

Operating Cost In Coal Mines - A Case Study Of Kottagudem Singareni Collieries Company Limited

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Abstract

The world is undergoing quick transitional changes in society. Government Industry, Organization Management and employee attitudes are rapid extension in the frontiers of knowledge. The country need for developing high quality managerial power and the managerial obsolesce have led to diversion of sizable economic growth and human resolves to the strategic area of managing training and development. The government of AP has instructed all the public sector undertaking to prepare a training sub-plan taking into account the need of all the staff. As per this G.O we have to provide sufficient budget under a separate subheading for training which should be of the order of 1% to 2.5% of the non-plan budget. The very activity of Human Resource Development and continuous skills up gradation in the fact of changing technologies or preferable in advance preparation for likely changes in technologies and consumption styles is going to be another major component of the service sector.

INTRODUCTION

India has a long history of commercial coal mining covering nearly 220 years starting from 1774 by M/s Sumner and Heatly of East India Company in the Raniganj Coalfield along the Western bank of river Damodar. However, for about a century the growth of Indian coal mining remained sluggish for want of demand but the introduction of steam locomotives in 1853 gave a fillip to it. Within a short span, production rose to an annual average of 1 million tonne (mt) and India could produce 6.12 mts. per year by 1900 and 18 mts per year by 1920. The production got a sudden boost from the First World War but went through a slump in the early thirties. The production reached a level of 29 mts. by 1942 and 30 mts. by 1946. With the advent of Independence, the country embarked upon the 5-year development plans. At the beginning of the 1st Plan, annual production went upto 33 mts. During the 1st Plan period itself, the need for increasing coal production efficiently by systematic and scientific development of the coal industry was being felt. Setting up of the National Coal Development Corporation (NCDC), a Government of India Undertaking in 1956 with the collieries owned by the railways as its nucleus was the first major step towards planned development of Indian Coal Industry. Along with the Singareni Collieries Company Ltd. (SCCL) which was already in operation since 1945 and which became a Government company under the control of Government of Andhra Pradesh in 1956, India thus had two Government coal companies in the fifties. SCCL is now a joint undertaking of Government of Andhra Pradesh and Government of India sharing its equity in 51:49 ratio.

REVIEW OF LITERATURE

According to the 2010 BP Statistical Energy Survey, India had end 2009 coal reserves of 58600 million tonnes, 7.09% of the world total. The world's largest reserves are held by the USA, Russia, China, Australia and India.

India had 2009 coal production of 557.57 million tonnes, 6.2% of the world total. The world's major producers are China, the USA, India, Australia, Russia, Indonesia and South Africa.

India had 2009 coal consumption of 245.82 million tonnes oil equivalent, 7.49% of the world total. India is the world's third largest coal consuming nation after China and the USA.

India now ranks 3rd amongst the coal producing countries in the world. According to the 2008 BP Statistical Energy Survey, India had end 2007 coal reserves of 56498 million tonnes, 6.66% of the world total. Through a sustained program of investment and greater thrust on application of modern technologies, it has been possible to raise the production of coal from a level of about 70 million tonnes at the time of nationalization in the early 1970's to production of 478.18 million tonnes in 2007. Most of the coal production in India comes from open pit mines which contribute over 81% of the total production. A number of large open pit mines of over 10 million tonnes per annum capacity are in operation. Underground mining currently accounts for around 19% of national output. Most of the production is achieved by conventional Board and Pillar mining methods.

OBJECTIVES OF THE STUDY

The main objective of the proposed study to examine the various aspects related training programs in Kottagudem Area of Singareni Collieries Company Limited. More specifically objectives of the study are.

1. To examine different training programmes conduct in the organization.
2. To study the various training methods and their relevance in meeting objectives.
3. To measures the 'effectiveness' of training programmes in the organization.
4. To suggest appropriate measures for improving effectiveness of training programmes in the organization.

SCOPE OF STUDY

The study is limited to investigation on effectiveness of training offered by Corporate Human Resource Development of the Singareni Collieries Co. Ltd.

The study aims at measuring the effectiveness of training at Singareni Collieries both Statutory and non- statutory.

Large size could not be covered due to size of the organization and due to time constraint of the student.

METHODOLOGY

The study of training in Kothagudem area of Singareni Collieries Company Limited is made with the help of Training and Secondary Data

Source of data

The study is based on the both Primary and Secondary data.

Primary data

Primary data is through a well-structured questionnaire circulated among sample response and through personnel interviews with them. Personal discussions were held with the officials to elicit relevant information for the purpose of the study.

Secondary data

Secondary data was sometimes collected from more than one source. Which in turn lacks uniformity, consistency and proper information? Suffers certain limitations like incomplete and non- availability of certain records.

IMPORT OF COAL

As per the present Import policy, coal can be freely imported (under Open General License) by the consumers themselves considering their needs and exercising their own commercial judgments. Coking coal is being imported by Steel Authority of India Limited (SAIL) and other Steel sector manufacturing mainly to bridge the gap between the requirement and indigenous availability and to improve the quality of overall blend for technological reasons. Coal based power plants, cement plants, captive power plants, sponge iron plants, industrial consumers and coal traders are importing non-coking coal on consideration of transport logistic and commercial prudence as well as against export entitlements. Coke is imported mainly by Pig-Iron manufacturers and Iron & Steel sector consumers using mini-blast furnace.

Details of import of coal and products during the last five years (as reported by Coal Controller's Organization) as under: (In million tons)

Coal	2012	2013	2014	2015	2016
Coking Coal	10.99	11.06	11.11	12.95	12.00
Non-coking Coal	8.71	9.87	9.44	10.31	9.50
Coke	2.41	2.42	2.28	2.25	2.00
Total Import	22.11	23.35	22.83	25.51	23.50

The current duty (during 2003-04) on imported coal as amended on 28.2.2004 is as under:-

Type of coal	Import Duty
Coking Coal	Having upto 12% ash
	Having ash 12% and more
Coke	5%
Non-Coking Coal	5%

Note: With effect from 9.1.2004 the Central Government has withdrawn the Special Additional Duty.

Coal mining in India dates back to the 18th century, however the regulatory framework for this industry was conceived in 1923. In 1972-73, the Indian government nationalized the coal industry, primarily to develop the sector, since it was considered of strategic importance for rapid industrial development. Coal India Ltd (CIL) was incorporated as a holding company for seven coal producing subsidiaries and a planning and design focused institute. It is engaged in mining from a total of 495 working coal mines which account for nearly 88 percent of total production.

Coal Industry highlights:

India is the third largest producer of coal in the world.

Coal is one of the primary sources of energy, accounting for about 67% of the total energy consumption in the country.

India has the fourth largest reserves of coal in the world (approx. 197 billion tonnes.).

Coal deposits in India occur mostly in thick seams and at shallow depths. Non cooking coal reserves aggregate 172.1 billion tonnes (85 per cent) while coking coal reserves are 29.8 billion tonnes (the remaining 15 per cent).

Indian coal has high ash content (15-45%) and low calorific value.

With the present rate of around 0.8 million tons average daily coal extraction in the country, the reserves are likely to last over 100 years.

The energy derived from coal in India is about twice that of energy derived from oil, as against the world, where energy derived from coal is about 30% lower than energy derived from oil.

As of 2003, India has 19 coal washeries (total capacity: 27.2 million tonnes per annum) of which 15 are owned by CIL.

The use of beneficiated coal has gained acceptance in steel plants and power plants located at a distance from the pithead.

Energy and Environment 27 November 2016, Forbes magazine

	China	India
Recoverable Coal Reserves	126,214.7 million short tons	101,903.2 million short tons
Coal Production	2,156.4 million short tons	403.1 million short tons
Coal Consumption	2,062.4 million short tons	430.6 million short tons

Production:

India has huge untapped potential for underground mining with extractable reserves up to a depth of 600 meters. Currently mining is done predominantly by open cast methods to exploit the 64 billion tons of proven reserves situated within a depth of 300 meters. Lower operating and production costs, greater percentage recovery and a higher output per man shift compared with underground mining are some of the advantages presently associated with open cast mining in India.

The Operation Areas of SCCL are as follows:

KHAMMAM DISTRICT -- Kothagudem, Yellandu and Manuguru

ADILABAD DISTRICT -- Bellampalli, Mandamra and Srirampur

KARIMNAGAR DISTRICT -- Ramagundam I, II & III

WARANGAL DISTRICT - Bhoopalapally

The Coal reserves stretch over 350 square kms. of Pranahita Godavari valley of above Districts of Andhra Pradesh with proven deposits of 8,575 million tones of coal. SCCL now operates forty two (36) Under Ground Mines and Thirteen (14) Open cast. The out put per man shift (mines+departments)in 2010-11=2.90 tonnes

TECHNOLOGIES & THEIR OUTPUT IN SCCL

NAME OF THE TECHNOLOGY	Percentage to total out put in 2009-10%
Open cast mining	76%
Long wall technology	1.8%
Blasting gallery technology	0.2%
Underground mining (Traditional, LHD, SDL, etc)	22.0%

MANPOWER OF SCCL

Sl No	CATEGORY	31-03-2010
1	Top executives	06
2	Executives	2,544
3	Supervisory Staff	3,549
4	Secretarial staff	2,131
5	Technical staff	9,001
6	Skilled (Daily rated)	18,133
7	Semiskilled (Daily rated)	5,097
8	Unskilled (Daily rated)	19,387
9	Unskilled (Piece rated)	9,255
10	Apprentices	30
	Total	69,043

LIMITATIONS OF THE STUDY

Applicability of Operating Cost is bound to cost of required data capture. That drives the prevalence to slow processes in services and administrations, where staff time consumed per task defines a dominant portion of cost. Hence the reported application for production tasks does not appear as a favored scenario. Beyond such selective application of the concept, Operating Cost may be extended to accounting, hence proliferating a full scope of cost generation in departments or along product manufacturing. Such extension however requires a degree of automatic data capture that prevents from cost increase in administering costs. The 6 weeks period is one of the constraints to make project much more qualitatively.

Finding of the study are purely based on information provided by the company other non-financial factors were not considered for analysis.

SUGGESTIONS

The Provision of internet facility from one store in SCCL to have effective online communication. More number of items is to be covered under (CD) supplying material to SCCL are the same SCCL management explore to possibility to arrive supply chain management concept with regular vendors to reduce lead time for requisition possibility & placement of final cost. Stores transfers from one stores to other stores to be done effectively

CONCLUSIONS

In this chapter an attempt is made to give the conclusions at a glance on operating cost Singareni Collieries Company Limited. The overall operating cost in SCCCL is up to mark where by adequate supplies of materials & stores & minimization of cost & avoid costly in interruptions in operations. It has kept down the investment operations. Operating cost obsolescence to the minimum through purchasing economics by the measurement of requirements on the basis of recorded experience. It also enables the management to make cost and consumption comparison between operations & periods.

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