MINERALS INDUSTRY IN THE CORDILLERA ADMINISTRATIVE REGION - CY 2016

The year 2016 was a generally challenging one for the mineral industry of the Cordillera Administrative Region. Nevertheless the region's industry remained strong despite all the difficulties.

To date, only four (4) companies are engaged in large scale mining operations namely: Philex Mining Corportion (copper), Lepanto Consolidated Mining Company (gold), Itogon Suyoc Resources, Inc. (gold) and Benguet Corporation (gold) with operations through the small scale miners as service contractors on a 60-40 percent sharing where Benguet Corporation gets 40% and the service contractors get 60%, all located in the province of Benguet.

Data gathered by the regional bureau is limited to those submitted by large scale mining companies and does not include small scale mining operations.

MINERAL PRODUCTION

Volatile global economic growth and lower demand affected the region's metallic production causing decrease by an average of seven percent (7.5%) for the mineral production of silver and gold. Despite this fact, its value posted an increase of thirteen percent (13%).

The regions' production stream remains at three (3) gold mines, a copper mine with gold and silver as by-product.

The quantity of gold production decreased by five percent (5.67%) with its production recorded at 4,676.33 kg in 2015 and 4,410.99 kg in 2016. Despite the production decrease, the value increased by fourteen percent (14.77%) with a production value of seven billion pesos (₱7,457,135,745.97) in 2015 and eight and half billion pesos (₱8,558,744,471.45) in 2016.

Silver production in 2015 was 4,845 kg and decreased to 4,394.42 kg posting negative nine percent (-9.31%). Despite the lowered quantity of production, its value increased from one hundred four million pesos (₱ 104, 789, 162.14) to one hundred eighteen million (₱ 118, 923, 247.18) posting a 13.49% growth.

On the other hand, the quantity of copper concentrate production grew by four (4.46%) with a seven percent (7.42%) corresponding growth in its value. The quantity of copper concentrate production in 2015 was 69,988 DMT and increased to 73, 109 DMT in 2016. Its production value grew from 3.5 billion pesos (₱3, 520, 272, 985.00) to 3.78 billion pesos (₱3, 781, 363, 677.00). Philex Mining Corporation's Padcal Copper-Gold Project which is an underground mine is the sole producer of copper in the province of Benguet.

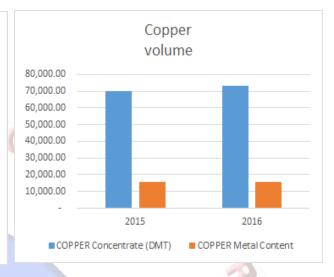
Non-metallic mineral production increased due to greater demand specially for the production of slaked lime which posted a five thousand percent (5,886.03%) increase but a thirty seven percent decrease (-37.35%) in its production value. Production quantity for slaked lime was 53.49 MT in 2015 and 3,201.75 in 2016.

Quicklime production quantity was recorded at 7,478.11 MT in 2015 and 9,253.79 in 2016 which equaled an almost eighteen percent (17.91%) growth, its value recorded an almost thirty percent (29.92%) increase with the production value of one hundred twelve million pesos (₱ 112, 810, 915.77) in 2015 and one hundred sixty three million pesos (₱ 163, 621, 606.91) in 2016.

The quantity of sand and gravel production decreased by twelve percent (12.08%) but the value increased by fifty eight percent (58.63%). The production quantity pegged at 876,120.26 CU.M. in 2015 went down to 770, 275 CU.M. in 2016, its value however increased from one hundred twelve million pesos (₱ 112,810,915.77) in 2015 to one hundred sixty-three million pesos (₱ 163,621,606.91) in 2016. This is basically affected by the law of supply and demand where supply went down thereby increasing its value due to greater demand.

	<u>Production</u>		<u>Valu</u>	<u>e</u> ₱			
	2015	2016	2015	2016			
GOLD (Kg)	4,676.23	4,411.00	7,457,135,745.97	8,497,712,452.57			
SILVER (Kg)	4,845.48	4,394.42	104,789,162.14	119,923,247.18			
COPPER Concentrate (DMT)	69,988.00	73,109.00	3,520,272,835.00	3,781,363,677.00			
COPPER Metal Content	15,471.00	15,860.00					
Quicklime (MT)	7848.105	9,253.79	59,069,664.47	76,744,197.90			
Slakelime (MT)	53.487	3,201.75	327,575.14	205,213.18			
Sand and Gravel (Cu.M.)	876,120.26	770,275.45	112,810,915.77	178,959,845.34			
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EXPORTS

The export of minerals from the region posted an overall decrease among the different commodities which could be attributed to the environment department's review of mining company operations last year, in this manner posing economic challenges to the mineral export in general.

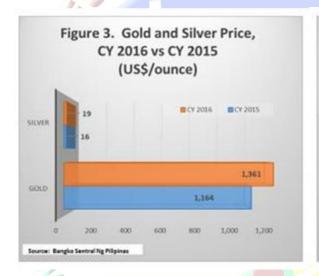
It is important to note that the decline in mineral production is tantamount to lower taxes, fees and royalties collected by the government both national and local, as such, mineral exports is expected to go down.

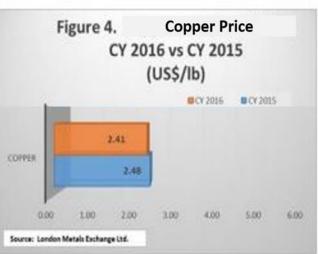
Gold and silver export value posted a decrease of fifty nine percent (-59.05%) from three hundred billion dollars (\$ 386,243, 123.24) in 2015 to one hundred fifty million dollars (\$153,468,992.32) in 2016.

The export value of silver registered a low seven percent (-7.5%) with more than three hundred seventeen million dollars (\$ 317,642,038,982.13) in 2015 down to one hundred fifty eight million dollars (\$ 158,144,131.83) in 2016.

Copper concentrate export value registered a slight decrease of one percent (-1.37%) from seventy-four million dollars (\$74,223,667.00) in 2015 to seventy-three million dollars (\$73,203,307.00) in 2016.

On metal prices, precious metals gold and silver both enjoyed growth of almost 17% and 19% respectively. The average price of gold grew from \$1, 163.59 per troy ounce to \$1, 360.85 per troy ounce, up by \$197.26. Silver on the other hand, went up from US\$15.72 per troy ounce to US\$18.63 per troy ounce up by US\$2.91; while base metal, copper recorded a decline of 3%. Copper slipped from US\$2.48 to US%2.40 per pound, pound year-on-year.





LOCAL SALES

Locally, gold sales suffered twenty-two percent (-22.19%) decrease from one billion pesos (₱1,097,223,271.97) in 2015 to eight hundred million pesos (₱853,712,772.03) in 2016. This is due to lower volume sold by Benguet Corporation to the Baguio Gold Buying Station of the Bangko Sentral ng Pilipinas.

Non-metallic mineral like the slaked lime registered a large decrease at fifty percent (-52.35%) with sales value of four hundred fifteen thousand pesos (₱415,522.64) in 2015 down to one hundred ninety eight thousand pesos (₱198,012.03) in 2016.

Sales value of quicklime increased by nine percent (9.83%) with seventy-one million pesos in 2015 (₱71,621,658.88) to seventy-eight million pesos (₱78,663,399.09) in 2016.

Sand and gravel however experienced a dramatic increase because of the great demand for this commodity. An increase of three thousand nine hundred percent (3,915.39%) was recorded with sales value of one hundred twelve million pesos (₱112,810,909.77) in 2015 to four billion pesos (₱4,529,801,690.55) in 2016.

EXPORTS		2015		2016			
		EXPORTS(London, U.K., China,)		EXPORTS(London, U.K., China,)			
METALLIC MINERAL		Quantity	Value (₱)	Value (US\$)	Quantity	Value (₱)	Value (US\$)
(Large Scale)							
GOL	D Kg	4,783.44	6,487,038,982.13	317,642,039.24	3,827.64	7,294,901,792.19	153,468,992.32
SILVE	R Kg	4,685.43	108,208,859.74	68,601,084.00	4,239.39	111,839,033.52	4,675,139.51
COPPER CONCENTRAT	E DMT	60,149.00	3,385,419,916.00	74,223,667.00	70,149.00	3,484,235,271.00	73,203,397.00
		LOCAL SALES		LOCAL SALES			
		Quantity	Value (쿠)	Value (US\$)	Quantity	Value (₱)	
METALLIC MINERAL							
(Large Scale) GOLD	Kg	661.13	1,097,223,271.97		449.73	853,712,772.03	
SILVE	R Kg	170.901	2,728,309.14		36.10	768,875.24	
NON-METALLIC QUICKLIN	E MT	8,036.86	71,621,658.88		9,740.54	78,663,399.09	
SLAKELIN	E MT	53.49	415,522.64		3,200.43	198,012.03	
SAND & GRAVE	L cu.m.	876,120.12	112,810,909.77		831,188.58	175,864,332.17	

EMPLOYMENT

Direct jobs from the mining industry posted nine percent increase (8.7%) with an employment of 8,175 in 2015 to 8,883 in 2016. While estimates vary, it is conservatively projected that for every basic job in the mines, about four ancillary/indirect jobs may be generated in the upstream and downstream sectors.

SOCIAL DEVELOPMENT AND MANAGEMENT PROGRAM

The total amount committed by mining companies in the region for the development of their host and neighboring communities through approved Social Development and Management program (SDMP) is ₱558 Million. SDMP refers to the comprehensive 5-year plan of the Contractor authorized to conduct actual mining and milling operations towards the sustained improvement in the living standards of the host and neighboring communities by creating responsible, self-reliant and resource-based communities capable of developing, implementing and managing community development programs, projects, and activities in a manner consistent with the principle of people empowerment.

Community Development Program

The amount of fifteen million pesos (₱15 Million) has been committed by companies with exploration permit. CDP refers to the two-year plan of the contractor for the development programs of the host community.

ENVIRONMENT PROTECTION AND MANAGEMENT

The committed implementation total amount for the of approved plans/programs/projects/activities under the Environmental Protection and Enhancement Programs (EPEP) is ₱552 Million. EPEP refers to the comprehensive and strategic environmental management objectives, criteria and commitments including protection and rehabilitation of disturbed environment. SCIENCE

MINING FOREST PROGRAM

REGION	COMPANY	Total Area Planted (Ha.)	Total No. of Seedlings Planted	No. of Surviving Trees		
CAR	Philex Mining Corporation	2034.09	4,899,752	4,381,345		
10	Benguet Corporation - Benguet Gold Operations	777.02	1,085,206	644,575		
DE	Lepanto Consolidated Mining Corp.	442.25	2,623,978	2,366,664		
Total		3253.36	8,608,936	7,392,584		

8 Million seedlings of different species have been planted by the mining companies in more than three thousand hectares of mined-out land and in different areas within their host and neighboring communities; trees planted had an eighty five percent (85.87%) survival rate.

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