

# Analysis of IIP And The Indian Mining Industry: Policies And Approaches

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**PURPOSE**

Purpose of this paper is to study the phenomenon of globalization in Indian economy and to understand the present scenario of Indian mining industry. The paper aims to explore the problems in the stated sector and tries to bring in the suggestions to deal with that.

**METHODOLOGY**

This paper is conceptual in nature wherein qualitative methods and secondary research has been used to substantiate the significant issues of Mining industry in Indian sub-continent. An attempt is made to explore the strategic approach in order to make certain vital observations to lay down conclusion.

**FINDINGS**

The paper contemplates that Government, management and society together has to play a key role in adapting sustainable practices for their operations and integrate it into the overall business strategies to address the sustainability issues critical to the mining and metals industry.

**KEY WORDS**

Indian economy, IIP, Metals, minerals, government policies

## INTRODUCTION

The Indian economy had broken free of the low-growth trap from the early 1990s. By the mid-1990s, following the economic reforms of 1991-93, India began to appear as a player of great significance in the global economy. Then, following the East Asian crisis of the late 1990s and from the first years of the first decade of the 21st century there was no looking back. India's exports began to climb, its foreign exchange reserves, which for decades had hovered around 5 billion dollars, rose exponentially after the economic reforms and in little more than a decade had risen to 300 billion dollars. India's exports and imports registered a five to seven fold increase in the last decade from US\$44.6 billion and US\$ 50.5 billion respectively in 2000-01 to US\$251.1 billion and US\$369.8 billion in 2010-11 respectively. The GDP value of India is roughly equivalent to 2.79 percent of the world economy. While the compound annual growth rates (CAGR) of India's exports and imports (in US dollar terms) were 8.2 per cent and 8.4 per cent respectively in the 1990s, they increased to 19.5 per cent and 25.1 per cent during 2000-01 to 2008-09. During 2009-10 and 2010-11, in spite of Global recession, India's gross domestic product GDP (at factor cost) grew by 8.4 per cent per annum and in 2010-11, the GDP at market price grew by a remarkable 9.6 per cent.



But this year (2012) has been a disappointing one. Overall GDP growth declined to 7.7 per cent in the first quarter (Q1) and then to 6.9 per cent in Q2 of 2011-12. The advance estimates of the Central Statistics Office (CSO) have placed growth in real GDP at 6.9 per cent in 2011-12. India's exports which had surpassed pre-crisis levels have started feeling the heat of this second global downturn which has come in quick succession to the first one. Not only share of Agricultural sector is falling in real GDP but also its fallen short of the Plan targets. During the current Five Year plan, agriculture growth is estimated at 3.28 per cent against a target of 4 per cent.

The share of industry, including construction, in GDP remained generally stable at around 28 per cent in the post-reform period. The share of manufacturing, which is

the most dominant sector within industry, also remained in the 14-16 per cent range during this period. This when compared with countries like China & other East Asian countries (in the range of 30 – 40 %) is an area of concern. The share of industry in total employment increased from 16.2 per cent in 1999-2000 to 21.9 per cent in 2009-10. However, the increase was largely on account of expansion of employment opportunities in the construction sector, from 17.5 million in 1999-2000 to 44.2 million in 2009-10.

The economy has successfully navigated the turbulent years of the recent global economic crisis mostly because of vital contribution of service industry both on domestic level as well as on external front. For more than a decade services has contributed greatly in growth of Indian economy. Among the top 12 countries with highest overall GDP in 2010, India ranks 8 and 11 in overall GDP and services GDP respectively. While countries like the UK, USA, and France have the highest share of services in GDP at above 78 per cent, India's share of 57 per cent is much above that of China at 41.8 per cent. In terms of compound annual growth rate (CAGR) for the period 2001-10, China at 11.3 per cent and India at 9.4 per cent show very high services sector growth. In India with a 16.9 per cent share, trade, hotels, and restaurants as a group is the largest contributor to GDP among the various services' subsectors, followed by financing, insurance, real estate, and business services with a 16.4 per cent share. Community, social, and personal services with a share of 14.3 per cent is in third place. Construction, a borderline service inclusion, is at fourth place with an 8.2 per cent share.

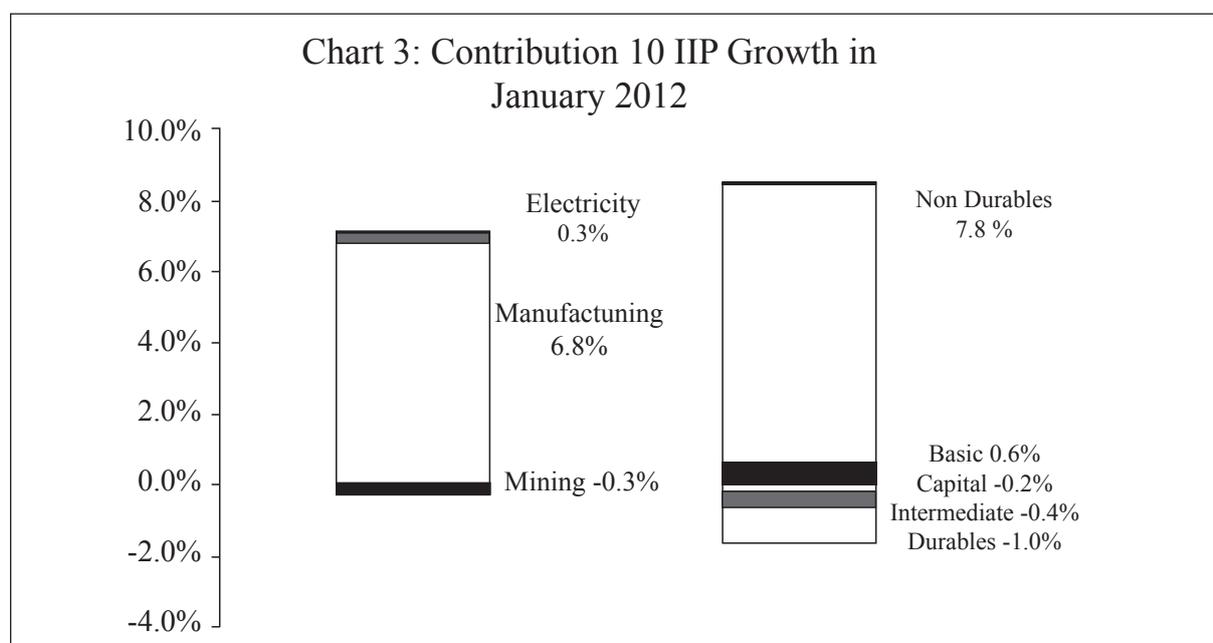
The index of industrial production (IIP), released each month shows fluctuating trends. Though there has been a recovery in industrial growth from 2.5 per cent in 2008-9 to 5.3 per cent in 2009-10 and 8.2 per cent in 2010-11, a sudden drop of 3.6 per cent compared to 8.3 per cent in the corresponding period of the previous year makes this troublesome.

## **IIP**

**Index of Industrial Production (IIP)** in simplest terms is an index which details out the growth of various sectors in an economy. E.g. Indian IIP will focus on sectors like mining, electricity and manufacturing. The all India IIP is a composite indicator that measures the short-term changes in the volume of production of a basket of industrial products during a given period with respect to that in a chosen base period. It is compiled and published monthly by the Central Statistics Office (CSO). IIP is compiled using data received from 16 source agencies viz. Department of Industrial Policy & Promotion (DIPP); Indian Bureau of Mines; Central Electricity Authority; Joint Plant Committee; Ministry of Petroleum & Natural Gas; Office of Textile Commissioner; Department of Chemicals & Petrochemicals; Directorate of Sugar; Department of Fertilizers; Directorate of Vanaspati, Vegetable Oils & Fats; Tea Board; Office of Jute Commissioner; Office of Coal Controller; Railway Board; Office of Salt Commissioner and Coffee Board. The new revised Industrial Production (IIP) with base 2004-05 for the month of May 2012 has been released by the Central Statistics Office of the Ministry of Statistics and Programme Implementation.

Pulled down by contraction in the capital goods and mining sectors, industrial production recorded a dismal growth of 2.4 percent in May -2012 slightly better than (-)0.9 percent in April 2012. Capital goods sector - machinery and equipment used by industry - declined by 7.7 percent in May, as against a growth of 6.2 percent in the same month last year. The mining sector output too contracted by 0.9 percent in May, compared to 1.8 percent growth. The manufacturing sector, which constitutes over 75 percent of the index also did not perform well and grew a meagre 2.5 percent, as against 6.3 percent in May 2011. Power generation witnessed a slower growth of 5.9 percent during May, compared to 10.3 percent last year. Only consumer durables production showed a faster growth rate of 9.3 percent in May, as compared to 5.1 percent in the same month last year.

The mining & quarrying sector recorded a contraction of 2.7% in January 2012, reflecting the continued negative impact of regulatory issues and bans on mining imposed in certain areas by the Supreme Court on mining activity.



*Source: CSO; ICRA Analysis*

However, the pace of de-growth of the mining sector eased for the fourth consecutive month in January 2012, partly reflecting a favorable base effect, with growth having slowed to 1.7% expansion in January 2011 from 6.3% in Q3FY11.

It's very clear from above graph that since July 2009 there has been a continuous downfall in Indian Mining Industry. Minerals are valuable natural resources being finite and non-renewable. Mining sector is an important segment of the Indian economy. They constitute the vital raw materials for many basic industries and are a major resource for development. India produces as many as 87 minerals, which includes 4 fuels, 10 metallic, 47 non-metallic, 3 atomic and 23 minor minerals (including building and other materials).

Chart 8: Year-on-Year Growth in Mining

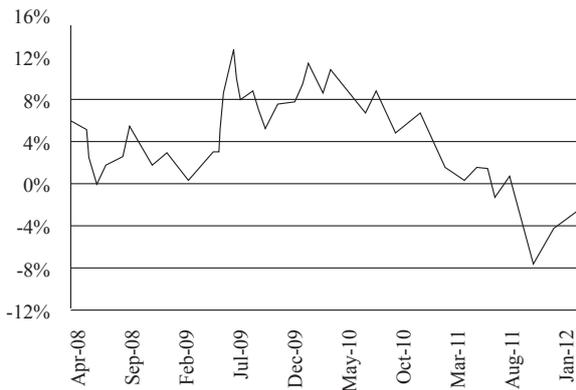


Chart 9: Year-on-Year Growth in Manufacturing

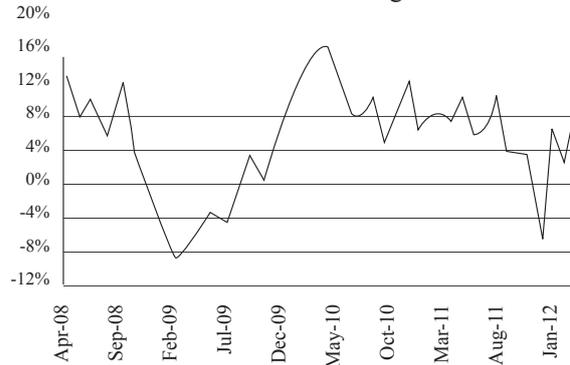


Chart 10: Year-on-Year Growth in Electricity

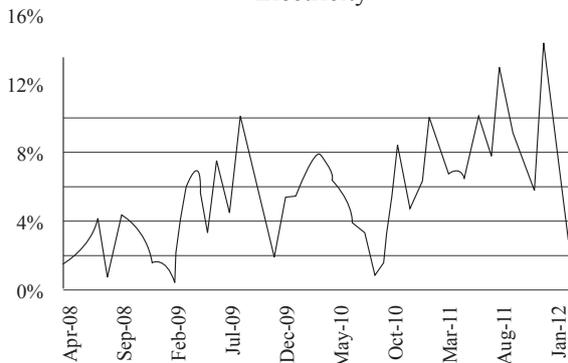


Chart 11: Year-on-Year Growth in Basic Goods

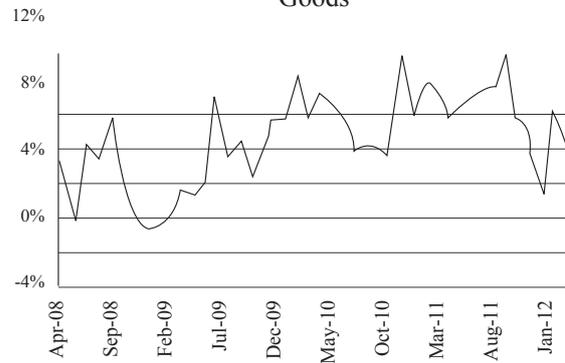


Chart 12: Year-on-Year Growth in Capital Goods

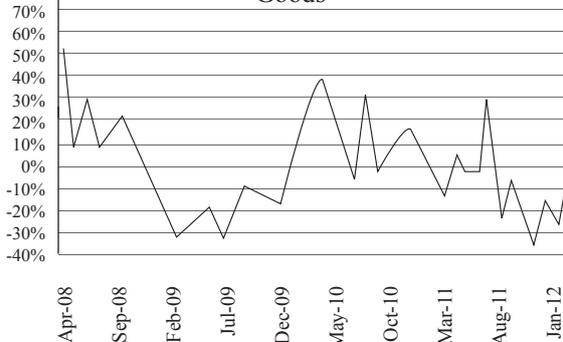


Chart 13: Year-on-Year Growth in Intermediate Goods

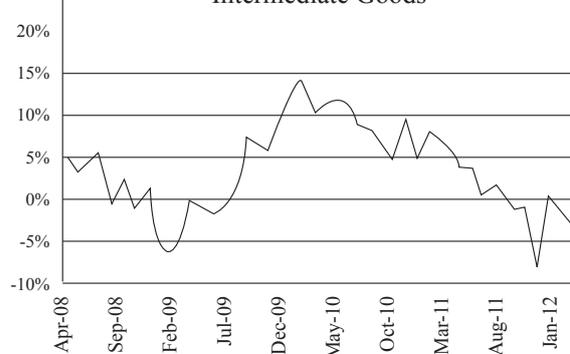


Chart 14: Year-on-Year Growth in Durables

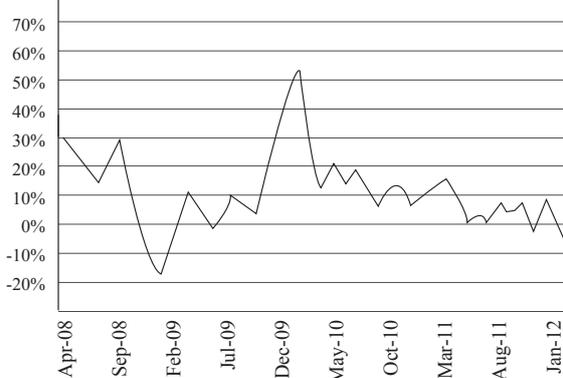
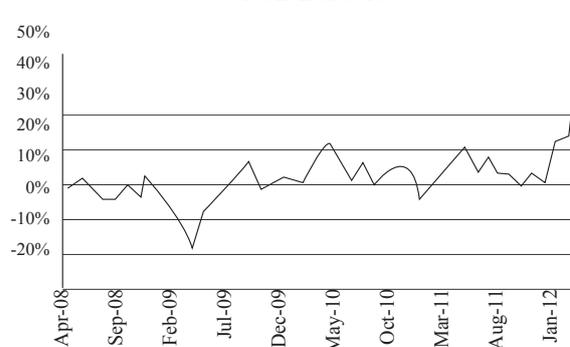


Chart 15: Year-on-Year Growth in Non-Durables

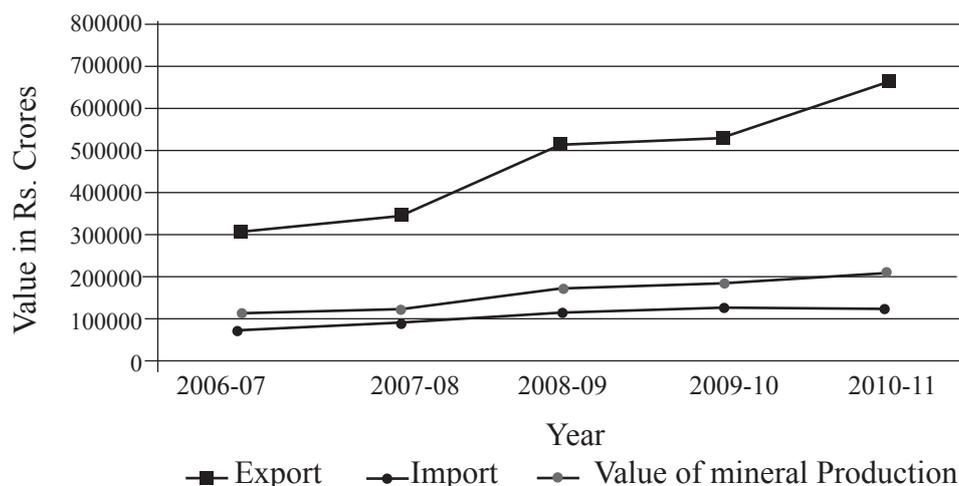


Source: CSO; ICRA Analysis

### Mineral Production

Based on the overall trend so far the index of mineral production (base 2004-05) for the year 2011-12 is estimated to be 130.38 as compared to 131.36 for 2010-11 showing a negative growth of 0.75%. The total value of mineral production (excluding atomic minerals) during 2011-12 has been estimated at `210334.55 crore, which shows a decrease of about 1.02% over that of the previous year. The decline in production is due to the restriction on exports, temporary discontinuance of mining for want of environmental clearance etc.

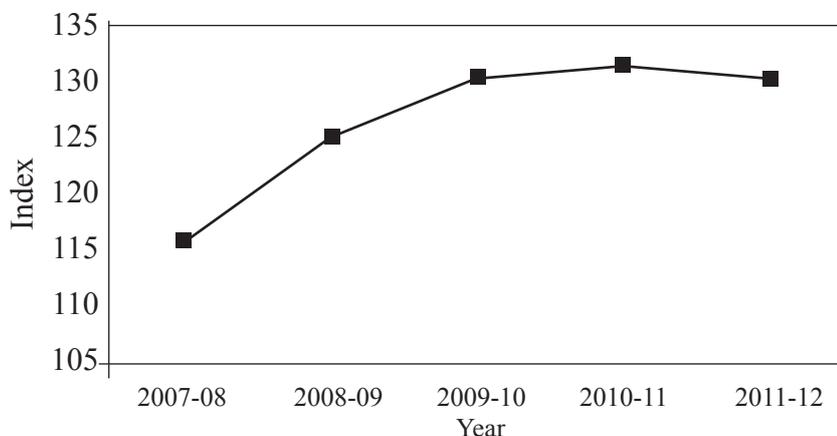
### Trends in Value of Mineral Production, Exports & Imports



Source: mines.nic.in

Thus it is very clear that there is a kind of stagnation in minerals sector which in turn is badly impacting IIP also. From above analysis it is very clear that one factor which is majorly responsible behind lame IIP is minerals and mining sector. Declining mineral production forces us to import majorly from other nation which again is putting pressures in this adverse BOP scenario and currency depreciation.

### Index of mineral production (Base 1993-94 = 100)



Source: mospi.nic.in

## **GDP from Mining & Quarrying Sector**

The advance estimates of GDP (at 2004-05 prices) for the first two quarters of the year 2011-12, indicated that the mining and quarrying sector accounted for about 2.10% of GDP. The contribution of mining and quarrying sector to GDP for the year 2011-12 is estimated at `51606 crore. This indicated a decline of 0.5% over that in the previous year.

## **Export and Imports**

The provisional value of export of ores and minerals during the year 2010-11 was ` 1,65,080crore. Diamond (mostly cut) was the principal item of export during 2010-11, which accounted for 71.26 %, followed by iron ore with a contribution of 12.97 %, alumina 5.57% and granite 3.26 %, zinc ores and conc. 1.11 %, Coal ex lignite 0.7 %, Precious and semi precious stones 0.67%, Lead ores and conc. 0.66%, Illmenite 0.58 % Emerald (cut & uncut) 0.23% and Chromite 0.17 % were the other important minerals exported during the year 2010-11.

The provisional value of import of ores and minerals during 2010-11 was ` 6,69,010crore. Petroleum (crude) was the main constituent of mineral import during 2010-11, which accounted for 63.02 % of the total value of import of ores and minerals followed by diamond (mostly uncut) with 22.82 %, Coal(excluding lignite) 6.21%, Copper ores and concentrate 2.99 %, Natural gas 2.19 %, rock phosphate 0.48 and coke 0.47 % percent.

## **GOVERNMENT POLICIES FOR MINING SECTOR**

The Indian government has opened up the mining sector to foreign direct investment in 1993 after the announcement of the new mineral policy to infuse funds, technology and managerial expertise in the sector. In 1997 automatic approval route for investments involving foreign equity participation up to 50% in mining projects and up to 74% in services incidental to mining was introduced. The Government had approved the new National Mineral Policy, 2008 on 13th March 2008. The new Policy enunciates measures to streamline and simplify the procedures for grant of mineral concessions, develop a sustainable framework for optimum utilization of the country's natural mineral resources for the industrial growth in the country. The new Policy spelt out measures to optimize the scientific mining and exploration of the country's mineral resources. Even though it is commonly agreed that India is endowed with large mineral resources, especially of iron ore, bauxite, lime stones, base metals, noble metals, and diamonds, due to inadequate survey and exploration activities, the full potential of these deposits are not known. Here there is need of proper government attention and intervention.

Rising economies of east and south-east Asia and other nations attributed to higher demands in national and international market of metals and minerals. This high demand led to scrambled, dig-sell mining practices in India which resulted in appearance of illegal mines over-night all under the nose of government of India. This has also led to

rise of mining mafia and other unscrupulous new entrants in the sector with political support. Government has failed to ensure key regulatory mechanisms so that at least legal mining operators comply with the law.

The 'first come first serve' policy of leasing mines remained the major way of contracting out mines to private ownerships by the ministry. The FDI entrants still find it very difficult to operate due to uncooperative attitude of locals, government's etc. After incident of Orissa where local tribes opposed Vedanta's to enter, the MNC's has got a further setback. The New Mineral Policy 2008 and Sustainable Development Framework 2010 enunciate several measures to address these issues but the real problem lies in the implementation of the policies. .

Mining as an occupation is done in the most inhuman way where the miners risk their lives for a meager sum of money; since most of them are illiterate bonded labor mostly poor local tribal people they are unaware and even helpless to voice their concern.

There is a need of scientific practices and advance geological instrumentation which helps in increased production in a sustainable way. But unfortunately these practices are missing in Indian mining sector. Currently no distinction is being made between companies which have good environmental practices and those who do not. Clarity in regulatory policies in terms of uniformity of interpretation is also missing.

## **ANALYSIS AND DISCUSSION**

As discussed India is endowed with large amount of metals and minerals having tremendous demand in the domestic as well as international market can contribute greatly to exchequer as well as to Indian GDP. But there are lot many areas and problems to address before we can think of optimizing the benefits. Illegality in the mining sector has deprived state governments of badly needed revenues and has threatened the industry with costly and unpredictable shutdowns. Minerals are valuable natural resources being finite and non-renewable resources has, therefore, to be closely integrated with the overall strategy of development; and exploitation of minerals is to be guided by long-term vision and policies.

There are several recommendations given to the government that include setting up of Lokayuktas and strengthening regulatory mechanisms, scrutiny and rehaul of environment impact assessment studies and criminal prosecution of erring mining outfits. Various innovative approaches can be adapted like inclusion of local governance system with sufficient powers to work with PSUs or MNCs. These PSUs or MNCs should also undertake corporate social responsibility that can benefit workers and locals associated with this sector. Corruption prevailing in the sector should be addressed by staunch governmental policies. Some of the required focus areas for mining industry in the present global competitive environment must include new financial strategies, aggressive exploration development programs, investment-friendly policies and regulatory framework, value addition of minerals and the use of productivity enhancing techniques. Indian government should encourage Indian mining companies

to collaborate or form JVs with global mining leaders in the technology space so as to -enjoy latest technologies. India needs to enhance and optimize logistics configuration between mines, plants, railways and ports. High turnaround time in the network leads to poor operational efficiency, resulting in demurrages and detentions. Managements also have to play a key role in adopting sustainable practices for their operations and integrate it into the overall business strategies to address the sustainability issues critical to the mining and metals industry.

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