# Royalty on Iron ore -An overview with a special reference to India

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Abstract - Levy of royalty on minerals is a universal concept. Royalty in law means a payment made to the owner of certain types of rights by those who are permitted by the owner to exercise such rights. The royalty on minerals is always a focal point for concern for government as well for industry. Any change in the royalty rate effects the fiscal performance of the mining industry. This paper provides an overview of royalty on iron ore with a special reference to India.

Keywords: royalty, ad valorem, iron ore, revenue accrual

#### 1 INTRODUCTION

Iron is the fourth most abundant element in the earth's crust and the second most abundant and useful metal known after aluminum. It makes up about 6.2% of the crust by weight. Iron is a giant among metals. Iron ore is the basic raw material used for making pig iron, spong iron and finished steel. The iron ore is used mainly in blast furnaces, mini blast furnaces (MBF), direct reduced iron (DRI) and sintering and pelletisation plants. Industrial progress and military potential of a country can be judged by its per capita consumption of iron/steel.

## 2 WORLD RESERVES

As per Mineral Commodity Summaries, published by US Geological Survey in January 2010, the total 'reserves' of iron ore in the world are placed at 160 billion tonnes. By iron content this translated into 77 billion tonnes. These summaries show that Ukraine has the largest reserve of iron ore at 30 billion tonnes followed by Russia, China, Australia, Brazil, Kazakhstan, India and USA. In terms of iron content, the largest reserve is in Russia followed by, Australia, Ukraine, Brazil, China, India and Kazakhstan. (In USGS nomenclature 'Reserves' refers to the part of the reserve base which could be economically extractable or produced at the time of determination).

### 3 WORLD PRODUCTION

As per statistics published by the US Geological Survey world production of iron ore in 2009 was 2300 million tonnes as against 2220 million tonnes in 2008. China was the largest producer of iron ore during 2009 (900 million tonnes), followed by Brazil (380 million tones), Australia (370 million tonnes) and India was the fourth largest producer of iron ore during that year with 260 million

tonnes production. Historically western European countries have seen the steepest fall in iron ore production. Some note worthy aspects about world iron ore production is:

- In 2008, China imported one half of the world's total iron
  ore exports and produced about one half of the world's pig
  iron. This clearly shows that iron ore consumption in
  China is the major factor upon which the expansion of the
  international iron ore industry depends.
- Brazil and Australia have huge reserves, which are much in excess of their domestic requirements. They have promoted huge investments in expanding production of iron ore for exports. In the last 15 years these two countries have added 180 million tonnes of iron ore production capacity.
- India, China, Brazil and Australia logged growth rates of over 10 % in iron ore production.

## 4 Royalty

Royalty rates are an important factor in making decisions about mining projects, including determining which country provides the best operating environment for new investments in resource projects. The table-1 below summarises the current royalty rate of iron ore in important countries.

Table-1: Royalty rate of iron ore in important countries

Country	Rate of royalty	
China	2% of Sale value	
Brazil	2% of Sale value	
Australia		
Queensland	2.7% Advalorem	

New South Wales	4% Advalorem				
Victoria	2.75% Advalorem	1968	1	Ore lumps	
Western Australia	Beneficiated ore 5% ad valorem		a	More than 62% Fe	Rs. 1.50 per tonne.
	fines ore 5.625% ad valorem		b	Less than 62% Fe	Rs. 1/- per tonne.
	Lump ore 7.5% ad valorem		_	D:	
South Australia	3.5% Advalorem			Fines Red Oxide	Rs. 0.25 per tonne Rs. 2/- per tonne
ndia	10% Advalorem	1975			
outh Africa	3% Advalorem		a	65% Fe and above	Rs 4/- per tonne

# 5 Indian Scenario

The major revenue accrual to the State Governments from the mining sector is by way of royalty on minerals extracted from mines within the state. Revenues from other sources are dead rent, annual fee payable by mineral concession holder on the basis of the area held, surface rent, sales tax or VAT, local area tax (e.g. Panchayat tax) and stamp duty.

The royalty is a variable return and it varies with the quantity of minerals extracted or removed. Royalty in strict sense and in common parlance may not be tax and has been levied by Central Government and collected by respective state government. While Value Added Tax (VAT) and Sale Tax (ST) are basically the state subjects. The State Governments, through Taxation Department are carrying out the responsibility of levying and collecting VAT and ST.

Panchay at tax is a local tax which has been levied and collected by local government called Panchayat. The mineral concession holder has to pay various types of taxes including these as a lessee of a mining lease.

Conceptually, royalty is a payment made by the mining lessee to the State owner of the mineral as a consideration for the mineral which the lessee extracts and sells. The chronological changes in rate of royalty on iron ore (grade-wise) since 1949 is given Table-2.

**Table-2: Choronological change of rates of royalty on iron ore** (grade-wise)

Year	Grade	Rate
1949	1) For extraction of iron	Annas* eight per
		tonne.
	2) Other purposes	Rs. 1/- per tonne
1962	1) 5% of the sale price	Rs. 0.50 per tonne.
	subject to minimum of	
	2) 5% of the sale price	Rs. 2/- per tonne.
	subject to minimum of	

	a) More than 62% Fe	Rs. 1.50 per tonne.	
	b) Less than 62% Fe	Rs. 1/- per tonne.	
	2) Fines	Rs. 0.25 per tonne	
	3) Red Oxide	Rs. 2/- per tonne	
1975	1) Ore lumps	1	
1775	a) 65% Fe and above	Rs. 4/- per tonne	
	b) 62-65% Fe	Rs. 3/- per tonne	
	,		
	c) 60-62% Fe	Rs. 2/- per tonne	
	d) Less than 60% Fe	Rs. 1.50/- per tonne	
	2) Fines	T =	
	a) 65% Fe and above	Rs. 2.50/- per tonne	
	b) 62-65% Fe	Rs. 1.50/- per tonne	
	c) Less than 62% Fe	Rs. 1/- per tonne	
	d) Beneficiated ores	Rs. 0.50 per tonne	
	containing 40% Fe		
	3) Red Oxide	Rs. 2/- per tonne	
1981	1) Ore lumps		
	a) 65% Fe and above	Rs. 4/- per tonne	
	b) 62-65% Fe	Rs. 3/- per tonne	
	c) 60-62% Fe	Rs. 2/- per tonne	
	d) Less than 60% Fe	Rs. 1/- per tonne	
	2) Fines		
	A) Fine including natural fine	s produced incidental to	
	mining and sizing of ore.	1	
	a) 65% Fe and above	Rs. 2.50/- per tonne	
	b) 62-65% Fe	Rs. 1.50/- per tonne	
	c) Less than 62% Fe	Rs. 1/- per tonne	
	B) Concentrate prepared by	Rs. 0.50/- per tonne	
	beneficiation and/ or		
	concentrate of low grade		
	ore, containing 40% Fe or		
1007	less 1) Ore lumps		
1987	a) 65% Fe and above	Do 6/ mon tompo	
	-,	Rs. 6/- per tonne	
	b) 62-65% Fe c) 60-62% Fe	Rs. 3.50/- per tonne Rs. 2.50/- per tonne	
		•	
	d) Less than 60% Fe Rs. 2/- per tonne		
	2) Fines A) Fine including natural fines produced incidental		
	to mining and sizing of ore.	nes produced meidentar	
	a) 65% Fe and above	Rs. 3.50/- per tonne	
	b) 62-65% Fe	Rs. 2/- per tonne	
		Rs. 2/- per tonne Rs. 1.50/- per tonne	
	b) 62-65% Fe c) Less than 62% Fe B) Concentrate prepared		
	b) 62-65% Fe c) Less than 62% Fe B) Concentrate prepared by beneficiation and/ or	Rs. 1.50/- per tonne	
	b) 62-65% Fe c) Less than 62% Fe B) Concentrate prepared by beneficiation and/ or concentrate of low grade	Rs. 1.50/- per tonne	
	b) 62-65% Fe c) Less than 62% Fe B) Concentrate prepared by beneficiation and/ or concentrate of low grade ore, containing 40% Fe or	Rs. 1.50/- per tonne	
1002	b) 62-65% Fe c) Less than 62% Fe B) Concentrate prepared by beneficiation and/ or concentrate of low grade ore, containing 40% Fe or less	Rs. 1.50/- per tonne	
1992	b) 62-65% Fe c) Less than 62% Fe B) Concentrate prepared by beneficiation and/ or concentrate of low grade ore, containing 40% Fe or less 1) Ore lumps	Rs. 1.50/- per tonne Rs. 0.50/- per tonne	
1992	b) 62-65% Fe c) Less than 62% Fe B) Concentrate prepared by beneficiation and/ or concentrate of low grade ore, containing 40% Fe or less 1) Ore lumps a) 65% Fe and above	Rs. 1.50/- per tonne Rs. 0.50/- per tonne Rs. 18/- per tonne	
1992	b) 62-65% Fe c) Less than 62% Fe B) Concentrate prepared by beneficiation and/ or concentrate of low grade ore, containing 40% Fe or less 1) Ore lumps	Rs. 1.50/- per tonne Rs. 0.50/- per tonne	

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	d) Less than 60% Fe	Rs. 5/- per tonne		
	2) Fines			
	A) Fine including natural fi	ines produced incidental		
	to mining and sizing of ore.			
	a) 65% Fe and above	Rs. 13/- per tonne		
	b) 62-65% Fe	Rs. 7/- per tonne		
	c) Less than 62% Fe	Rs. 5/- per tonne		
	B) Concentrate prepared	Rs. 2.25 /-per tonne		
	by beneficiation and/ or			
	concentrate of low grade			
	ore, containing 40% Fe or less			
1997	1) Ore lumps			
1997		Da 21.50/ man tanna		
	a) 65% Fe and above b)62-65% Fe	Rs. 21.50/- per tonne Rs. 12/- per tonne		
	c)60-62% Fe	Rs. 8.50/- per tonne		
	d) Less than 60% Fe	Rs. 6/- per tonne		
	2) Fines	<u> </u>		
	A) Fine including natural	fines produced		
	incidental to mining and sizin	g of ore.		
	a) 65% Fe and above	Rs. 15.50/- per tonne		
1997	b) 62-65% Fe	Rs. 8.50/- per tonne		
(Contd.)	c) Less than 62% Fe	Rs. 6/- per tonne		
	B) Concentrate prepared by	Rs. 2.50/- per tonne		
	beneficiation and/ or	1		
	concentrate of low grade			
	ore, containing 40% Fe or			
	less			
2000	1) Ore lumps			
	a) 65% Fe and above	Rs. 24.50/- per tonne		
	b) 62-65% Fe	Rs. 14.50/- per tonne		
	c) 60-62% Fe	Rs. 10/- per tonne		
	d) Less than 60% Fe	Rs. 7/- per tonne		
	2) Fines	1		
	A) Fine including natura	l fines produced		
	incidental to mining and sizin	g of ore.		
	a) 65% Fe and above	Rs. 17/- per tonne		
	b) 62-65% Fe	Rs. 10/- per tonne		
	c) Less than 62% Fe	Rs. 7/- per tonne		
	B) Concentrate	Rs. 3/- per tonne		
	prepared by beneficiation			
	and/ or concentrate of low			
	grade ore, containing 40%			
200:	Fe or less			
2004	1) Ore lumps			
	a) 65% Fe and above	Rs. 27/- per tonne		
	b) 62-65% Fe	Rs. 16/- per tonne		
	c) Less than 62% Fe	Rs. 11/- per tonne		
1	.,			

	2) Fines		
	A) Fine including natural fines produced incidental to mining and sizing of ore.		
	a) 65% Fe and above	Rs. 19/- per tonne	
	b) 62-65% Fe	Rs. 11/- per tonne	
	c) Less than 62% Fe	Rs. 8/- per tonne	
	B) Concentrate prepared by beneficiation and/ or concentrate of low grade ore, containing 40% Fe or less	Rs. 4/- per tonne	
2009	All grades	10% of sale price on ad valorem basis	

<sup>\*</sup>Anna is a smallest unit of Indian currency before the year 1950( 1 Rupees = 16 anna).

The rates over the years in term of fixed prices will be decided by a Study Group use to be setup by Ministry of Mines, Government of India as per Section 9(3) of Mines and Minerals (Development and Regulation) Act, 1957. The government of India has notified a new royalty regime on August, 2009 according to which currently the royalty on iron ore is levied at the rate of 10% on ad valorem basis on the sale price.

There are significant jumps in revenues of mineral bearing states such as Andhra Pradesh, Orissa, Jharkhand, Chhattisgarh, Karnataka and Goa due to new rate of iron ore royalty. The statewise revenue accrual by way of royalty for iron ore for 2008-09 and 2009-10 is given Table-3.

Table-3: Revenue Collection for Iron ore during 2008-09 and 2009-10

State	Royalty Accrual (Rs. In millio		
	2008-09	2009-10	
Andhra Pradesh	165	299	
Chhattisgarh	612	3590	
Jharkhand	349	1154	
Goa	259	2553	
Karnataka	1044	3190	
Orissa	1495	6545	

# 6 Conclusion

There is need to reasonably augment revenues of governments in lieu of sharing right of minerals, at the same time

devising a royalty regime that is stable and attractive to investors in the mining sector. Since 13<sup>th</sup> August 2009 the rate of royalty of iron ore been revised from Rupees per tonne basis (varying from Rs. 4 to Rs. 27 per tonne) to 10% of sale price on ad valorem basis (Table-2). Therefore the state wise royalty collection has been increased many fold as shown in Table-3. Simultaneously the price of iron ore has increased in India and international markets. The price increase is attributed to an increased demand for iron ore for steel production, which is showing tremendous growth in capacities in India and all over the world, especially in China. This has generally led to windfall profits to the miners. Therefore the rate of royalty of iron ore on ad valorem basis translates proportionate revenue to the Governments.

#### REFERENCES

- i) United State Geological Survey, Mineral Commodities Summaries, 2010.
- ii) Indian Bureau of Mines, Iron ore A market Survey, 2007.
- iii) Indian Bureau of Mines, Mineral royalties 2006.
- iv) Jain, P.K. 2008 Mineral Royalty in India and its comparison with selected countries. Minerals & Energy v. 23, No.3 P.119-126.

**Note**: The views expressed in this paper are the author's own and not necessarily those of the organization for whom he is working.