

LABSTAT Updates

**Quezon City, Philippines** 

Vol. 22 No. 19 October 2018

# 2015/2016 INDUSTRY PROFILE: **MINING AND QUARRYING**

(Fifth of a series)



This industry profile covers the following topics on labor and employment:

#### EMPLOYMENT (June 30, 2016)

- 1. Number of establishments
- 2. Employment
- 3. Category of workers
- 4. Specific groups of workers
  - Young workers
  - Female workers
  - Persons with disabilities (PWDs)
  - Workers paid the exact minimum wage
  - Time-rated workers
  - Output-rated workers
  - Graveyard/Shift workers
- 5. Subcontracting
- 6. Job vacancies (Jan. 2015-June 2016)
  - Easy-to-fill vacancies
  - Hard-to-fill vacancies
  - Reasons why vacancies are hard-to-fill

## UNIONISM AND COLLECTIVE BARGAINING (June 30, 2016)

- 7. Unionism
- 8. Collective bargaining

## OCCUPATIONAL SAFETY AND HEALTH PRACTICES (2015)

- Preventive and Control Measures Against Work Safety and Health Hazards
- 10. Occupational Safety and Health Policies/Programs
- 11. Work Safety and Health-Related Trainings/Seminars
- 12. Designated Health and Safety Personnel

## OCCUPATIONAL INJURIES AND DISEASES (2015)

- 13. Measures of Safety Performance
- 14. Cases of Occupational Injuries with Workdays Lost
- 15. Occupational Diseases

#### **Background**

This issue of LABSTAT Updates is the fifth in a series of industry profiles that features key industries with strong employment generation potentials. Statistics in this report were culled from the results of the 2015/2016 *Integrated Survey on Labor and Employment (ISLE)* – a nationwide sample survey covering 12,926 establishments with 20 or more workers.

#### **EMPLOYMENT**

#### **Number of Establishments**

 As of June 2016, mining and quarrying industry covered around 156 establishments with 20 or more workers.

#### **Employment**

During the period, the estimated number of workers employed in the establishments engaged in mining and quarrying was 30,727. Majority of them (99.8 percent or 30,662) were employees who received their regular pay. The remaining 0.2 percent or 65 were working owners or unpaid workers.

#### Category of Workers

- The biggest share of 25,417 or 82.9 percent of the total workforce were categorized as rank and file workers. The rest were classified as supervisors/foremen (12.2% or 3,737) and managers/executives (4.9% or 1,508).
- In addition, about eight out of every 11 rank and file employees (72.7 or 18,467) were regular workers while non-regular workers who worked on temporary status were placed at 27.3% or 6,950.
- Across categories, contractual/project-based workers comprised for more than half (52.0% or 3,613) of the total non-regular workers. Seasonal workers (26.2% or 1,822); probationary workers (12.6% or 874); casual workers (5.9% or 407); and apprentices/learners (3.4% or 233) made up the shares of other non-regular workers.





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### Specific Group of Workers

- Young workers (15-30 years old) under mining and quarrying estimated industry was 30.2 percent or 9,282. This was relatively higher by 70.0 percent (6,508) compared to the 2,774 employed in 2014. **Female** workers placed at 12.0 percent or 3,684 during the period.
- One out of six workers (16.1% or 4,955) received minimum wage.
   Twenty persons with disabilities (PWDs) accounted for a less than one percent of the total workforce.
- The bulk of the total workforce were time-rated workers at 97.5 percent or 29,970. Of which, 99.8 percent or 29,921 were full-time workers and 0.2 percent or 49 were part-time workers.
- Moreover, majority of the fulltime workers were paid on daily basis (59.4% or 17,765); and monthly basis (40.6% or 12,155).
- The shares of output-rated workers and commission workers to the total employment were posted 17.0 percent and at 0.01 percent, respectively. Employed persons who work at shift niaht was placed at 10.1 percent or 3,110.

#### Subcontracting

 More than 11,500 agency-hired workers were employed by the establishments engaged in mining and quarrying industry as of June 2016. ■ Five out of eight (62.8% or 98) of the total establishments employed workers doing their jobs within the establishment's premises. The number of workers hired to do their job or services outside the premises of the establishments was estimated at 11.5 percent or 18 workers.

#### Job Vacancies

- Total job vacancies for the period from January 2015 to June 2016 was estimated at 3,146. Seven out of nine (77.2% or 2,428) vacancies were easy-to-fill occupations while the rest were hard-to-fill occupations (22.9% or 719).
- Meanwhile, two out of every nine hard-to-fill occupations (22.3% or 160) in mining and quarrying industry were crop farm laborers. other top hard-to-fill occupations include well drillers and borers and related workers (85); agricultural and industrial machinery mechanics repairers (63); mining engineers, metallurgists and related professionals (57); and mining and metallurgical technicians (49).
- Mining and quarrying industry found difficulties of recruitment due to the following main No/few reasons: applicants applied for the job; applicants lack years of experience; needed applicants lack competency/skill; applicants salary; expect high and applicants lack professional license/TESDA skills certification.

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# UNIONISM AND COLLECTIVE BARGAINING: 2016

- 23 156 In 2016. out of establishments in mining and quarrying industry had unions. These unions covered 7,349 unionized workers which is equivalent to union density rate of 24.0 percent of the total paid employees reported at 30,662.
- Majority of the unionized workers were male at 91.5 percent (6,726) with female composing the remaining 8.5 percent (623).
- In terms of collective bargaining, one out of every four employees in mining and quarrying industry was covered by CBAs which is equivalent to a collective bargaining rate of 25.3 percent (7,766)VS. 30,662).
- Most of the workers covered by CBAs were male at 90.5 percent (7,028) while female comprised 9.5 percent (738) of the total.

# OCCUPATIONAL SAFETY AND HEALTH PRACTICES: 2015

### Preventive and Control Measures/ Activities against Work Safety and Health Hazards

- In 2015, all the 141 establishments engaged in mining provided quarrying had various preventive and control measures against work safety hazards health at the workplace.
- The most common measure/activity adopted by the establishments was regular inspection and maintenance of equipment (135 or 95.7%).

 Other measures adopted by most establishments include proper maintenance of mechanical and electrical facilities (132 or 93.6%) and appointing of safety/health officers and/or first-aiders (127 or 90.1%).

# Occupational Safety and Health Policies/Programs

- Majority (97.9%) or 138 establishments out of the total 141 mining and quarrying establishments had implemented different occupational safety and health policies and programs in 2015.
- Most of these establishments adopted fire prevention control programs (124 87.9%); prevention accident programs (114)80.9%); or and emergency response preparedness programs (103 or 73.0%).

# Work Safety and Health-Related Trainings/Seminars

- Different trainings/seminars on work safety and health hazards were conducted by establishments in mining and quarrying to their employees. Among these trainings/seminars, three out of four establishments conducted fire safety training (75.0%).
- Likewise, most establishments conducted the following work health-related safety and trainings/seminars: 40-hour basic occupational safety and (52.3%);health training emergency preparedness (49.6%);drug-free workplace (43.0%);and safety audit (37.3%).

### Designated Health and Safety Personnel

- To ensure health and safety in the workplace, 134 out of 141 (95.0%) mining and quarrying establishments had designated health and safety personnel at iobsites.
- Specifically, eight out of every ten establishments hired safety officers (110 or 78.0%) as their designated health and safety personnel. Safety officers accredited by the DOLE were reported in other establishments with 52.7 percent (58). Some establishments have trained first-62.4%) aiders (88) or and occupational health nurses 41.1%) (58 or as their designated health and safety personnel.

# OCCUPATIONAL INJURIES AND DISEASES: 2015

### Measures of Safety Performance

- For mining and quarrying industry, a total of 527 cases of occupational injuries were reported in 2015. Of this, only 59 (11.2%)were with cases workdays lost while 468 cases (88.8%) were without workdays lost.
- Of the 59 cases with workdays lost, 52 cases were non-fatal (88.1%) while 7 (11.9%) were fatal. All the 52 non-fatal cases involved temporary incapacity cases only.

- The frequency rate of cases of occupational injuries with workdays lost was posted at 0.57 percent. This means that that there was around 1 case of occupational injury with workdays lost per 1,000,000 employee-hours of exposure in 2015.
- Meanwhile, the incidence rate of cases of occupational injuries with workdays lost was reported at 1.41 indicating that there was about 1 case of occupational injuries with workdays lost for every 1,000 workers during the year.
- On the other hand, severity rate was posted at 5.30 percent which means that there were around 5 workdays lost in cases of occupational injuries resulting to temporary incapacity per 1,000,000 employee-hours of exposure.
- Overall, the average workdays lost was reported at 12.84 percent implying that approximately 13 workdays were lost for every case of occupational injury resulting to temporary incapacity.

# Cases of Occupational Injuries with Workdays Lost

#### Types of Injuries

Almost half or four out of every injuries occupational nine (44.1%) with workdays lost in mining and quarrying in 2015 were caused by superficial injuries and open wounds. This followed by fractures (39.0%) and concussions and internal injuries (10.2%).

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### Parts of Body Injured

Lower extremities were the most injured parts of the body in mining and quarrying reported at 37.3 percent followed by wrists and hands at 25.4 percent. Injuries involving the body's trunk or internal organs were posted at 10.2 percent.

### Causes of Injury

- Two out of every five cases of occupational injuries with workdays lost reported were caused by being struck by falling objects (40.7%).
- Other cases were caused by stepping on, striking against or struck by object, excluding falling objects (32.2%) and fall of persons (16.9%).

### **Agents of Injury**

 The most common agent of occupational injuries in mining and quarrying were materials and objects recorded at 50.8 percent.  Other agents of injuries include buildings, and structures (16.9%); machines and equipment (13.6%) and hand tools (10.2%).

### Cases of Injuries by Occupation

- The occupation with the highest incidence of occupational injuries in mining and quarrying involved elementary occupations at 39.0 percent.
- Other occupational groups likewise affected by occupational injuries include plant and machine operators and assemblers (37.3%); and craft and related trade workers (15.3%).

### Occupational Diseases

- For 2015, a total of 1,735 cases of occupational diseases were recorded in mining and quarrying industry.
- Most workers suffered from back pains (26.4%); other diseases caused by chemicals (21.0%); and occupational dermatitis (15.7%).

### Selected Labor and Employment Indicators on Mining and Quarrying, Philippines 2016

INDICATOR	Number	Percent
1. Number of Establishment (2016)	156	
2. Total Employment (2016)	30,727	
3. Category of Employment	30,121	
Working owners/Unpaid workers	65	0.2
Employees	30,662	99.8
Managers/Executives	1,508	4.9
Supervisors/Foremen	3,737	12.2
Rank and File Workers	25,417	82.9
• Regular	18,467	72.7
Non-Regular	6,950	27.3
- Probationary Workers	874	12.6
- Casual Workers	407	5.9
- Contractual/Project-based Workers	3,613	52.0
- Seasonal Workers	1,822	26.2
- Apprentices/Learners	233	3.4
4. Specific Groups of Workers		
Young workers (15 - 30 years old)	9,282	30.2
Female workers	3,684	12.0
Persons with Disabilities (PWDs)	20	0.1
Workers paid the exact minimum wage	4,955	16.1
Time -rated Workers	29,970	97.5
Full-time Workers	29,921	99.8
- Daily	17,765	59.4
- Monthly	12,155	40.6
Part-time Workers	49	0.2
Commission Workers	162	0.01
Output-rated Workers	534	1.7
Graveyard Shift Workers	3,110	10.1

INDICATOR	Number	Percent	
5. Establishments Engaged in Subcontracting			
Within the premises of the establishment	98	62.8	
<ul> <li>Number of agency-hired workers</li> </ul>	11,513		
Outside the premises of the establishment	18	11.5	
6. Total Vacancies (January 2015-June 2016)	3,146	100.0	
Easy-to-fill	2,428	77.2	
Hard-to-fill	719	22.9	
Top hard-to-fill vacancies			
Crop Farm Laborers	160	22.3	
Well Drillers and Borers and Related Workers	85	11.8	
Agricultural and Industrial Machinery Mechanics and Repairers	63	8.7	
Mining Engineers, Metallurgists and Related Professionals	57	7.9	
Mining and Metallurgical Technicians	49	6.9	
Miners and Quarries	35	4.9	
Heavy Truck and Lorry Drivers	25	3.5	
Mining Supervisors	23	3.2	
Earthmoving and Related Plant Operators	22	3.0	
Top reason why vacancies are hard-to-fill			
No/few applicants applied for the job	55	26.7	
Applicants lack years of experience	44	21.5	
Applicants lack needed competency/skill	39	18.7	
Applicants expect high salary	22	10.5	
Applicants lack professional license/TESDA Skills Certification	19	9.4	

Note: Details may not add up to totals due to rounding.

<sup>1</sup> Details do not add up to totals due to multiple responses.
Source of data: Philippine Statistics Authority, 2015/2016 ISLE.

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### Selected Labor and Employment Indicators on Mining and Quarrying, Philippines 2016

INDICATOR	Number	Percent
Number of Establishments (2016)	156	
7. Unionism (2016)		
Union density rate (%)		24.0
Union membership	7,349	100.0
- Male	6,726	91.5
- Female	623	8.5
8. Collective Bargaining (2016)		
Collective bargaining coverage rate (%)		25.3
CBA coverage	7,766	100.0
- Male	7,028	90.5
- Female	738	9.5
OCCUPATIONAL SAFETY AND HEALTH PRACTICES (2015)		
Preventive and Control Measures/Activities Against     Work Safety and Health Hazards (2015)		
Number of Establishments (2015)	141	
Establishments with OSH Practices	141	100.0
Regular inspection and maintenance of equipment	135	95.7
<ul> <li>Proper maintenance of mechanical and electrical facilities</li> </ul>	132	93.6
<ul> <li>Appointed safety/health officers and/or first-aiders</li> </ul>	127	90.1
Workers' orientation on safety and health hazards at work	126	89.4
- Posting of safety signages or warnings	125	88.7
Training on safety and health for officers and workers	123	87.2
- Dissemination of info materials on safety and health	117	83.0
<ul> <li>Provision of appropriate personal protective equipment (PPE) such as hard hats, safety shoes, safety goggles, gloves, etc.</li> </ul>	116	82.3
Emergency response preparedness activities for earthquake, fire, chemical spills, etc.	113	80.1
Regular monitoring of hazards such as chemicals, noise, heat in work areas	108	76.6
Perform corrective action programs and audits	107	75.9
- Periodic/annual medical exam of workers	106	75.2
Organized safety and health committee	105	74.5
- Smoke-free workplace	103	73.0
Use of safety manuals, labels or maintenance procedures	103	73.0

INDICATOR	Number	Percent
10. Occupational Safety and Health Policies/Programs		
Establishments with OSH Policies/Programs (2015)	138	97.9
<ul> <li>Fire Prevention and Control Program</li> </ul>	124	87.9
<ul> <li>Accident Prevention Program</li> </ul>	114	80.9
- Emergency Response Preparedness Program	103	73.0
<ul> <li>Monitoring/Surveillance of Occupational and Work-</li> </ul>	102	72.3
Related Injuries and Illnesses		
<ul> <li>Drug-Free Workplace Policy and Program</li> </ul>	96	68.1
<ul> <li>Healthy Lifestyle Program</li> </ul>	90	63.8
<ul> <li>Anti-Sexual Harassment Policy</li> </ul>	77	54.6
- Chemical Safety Program	67	47.5
<ul> <li>Policy on Non-discrimination of Workers with Hepatitis B Infection</li> </ul>	66	46.8
Tuberculosis Prevention and Control Program	66	46.8
Hepatitis B Prevention and Control Policy and Program	66	46.8
<ul> <li>Anti-Sexual Harassment Program</li> </ul>	64	45.4
Policy on Non-discrimination of Workers with HIV Infection	61	43.3
DOLE-Approved Construction Safety and Health     Program	60	42.6
- Policy on Non-discrimination of Workers with PTB	60	42.6

Note: Details may not add up to totals due to multiple responses.

#### Definitions.

Union density rate – proportion of union membership to total paid employees.

Collective bargaining coverage rate – proportion of employees covered by CBAs to total paid employees.

## Selected Labor and Employment Indicators on Mining and Quarrying, Philippines 2016

INDICATOR	Number	Percent
11. Work Safety and Health-Related Trainings/Seminars (2015)		
- Fire Safety Training	106	75.0
- 40-Hour Basic Occupational	74	52.3
- Emergency Preparedness	70	49.6
- Drug-Free Workplace	61	43.0
- Safety Audit	53	37.3
- 1-Day Occupational Safety	52	37.2
- Smoke-Free Workplace	52	36.6
- OSH Management System	48	33.8
- Chemical Safety Training	45	32.0
- Industrial Hygiene	45	31.8
- Tuberculosis Prevention	40	28.2
- HIV and AIDS Prevention	40	28.1
- Hepatitis B Prevention	37	26.0
- Safe Work Procedures	36	25.4
- Ergonomics Training	30	21.1
- Prevention and Control	29	20.7
- Scaffold Safety Training	26	18.1
- 40-Hour Construction	25	17.7
- Family Planning and Reproductive Health	23	16.3
- Stress Management	23	16.2
- Others	6	4.2
12. Designated Health and Safety Personnel in the Establishment (2015)		
Establishments with Designated Health and Safety Personnel	134	95.0
- Safety Officer	110	78.0
Accredited by DOLE	58	52.7
Not Accredited by DOLE	52	47.3
- Trained First-Aider	88	62.4
- Occupational Health Nurse	58	41.1
- Occupational Health Physician	28	19.9
- Dentist	8	5.7
- Industrial Hygienist	2	1.4
- Others	31	22.0

			With Workdays Lost			Maria .	
INDICATOR	TOTAL	Total		Non-Fa			Without Workdays
	1017.2		Fatal	Total	Permanent Incapacity	Temporary Incapacity	Lost
13. Measure of Safety Performance							
Cases of Occupational Injuries	527	59	7	52	-	52	468
Frequency Rates	-	0.57	0.22	0.55	-	0.55	-
Incidence Rates		1.41	0.05	1.36	-	1.36	
Severity Rates						5.30	
Average Workdays Lost						12.84	

INDICATOR	Number	Percent	
14. Cases of Occupational Injuries with Workdays Lost (2015)	59	100.0	
By Type of Injury			
Superficial Injuries and open wounds	26	44.1	
Fractures	23	39.0	
Concussions and Internal Injuries	6	10.2	
Dislocations, sprains, and strains	4	6.8	
Traumatic Amputations	1	1.7	
By Part of the Body Injured			
Lower extremities	22	37.3	
Wrist and Hand	15	25.4	
Trunk or Internal organs	6	10.2	
Head	4	6.8	
Arm and shoulder	4	6.8	
Whole body or multiple sites equally injured	4	6.8	
By Cause of Injury			
Struck by Falling Objects	24	40.7	
Stepping on, striking against or struck by objects, excluding falling objects	19	32.2	
Fall of person	10	16.9	
Caught in or between objects	5	8.5	
Others	1	1.7	

Note: Details may not add up to totals due to rounding.

Source of data: Philippine Statistics Authority, 2015/2106 Integrated Survey on Labor and Employment.

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## Selected Labor and Employment Indicators on Mining and Quarrying, Philippines 2016

INDICATOR	Number	Percent	
14. Cases of Occupational Injuries with Workdays Lost (2015) (Cont'd)			
By Agent of Injury			
Materials, objects	30	50.8	
Buildings, structures	10	16.9	
Machines, equipment	8	13.6	
Hand tools	6	10.2	
By Major Occupation			
Elementary Occupations	23	39.0	
Plant and Machine Operators and Assemblers	22	37.3	
Craft and Related Trade Workers	9	15.3	
Service and Sales Workers	2	3.4	
15. Occupational Diseases (2015)	1,735	100.0	
- Back pain	458	26.4	
<ul> <li>Other diseases caused by chemicals</li> </ul>	364	21.0	
<ul> <li>Occupational dermatitis</li> </ul>	272	15.7	
<ul> <li>Neck-shoulder pain</li> </ul>	190	11.0	
- Shoulder tenditis	148	8.5	
<ul> <li>Occupational asthma</li> </ul>	97	5.6	
- Other infections	75	4.3	
<ul> <li>Other work-related musculoskeletal diseases</li> </ul>	33	1.9	
<ul> <li>Heat stroke, cramps, exhaustion</li> </ul>	31	1.8	
- Tuberculosis	31	1.8	

Note: Details may not add up to totals due to rounding.

Source of data: Philippine Statistics Authority, 2015/2106 Integrated Survey on Labor and Employment.