

# Skill Needs Survey

## in the

# Mining Sector of Guyana

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**Council for Technical and Vocational Education  
and Training (CTVET)**

and

**Ministry of Labour Human Services and Social  
Security  
Statistical Unit**

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## Acknowledgement

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## Chapter I

# Introduction

A skill needs survey for the mining sector was conducted in January 2012 by the Council for Technical and Vocational Education and Training (CTVET), and Statistical Unit, Ministry of Labour Human Services and Social Security.

### Mining Sector

The Mining Sector is developing rapidly in Guyana and is poised to develop even further with Oil Exploration, resumption of Manganese Mining and increased production of Bauxite and Gold.

### Contribution of the sector to GDP

In 2011, the mining sector would have contributed in excess of \$101,645 million or 22.9% of the GDP. It is the highest financial contributor and the most rapidly growing sector.

## Background of the study

Because of the rate in which the mining sector is growing in Guyana, it has become imperative that the existing workforce is trained and skilled to work in the sector.

### Identification of Training Institution

In keeping with the training needs of the mining sector one technical training institution has been identified to pay special attention to the training of persons in relevant skills needed in the mining sector.

### Training in crucial occupational areas

The focus will be on ensuring that persons are trained in the crucial occupational skill areas, thus this skills need survey for workers employed in the sector was conducted.

The Guyana Geology and Mines Commission will also be identifying occupational areas for the training of persons in the mining sector since it is working closely with miners, however it was felt that this survey would still have been necessary.

## Chapter II

# Methodology

This survey was an establishment survey which targeted firms in the industry with a questionnaire which was filled up by senior personnel.

### Field Work

Two field workers went into field during the month of January and filled up the questionnaires at the offices of the mining companies.

### Response Rate

From some forty firms, there were sixteen mining and related firms who participated in the survey. Even though the response rate could have been better, it is felt that it was a good start, and in the future, organization will respond more favorable when they observe the benefits that can be derived, both at the organizational and national level from there studies.

### Classification:- use of International Standard of Occupational codes

In order to obtain some degree of comparability the establishments were classified according to Industrial Classification, (ISIC) and the occupations were classified according to International Standard Occupational Codes (ISCO).

## Chapter III

# Findings

### Activities of the Establishments which responded

Of the sixteen establishments, nine were involved in Gold Mining, and one each was involved in Regulatory, Equipment supplies, Uranium Exploration, Oil and Gas Exploration, Land Clearing/Security, Bauxite Mining and Quarrying.

### Employment Composition

There were one thousand eight hundred and twenty three employees in the sixteen establishments. The majority of the employees of these firms were employed in Gold mining, Land Clearing/Security, Regulatory, Bauxite Mining and Quarrying.

### Size of the Firm in Terms of Employees

Two firms had between 1-9 employees six firm had between 10-49 employees, three had 50-99 employees, two firm had 100-149 employees and 150-299, 300-599 and over 600 employees there were one establishment each.

### Ownership Nature of Firms

Of the sixteen firms four (4) were sole proprietorship, three (3) were partnership, five (5) were private limited company, one (1) was Government.

### Nature of Ownership

Of the sixteen firm, seven (7) where fully Guyanese owned. Two were fully foreign owned and seven (7) were Guyanese foreign owned

## Chapter 4

### Skills Available

Eight hundred and thirty eight (838) employees give us an indication of their occupational and skills available in sixteen firms were as follows:-

Skills Available			
No	Occupation	No	%
1	Managerial/Professionals	41	4.9
2	Technical Professionals	107	12.8
3	Technical Skills	412	49.1
4	Administrative/Clerical	56	6.7
5	Drivers	140	16.7
6	Manual/Unskilled	82	9.8
	Total	838	100

### Level of Education Attained

One hundred and fifty two (152) of the eight hundred and thirty eight employees gave us an indication of their educational attainment

No	Occupation	Tertiary	Diploma	Secondary	Primary		Total
1	Managerial/Professionals	23	4	1	1	12	41
2	Technical Professionals	31	5	-	1	70	107
3	Technical Skills	1	7	6	6	392	412
4	Administrative/Clerical	2	7	12	3	32	56
5	Drivers	-	11	-	12	117	140
6	Manual/Unskilled	-	4	15	-	63	82
	Total	57	38	34	23	686	838
	%	38	25	22	15		



## Experience

One hundred and forty six (146) of the eight hundred and thirty eight (838) employees gave information on their years of working experience in the mining sector.

Of the one hundred and forty six (146), forty four (44) had 10-14 years working experience or 30%.

This captured the longest grouping followed by the 5-9 years and 2-4 years groupings with 21%.

This is fairly significant since it indicates the employees are retained for a reasonable number of years in the sector and are experienced workers in mining.

## Experience

	Occupation	1 yr	2-4yrs	5-9yrs	10-14yrs	Over15yrs		Total
1	Managerial/Professionals	-	1	1	10	13	16	41
2	Technical Professionals	3	2	8	16	6	72	107
3	Technical Skills	1	2	10	12	8	379	412
4	Administrative/Clerical	5	9	5	5	1	31	56
5	Drivers	-	12	4	1	1	122	140
6	Manual/Unskilled	3	4	3	-	-	72	82
	Total	2	30	31	44	29	692	838
	%	8	21	21	30	20		

Chapter V

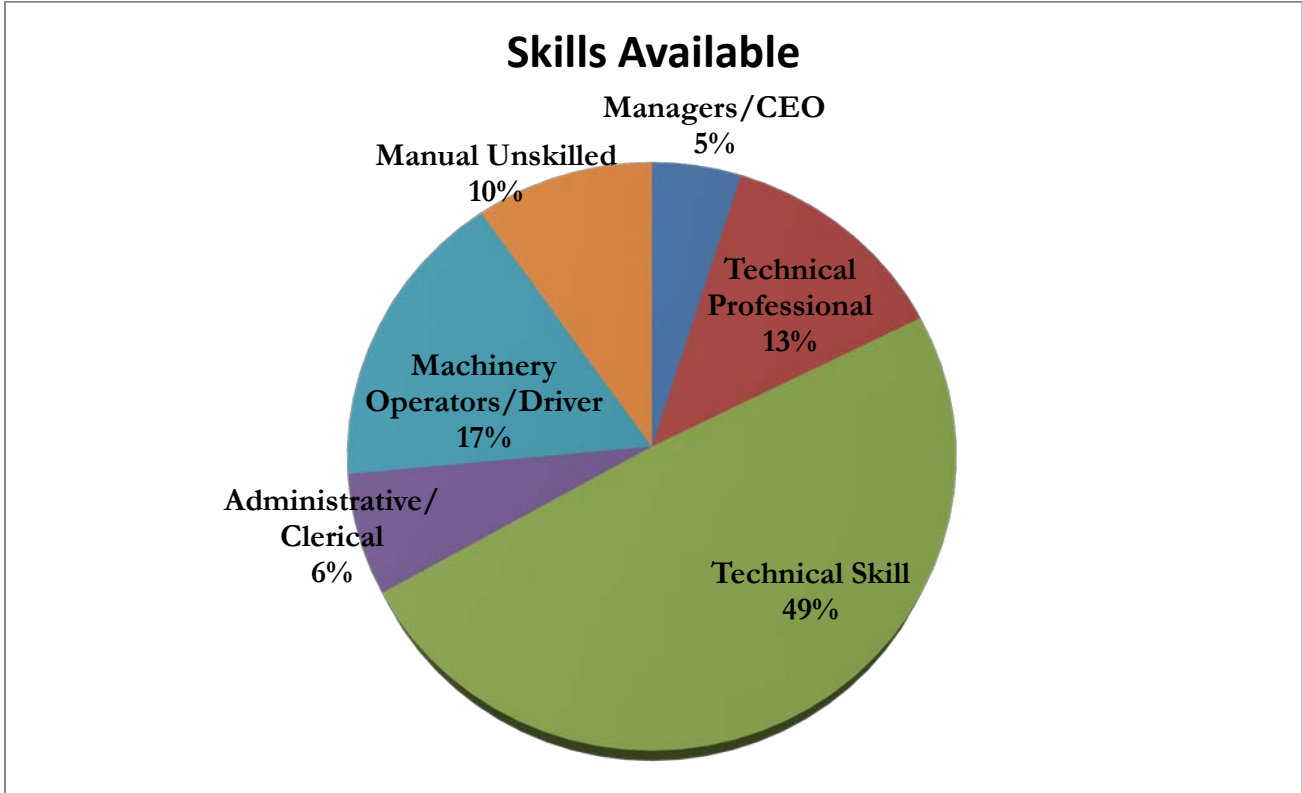
## Skills Available

ISCO	<b>Managers/CEO</b>	Number
1210	Managing Director	11
1220	Project Manager	2
1232	Human Resource Manager	2
1239	Logistics Manager	1
1239	Camp Manager	1
1239	Environment Manager	1
1239	Safety Manager	1
1239	Country Manager	1
1231	Chief Financial Manager	1
1229	Operational Manager	1
1319	General Manager	1
	<b>Technical Professional</b>	
2114	Geologists	45
2142	Civil Engineers	3
2229	Environment Health Officer	12
2229	Medex	1
2147	Mining Engineers	7
2411	Financial Accountant	15
2411	Management Accountant	7
2147	Metallurgist	4
2147	Drilling Managers	4
2131	Systems Managers	3
2131	Information Systems Specialist	1
2145	Mechanical Engineers	2
3114	Logistics Manager	1
3114	Geo Technicians	1
	<b>Technical Skill</b>	
7111	Samplers	28
7231	Auto Mechanics	73
4112	Computer Operator	1
5122	Cooks	37
8211	Heavy Equipment Operator	1
7233	Small Engine Repairs	1

3439	Purchasing Officer	1
3439	Expediter	1
3439	Superintendent	12
3439	Coordinators	1
3439	General Foreman	79
2148	Surveyors	6
7231	General Mechanic	21
3117	Field Technician	2
3439	Security Coordinator	2
7233	Diesel Mechanic	31
7137	Electrician	18
3122	Computer Operator	4
7212	Welders	13
7233	Heavy Equipment Mechanic	11
3118	Draughtsman	4
7124	Carpenter	48
7136	Plumbers	2
7133	Mason	5
8284	Tyre Repair	2
3111	Field Technician	8
	<b>Administrative/Clerical</b>	
4121	Accounts Clerks	16
4121	Payroll Clerks	5
4121	Purchase Clerk	8
4122	Store Keeper	13
3439	Assistant Administrator	2
3439	Office Administrator	7
3439	Data Clerks	2
3439	Human Resource	1
3416	Expenditure Help	1
9151	Office Assistant	1
	<b>Machinery Operators/Driver</b>	
8332	Bulldozer Operators	24
8332	Loader	28
8332	Excavator Operators	23
8332	Machinery Operators	10
8113	Dredge Operators	6
8324	Truck Driver	1
8324	Tractor Driver	3
3142	Boat Captain	14
8332	Crane Lift Operator	5
7313	Driller	15
7113	Stone Processors	11

	<b>Manual Unskilled</b>	
9151	Handyman	1
9151	Labourers	43
9151	Field Assistant	33
9151	Camp Rounder	3
6112	Farm Hands	2

Managers/CEO	41
Technical Professional	107
Technical Skill	412
Administrative/Clerical	56
Machinery Operators/Driver	140
Manual Unskilled	82



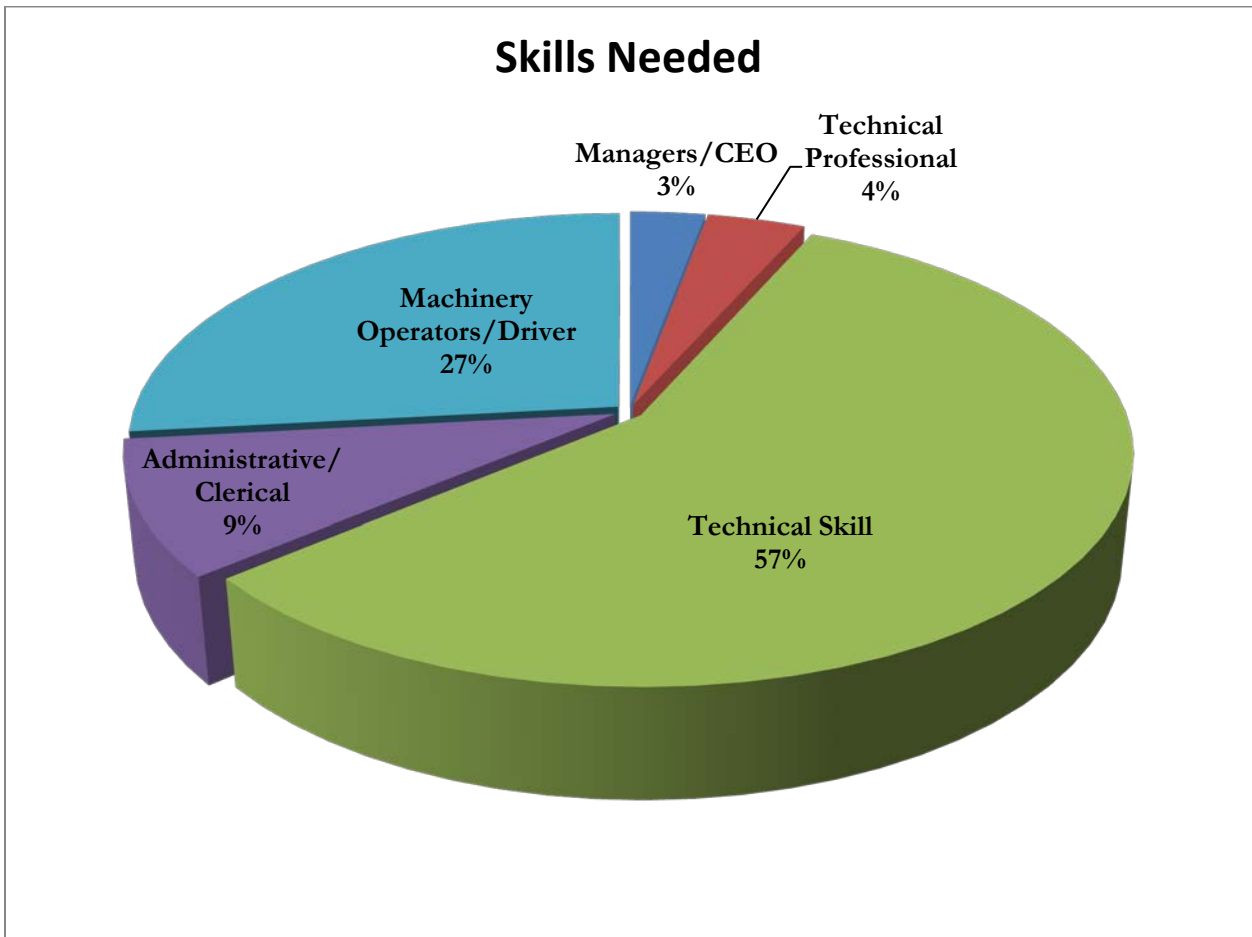
## Chapter VI

## Skill Needed

ISCO	<b>Managers/CEO</b>	Number
1210	Managing Director	3
1220	Project Manager	2
1232	Human Resource Manager	2
1239	Logistics Manager	1
1228	Production Manager	9
1239	Environmental Manager	5
1229	Operational Manager	6
1229	Exploration Manager	1
	<b>Technical Professional</b>	
2114	Geologists	9
2142	Civil Engineers	1
2229	Environment Health Officer	1
2229	Medex	2
2147	Mining Engineers	7
2411	Financial Accountant	4
2411	Management Accountant	3
2147	Metallurgist	3
2147	Technical Planners	1
2131	Systems Managers	2
2131	Information Systems Specialist	1
2145	Chemical Engineers	2
3114	Jewelers Designers	1
3114	Diamond Cutters	1
	<b>Technical Skill</b>	
7231	Auto Mechanics	7
7233	Body Repairmen	20
7124	Carpenter	61
4112	Data Entry Operator	1
3122	Computer Operator	1
5122	Cooks	45
7233	Diesel Mechanic	6
3118	Draughtsman	5
7137	Electrician	4

8223	Filter Mechanist	2
7233	Heavy Equipment Mechanic	3
7136	Instrument Technician	16
7124	Joiners	2
3117	Laboratory Managers	1
3117	Laboratory Technician	6
7133	Mechanics General	155
3117	Metallurgical Technician	220
7231	Small Engine Repairs	2
2148	Surveyors	11
7212	Welders	5
	<b>Administrative/Clerical</b>	
4121	Accounts Clerks	9
4121	Payroll Clerks	7
4121	Purchase	4
4122	Store Keeper	4
3439	Office Assistant	2
3439	Office Administrator	18
4122	Clerical Administrative	50
	<b>Machinery Operators/Driver</b>	
8332	Bulldozer Operators	89
8332	Loader	41
8332	Excavator Operators	26
8332	Machinery Operators	6
8113	Dredge Operators	11
8324	Truck Driver	8
8324	Tractor Driver	7
3142	Boat Captain	6
8332	Crane Lift Operator	3
7313	Driller	25
7113	Stone Processors	13
7111	Miner	16
7112	Blasters	8
8331	Bobcat Operator	1
8340	Sailors	4
8332	Millers	5

Managers/CEO	29
Technical Professional	38
Technical Skill	574
Administrative/Clerical	94
Machinery Operators/Driver	268



## Chapter VII

### Incomes

There was a general reluctance to give information on occupational earnings by the various respondents. This attitude was very alarming, and it robbed us of the opportunity to assess another key component in the demand for skill, that is income earnings.

Notwithstanding, where two or more firms responded to the amounts paid to a particular occupation, the average monthly income was computed, these were as follows:-

No	ISCO	Occupation	Average Monthly Earnings
1	2411	Financial Accountant	\$345,000.00
2	2411	Management Accountant	\$295,000.00
3	2148	Surveyor	\$140,000.00
4	7231	General Mechanic	\$265,000.00
5	5122	Cook	\$177,500.00
6	4121	Accounts Clerk	\$133,333.00
7	2114	Geologist	\$450,000.00
8	8112	Heavy Machine Operator	\$345,000.00
9	8332	Bulldozer Operator	\$290,000.00



## Future Plans and Critical Skill Needs

There were five issues which respondents were asked to respond on, they were:-

- i. Infrastructure expansion
- ii. New mines and Exploratory work
- iii. Recruitment of skilled workers
- iv. Whether there were plans for workforce reduction
- v. Plans for training workers

Respondents stated that during the next twelve (12) months they would be involved in various degrees in the above activities, possibly extending for the next one to five (1-5) years.

Ten respondents stated that they would be involved in capital infrastructure expansion. Similarly this respondent stated they have plans to venture into new mining and exploratory ventures.

Of note twelve out of sixteen respondents stated they had plans to recruit workers. Only four of the twelve respondents stated they planned laying off or retrenching workers.

Finally in terms of training twelve of the respondents have plans to train their workforce themselves.

### **Skill Needs**

Respondents stated that the following are their critical skill needs;

<b>Summary Critical Skills Needs</b>
<b>Mention by Respondents</b>
Heavy Duty Drivers; Mechanist; Geologist; Surveyor; Mining Engineers; Skilled Operator; Bulldoze Operator-particularly Technicians; Seamen, Mechanics, Production Manager; Drillers

**Future Plans of Respondents**

<b>1</b>	Infrastructure expansion	<b>10</b>
<b>2</b>	New Mines/Concession Expansion	<b>10</b>
<b>3</b>	Recruitment of skilled workers	<b>12</b>
<b>4</b>	Retrenchment	<b>4</b>
<b>5</b>	Training/Retraining Existing Staff	<b>10</b>



## Conclusion

In spite of the limited respond rate, of players in the mining sector one can note a number of things which can be derived from observing the information and data collected in this survey.

There are a number of skills needs at the level of **technical professional, technical skill and machinery operators/drivers** .

For the future each category of occupation is important. Managerial and technical professional are important as well, in that they are essentially occupied as planners, evaluator, analysis for the expansion of the mining sector.

Technical skilled are important in both sustaining and expansion of the sector.

It can be seen and noted that there is a large demand for persons at the technical skilled level and machinery operators and drivers .

We trust that the report of this survey will be acted upon and fulfill its initial purpose.