No. of jobseekers who registered and referred for placement ('000)	1,260	495	575
Of which: placed for jobs (%)	84	78	83

Source: Labor Force Survey, Philippine Statistics Authority; Department of Labor and Employment; World Bank Staff Calculations.

*Estimated from Labor Force Survey. Latest full-year PESO data available is 2017.

V. Summary and Policy Recommendations

Attaining inclusive growth and poverty reduction require the creation of quality jobs. This study aims to analyze the latest educational and labor market outcomes in Mindanao and assesses the performance of key employment government programs implemented in the island-region. It finds that a lack of quality jobs, rather than unemployment, is the main labor market challenge in Mindanao. Though it has declined over time, the underemployment rate has remained high. This is consistent with the pervasive informality manifested in the high incidence of low-paid and vulnerable jobs. Like underemployment, the share of vulnerable work comprising of the self-employed and unpaid family workers has declined by 10 percentage points over a four-year period but has remained the highest in Mindanao across island-regions. In 2018, this vulnerable work comprised 44 percent of Mindanawon workers who are not covered by labor laws and standards. 3 out of 10 Mindanawon workers are engaged in elementary occupations which are associated with unskilled and low-paid jobs. Despite the slow shift to industry and services, the Agriculture sector, where workers are considered vulnerable given the susceptibility to shocks, continued to employ a large portion or 40 percent of the workers. It is unsurprising that in-work poverty has remained the largest as well in Mindanao across island-regions, albeit declining by 4 percentage points over a three-year period. Despite having jobs, 32 percent of workers remained poor in 2015. Two-fifths of the underemployed are working poor, potentially indicating the inadequate pay as a major source of dissatisfaction. These working poor are likely to be low-educated, a wage-worker and self-employed in Mindanao. Apart from the high underemployment and large informality, other factors contribute to the rising demand for good jobs. First, more students favor continuing school through the SHS of the K to 12 Program, which may explain the temporary drop in labor force participation rate in recent years. Second, there is a gradual shift in employment structure from agriculture to industry and services, especially among younger age groups. As graduates and younger cohorts become better educated and inclined toward non-agriculture sectors, the greater is the demand for better jobs that meet their aspirations.

Particularly for ARMM, this challenge is complemented by the lack of opportunities. Both underemployment rate and unemployment rate of ARMM are the lowest in Mindanao and the second-lowest in the country, though the former remained higher than the latter. This may be more reflective of a labor market with a lack of opportunities, rather than a vibrant one. Whereas the national average is at 61 percent, the labor force participation rate in ARMM is nearly a half only at 47 percent in 2018; the other half of the working age population in the region are economically inactive. The long history of civil conflict in ARMM may have hampered the confidence of businesses and individuals to operate and work, respectively. When they choose to work, it is more than likely to be vulnerable. In 2018, nearly three-fifths or 73 percent of the workers are in vulnerable work in Mindanao—62 percent are self-employed and 11 percent are unpaid family workers. Self-employment is, again, an indication of a lack of opportunity, rather than entrepreneurial drive. In addition, 61 percent of the employed rely on agriculture, which is significantly higher than the 20 percent average share in Mindanao. Hence, the effect on vulnerability as a result of the sector's low-productivity and weakness to shocks are tripled in ARMM.

The youth deserve particular attention in Mindanao, given their three-fold challenge of out-of-school youth, underemployment and unemployment. In 2018, one out of five young adults aged 16-24 years old in Mindanao were neither attending school nor employed. Among all regions, ARMM observed the highest NEE Rate at 30 percent or one out of three young adults. Prolonged periods of idleness have serious implications to confidence and employment prospects in the medium and long run. The most common reasons for not attending school or being employed are marriage or family matters, a lack of personal interest, and the high cost of education or other financial concerns. Secondly, while prevalent among most age groups, the youth underemployment rate comprising of 18 percent or 5 million youth in Mindanao is the highest across island-regions. Thirdly, unemployment is largely a problem of the youth and young adults. In Mindanao, the youth unemployment rate of 11 percent is more than twice the island's unemployment rate of 4 percent.

The labor force participation rate of women is low in Mindanao, particularly in ARMM. Labor force participation rates among women in their twenties are much lower in Mindanao than in Luzon and Visayas, where they stand at 60 percent and 57 percent, respectively. Such rate is significantly lower in ARMM where 23 percent of women in their twenties participate in the labor force. Women in Mindanao and ARMM may face limited economic opportunities and are likelier to work in the home especially during armed conflicts.

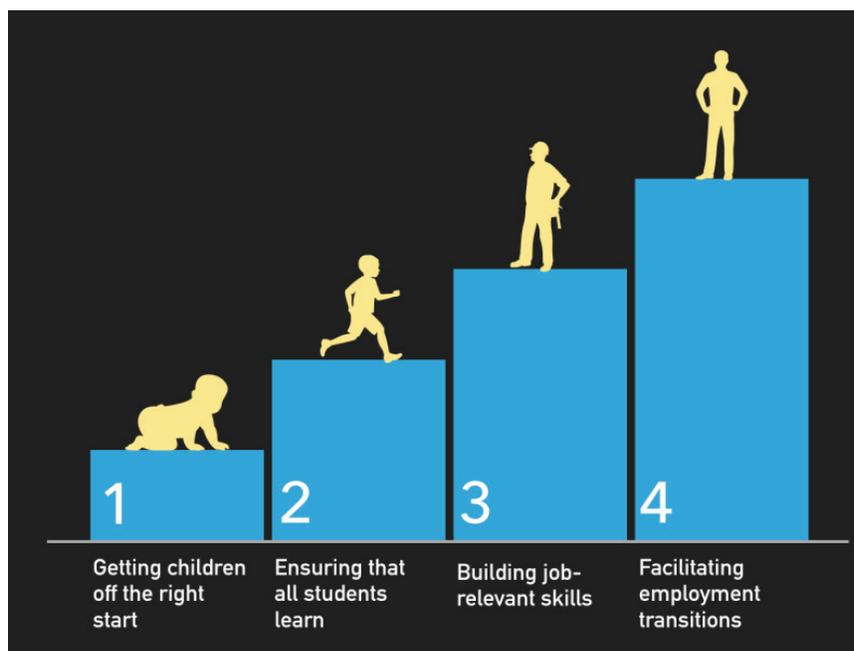
At the root of the quality jobs challenge on the supply side is a skills gap. Though there are notable improvements, the quality of teaching and learning as well as access to education still face constraints. Despite the minimal differences in preschool attendance rates across regions, Mindanao observed the highest preschool participation rate for older-years indicating a likely delay in child development. For basic education, key school performance indicators such as net enrollment and completion rates have improved over a 7-year period but has remained to be a greater challenge for secondary level than elementary level in Mindanao. Though improving as well, dropout rates remained high for secondary level and among boys. Across island-groups learning outcomes using the NAT have shown only modest gains over a seven-year period and are reflective of poor teacher preparation or competency mainly for science and mathematics as well as the lower ability in instruction and socio-emotional skills. These gaps in education reflect in labor market outcomes as well. The forty percent share of secondary-educated workers and twenty percent share of college-educated workers have remained unchanged over the last four years. Workforce of most regions are dominated by secondary-educated workers, except for Region IX and ARMM where there are more workers with elementary education. While overall unemployment rates are not alarming, elevated rates of youth unemployment and of OSYs and young adults are cause for serious concern. The high youth unemployment and youth underemployment rates may indicate a potential gap between employers' demands and graduates' skills.



In addition, this study finds that workers with a higher education level earn considerably higher wages and that education and labor market programs have the potential to significantly improve employability of disadvantaged groups. The report has plentiful of evidence showing how higher educational levels are associated with higher returns. The wage gap between workers with tertiary education and those with primary education is highest in Mindanao, amounting to 203 percent in 2018. Such large premium could partly explain the nearly zero share of working poor among tertiary graduates and the 64 percent share of working poor among those who completed primary education or below in the island. Put in another way, the STEP survey indicates that, controlling for other factors, an additional year of education increased earnings by 5 percent in Mindanao in comparison to non-Mindanao areas where it only increases 3 percent. However, compared to the Philippines, socio-emotional skills appear to be less relevant to earnings in Mindanao, partly attributed to the agricultural oriented economy. Labor market programs are shown to improve employability of disadvantaged groups but are small in scale and weakly targeted. Public infrastructure programs attract a large share of poor workers in Mindanao but only benefit 2 percent of the target group. The SLP focused on CCT beneficiaries who comprise the poorest households in the country have declined its coverage to 166,000 families in 2017. Youth bridging programs such as SPES and GIP tend to target well-educated workers. TVET is shown to raise wages of low-educated workers, but those whose levels are below high school completion rarely benefit from skills training and comprise only 12 percent of the total trainees in Mindanao. The ALS, which serves as a second-chance program to enhance skills of OSYs, only benefits a small portion of participants in Mindanao, as all regions in Mindanao observe below-average pass rates, with the lowest seen in ARMM. Meanwhile, while their job placement rates are high, only a small share of the unemployed access PESOs, relying more on referrals and walk-in methods. Much more, ARMM does not have a single institutionalized PESO.

This study recommends a systematic and sequential approach to skills development that begins in early childhood and ends in lifelong learning and career mobility. This paper slightly modifies the World Bank’s Skills Toward Employment and Productivity (STEP) framework that shows a sequenced combination of educational, training, and labor market interventions to achieve productivity and economic growth (Figure 58). With a strong focus on vulnerable groups, the proposed approach includes the following elements: (i) getting children off to the right start, (ii) ensuring that all students learn, (iii) building job-relevant skills, and (iv) facilitating employment transitions. This study also recommends that for all relevant policies and programs, rigorous monitoring and evaluation needs to be regularly conducted. This will improve design and delivery, strengthen impact on the ground, and make it possible to prioritize funding for effective programs.

Figure 58. Proposed Framework for Skills Development in Mindanao



Getting children off to the right start will entail increasing awareness of its importance as well as access to early childhood care. Foundational skills acquired early in childhood – from before birth until the transition to primary school – make possible a lifetime of learning that puts them on the path to greater prosperity. Integrating actions of different agencies in early childhood education and development (ECED) could help facilitate a common approach that can maximize gains as interventions can start earlier than or simultaneously with preschool education. For example, standards for curricular and service providers can be set to effectively foster foundational development, especially the socio-emotional skills, which has become an increasingly important measure of workforce skills²⁴. Complimenting these efforts would be a ECED delivery focused on ARMM which has observed low preschool attendance rates.

Ensuring that all students learn will require continuously raising the quality of and access to basic education, especially to disadvantaged groups. Improving the quality of teaching and learning will entail reviewing and refining teacher professional programs, both pre-service and in-services trainings. Better access to education will stem from building conducive learning infrastructures with manageable classroom sizes, in improving teacher learning materials to make staying in school attractive as well as in driving dropout prevention and response activities. Efforts are particularly needed to understand underperformance among boys and experiment with learnings methods that may appeal more to them. To help those who have dropped out complete basic education, raising the quality of the ALS program as well as the reach and support to OSY to not just enter the program but to pass it will be needed. For ARMM, where the rate of OSY are the highest in the country, the approach needs to be complemented by the regional Department of Education by leveling up the program delivery and boosting the capacity building of ALS facilitators²⁵. In addition, as take-up of tertiary education following SHS is expected to rise, ensuring the quality of HEIs would entail strengthening and reviewing regularly the implementation of the free provision of college tuition in SUCs and LUCs. A PIDS study suggested that giving free tuition to enrolled students in SUCs will likely benefit mostly richer students²⁶. This suggests the need to complement costs of education, such as transportation, living allowance and project expenses, that may hinder college take-up and would need a shift of intervention towards scholarships and grants for poor but deserving students. Extending the reach and ensuring appropriate implementation of the Pantawid CCT program, especially in ARMM, is a key additional intervention.”

Developing job-relevant skills through on-the-job training (OJT), apprenticeships, and other vocational programs will entail improving its design, coverage and targeting. Efforts are needed to improve DOLE’s work programs of SPES and GIP, so that beneficiaries can be given meaningful jobs that could enhance their skills and employability. For SPES, refining the screening criteria will help SPES reach those who benefit it the most, such as males who are at a risk of dropping out and low-income students. For GIP, given the strong preference for college graduates, appropriate support can be given for employers to accommodate and design programs fit for other eligible graduates such as those from high school and technical-vocational, who may benefit from it more. To benefit more the poor, provision of financial support to TVET beneficiaries, encouraging transparency in beneficiary selection, especially for free TVET programs, as well as expansion of TESDA initiatives for agricultural training and other activities with high-potential in ARMM are needed, through its regional office. Further, given the promise of the Special Training for Employment Program and DTS in reaching the poor and improving employment prospects respectively, initiatives can focus on scaling up and enhancing the incentives for the delivery and take-up.”

Facilitating employment transitions will require improving the monitoring of SLP as well as expanding PESO institutionalization. Employment facilitation services seek to provide work for or increase the employability of people with certain disadvantages in the labor market through interventions like direct employment, livelihood or self-employment, and employment services. Priority should be given to streamlining the various livelihood programs of the government, including the SLP from the CCT, for a united approach as well as incorporating standards for beneficiary targeting to prevent patronage. Given the success in job placements of PESOs, institutionalized PESOs should be expanded in Mindanao, particularly in ARMM, to service more beneficiaries who need it the most. Strengthening its client-driven approach based on international best practices would also help improve its delivery as well as attract more jobseekers to avail of its services. This includes enhancing its collaboration with other government agencies who may have related programs on training and employment and private partners who will help in designing proper incentives to increase take-up of employers.

²⁴ Acosta, Pablo Ariel; Igarashi, Takiko; Olfindo, Rosechin; Rutkowski, Jan Jerzy. 2017. *Developing Socioemotional Skills for the Philippines’ Labor Market*. Directions in Development, Human Development. Washington, DC: World Bank Group.

²⁵ World Bank. 2019. *Unlocking the Potential of the Bangsamoro People through the Alternative Learning System*. Forthcoming.

²⁶ Orbeta, Aniceto and Paqueo, Vicente. 2017. *Who benefits and loses from an untargeted tuition subsidy for students in SUCs?* Policy Note 2017-03. Philippine Institute for Development Studies.



Ultimately, quality job creation depends not only on the human capital of the workforce but also on the availability of productive opportunities which is most crucial for ARMM. Therefore, future research could be conducted on the demand-side labor market constraints to complement this paper's largely supply-side focus. In addition, further analyses could explore the adaptation of elements in the STEP framework to the Mindanao context, on promoting entrepreneurship and innovation, and supporting labor mobility (domestic and abroad).

