

Impact of Global Economic Recession on the Livelihood of Diamond Workers: a case study of Gujarat, India

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Diamonds may be forever, but apparently Diamond buyers are more Fickle

Gujarat is one of the most economically progressive provinces of the Indian Sub-Continent. Diamond Industry and the Diamond Workers have played a significant role in the high economic growth estimated at 12% SGDP per annum. It is estimated that Surat city alone employs 4.5 Lakhs in the diamond industry and roughly around 1 million people work in the diamond industry. Rough and cut diamonds worth of \$43 Bn are imported from Antwerp to Surat and other cities of Saurashtra region of the Gujarat State and are polished here and again export to countries like US and other European countries. On the onslaught of Global recession especially in the US the fate of million of these workers became uncertain who lived a dignified life. The plight of the workers were reported in the media and even the film industries captured the woe of the life of the workers. Most of the diamond units closed in the mid of 2008 and virtually the whole diamond industries closed down during the early 2009. Workers migrated back to their village and fall back upon cultivation and other non-farm activities like weaving, vegetable vending, sewing and stitching, embroidery and so on. Interestingly the workers cope with the changed situation by taking up alternative employment. Keeping the grim situation of the workers, present paper would try to understand the impact of Global Recession on the livelihood of the Diamond workers through a primary field study of Saurashtra and South Gujarat. The study will also try to find out means of coping strategy of the workers and impact of employment guarantee and other social safety measures initiated by the Government. In any case recession reoccurs; what precautions the diamantaries, the workers and the Government has to take in advance.

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Introduction

The global financial crisis started in 2007 and continuing until now is one of the worst recessions witnessed by Global Economy since the Great Depression of 1930s². The impact of the present Global Recession rooted especially in the United States of America has spread to other economies and sectors of the world directly or indirectly depending on the U.S. Economy. Both the formal as well informal sector of the economy as well as employment has been deeply influenced by the crisis. Many financial institutions like the Lehman Brothers and others were deeply impacted by the ongoing crisis. Many financial institutions closed down and others approached the U.S. government for bail out. The real estate market, the stock market has suffered a lot. It contributed to the failure of key businesses, declines in consumer wealth estimated in the trillions of U.S. dollars, substantial financial commitments incurred by governments, and a significant decline in economic activity. The crisis rooted in the real estate and housing market in U.S. that collapsed in 2006. This affected the value of securities tied to the real estate market and hence impacting the global financial institutions negatively. Questions regarding bank solvency, declines in credit availability, and damaged investors confidence had an impact on global stock markets, where securities suffered large losses during late 2008 and early 2009. Economies worldwide slowed during this period as credit tightened and international trade declined.³ The impact of present recession is huge especially in U.S. and has implication for other economies in the world. This is because as reported by the brooking institution that says U.S. consumption accounted for more than a third of the growth in global consumption between 2000 and 2007. The US economy has been spending too much and borrowing too much for years and the rest of the world depended on the U.S. consumer as a source of global demand. With a recession in the U.S. and the increased savings rate of U.S. consumers, declines in growth elsewhere have been dramatic. (ibid. Brooking report 2009). the output of goods and services produced by labor and property located in the United States—decreased at an annual rate of approximately 6 percent in the fourth quarter of 2008 and first quarter of

² Martin Neil Bailly and Douglas J. Elliott (2009): The US Financial and Economic Crisis: Where Does It Stand and Where Do We Go From Here? The Initiative on Business and Public Policy, Brookings

³ IMF (2009): World Economic Outlook: Crisis and Recovery

2009, versus activity in the year-ago periods⁴. There is a significant rise in unemployment in the United States as well as economies depending on it. U.S. Unemployment rate stands at 10.1% by October 2009, the highest rate since 1983 and roughly twice the pre-crisis rate. The average hours per work week declined to 33, the lowest level since the government began collecting the data in 1964⁵. According to International Labour Organisation report; current global crisis is could increase world unemployment by an estimated 20 million women and men⁶. Based on revised global growth estimates by the International Monetary Fund (IMF), the UN and early reports suggesting rising job losses for most countries where data was available, ILO Director-General Juan Somavia said the ILO's preliminary estimates indicated that the "number of unemployed could rise from 190 million in 2007 to 210 million in late 2009." Mr. Somavia added that "the number of working poor living on less than a dollar a day could rise by some 40 million – and those at 2 dollars a day by more than 100 million. According to an OECD projection the average unemployment rate in the OECD area may reach 6.3% in the last quarter of 2008, from 5.5% a year earlier. The unemployment rate is projected to increase further in the next 18 months and peak at 7.3% in the second quarter of 2010. Overall, these projections suggest an increase in the number of unemployed persons in the OECD area from 34 million in 2008 to 42.1 million in 2010 – the most rapid rise in OECD unemployment since the early 1990s.⁷The report also indicates that unemployment rate is also rising in the European Union but at a slower pace.

Looking at the growth record of the Indian economy it was thought that the global crisis would not affect much the Indian economy. Later it was realized that FDI started declining and Indian economy was projected to grow around 7% in 2008-09 and at six per cent in 2009-10. The industries most affected by weakening demand were airlines, hotels, real estate. Besides this, Indian exports suffered a setback and there was a setback in the production of

⁴ BEA Press Releases: (2010.)<http://www.bea.gov/newsreleases/national/gdp/gdpnewsrelease.htm>.

⁵ BIS-historical Unemployment Rate Data Table (2010):
http://data.bls.gov/PDQ/servlet/SurveyOutputServlet?data_tool

⁶ http://www.ilo.org/global/About_the_ILO/Media_and_public_information/Press_releases/lang-en/WCMS_099529/index.htm

⁷ Impact of the economic crisis on employment and unemployment in the OECD countries: OECD Economic Outlook (No. 84, November 2008).

export-oriented sectors. The government advised the sectors of weakening demand to reduce prices. It provided some relief by cutting down excise duties, but such simplistic solutions were doomed to failure. Weakening demand led to producers cutting production. To reduce the impact of the crisis, firms reduced their workforce, to reduce costs. This led to increase in unemployment but the total impact on the economy was not very large. Industrial production and manufacturing output declined to five per cent in the last quarter of 2008-09. Consequently, a vicious cycle of weak demand and falling output developed in the Indian economy.

A weakening of demand in the US affected our IT and Business Process Outsourcing (BPO) sector and the loss of opportunities for young persons seeking employment at lucrative salaries abroad. India's famous IT sector, which earned about \$ 50 billion as annual revenue, is expected to fall by 50 per cent of its total revenues. This would reduce the cushion to set off the deficit in balance of trade and thus enlarge our balance of payments deficit. It has now been estimated that sluggish demand for exports would result in a loss of 10 million jobs in the export sector alone.⁸

Recession in the United States equally affected the diamond industry and trade world wide during this period. The United States remained the world's largest market for industrial diamond until now. Domestic consumption of industrial diamond during the year 1996 was estimated to be 224 million carats. Due to recession Retail sales dropped as much as 20 percent over the year-end holidays in the United States, which is responsible for about half of the world's demand for diamonds.⁹ As the diamond industry is a network of miner, cutters and polishers and retailer the impact of economic recession is huge on each sector of the network that has affected equally.

Cutting and polishing of rough diamond is one of the most important activities in the global diamond supply chain. Rough diamond gets value addition in this Global Production Network. Rough and diamond amount of \$43 billion passes through Antwerp, Belgium to

⁸ Ruddar Datt (2009) :Global Meltdown and its Impact on the Indian Economy, Mainstream, Vol XLVII, No 15, March 28

⁹ Julia Werdigier (2009) :, Diamond Sales, and Prices, Plunge NYT February 20
<http://www.nytimes.com/2009/02/21/business/21diamonds.html>

India and other Diamond Polishing Nations. Diamond market here also is reeling from the pang of recession. Not only that it has widespread implication in other parts of the Globe especially Surat city of Gujarat of India It is unique in the sense that it has a rich craft of diamond making and 11 out of the 12 cut and polished diamonds are generated from Gujarat, India. Estimates shows that in Gujarat alone employees are around 10 lakhs of cutters and polisher (1 million) and Surat alone around 0.5 to 0.6 Millions. Some 500,000 jobs have been lost in the Indian diamond-manufacturing hub of Surat in Gujarat. Big diamond houses in Israel, an important diamond centre, have already started reporting bankruptcies. The market showed indications of a crisis as early as October 2008. The problem centers on the procurement of rough diamonds (the raw material), which is the first stage of the diamond's production value chain. In the first few months post-October 2008, demand for rough diamonds dropped by 70-80 percent, which in turn led to a 50-60 percent drop in the wholesale polished output with retail diamond and diamond jewellery sales dropping by 20 percent in the month of February.¹⁰

Gujarat is a fastest growing provincial economy of the Indian Subcontinent. The major driver of high economic growth Gujarat are Energy, Oil & Gas, Agro & food processing, Textiles, Diamonds, Petrochemicals, Engineering, SEZ, Medical Tourism, Biotechnology and IT. Diamond cutting and polishing being the export oriented add significantly to the State GDP and economic growth. Gujarat contributes about 72 per cent of the total exports of India. Gujarat accounts for about 80 per cent of the diamonds processed and 90 per cent of the diamond export from India. Surat has 65 per cent share in India's diamond trade. Diamonds worth \$9 billion are being processed in Gujarat, accounting for 80 percent of India's total diamond exports, according to official data¹¹. At this juncture it is important to understand the impact of economic recession on the workers and their livelihood as labour is an important factors of production in any business or enterprise including the diamond industry. Livelihood and efficiency of the worker has a key role to play. As the diamond cutting and polishing is key to the total diamond supply chain; it's performance is key to the

¹⁰ Karishma Bhansali Mehta, (2009): 'Antwerp's diamond industry reels from recession', March 29: <http://www.thaindian.com/>

¹¹ Menon, Sudha Venu (2008): Drivers of economic growth in Gujarat, MPRA Paper No. 9233, http://mpira.ub.uni-muenchen.de/9233/2/MPRA_paper_9233.pdf

livelihood of the millions of workers involved in mining as well as retail selling. Further it has enormous backward and forward linkages that provide additional livelihood to millions. Keeping the importance of diamond cutting and polishing in mind present paper would try to understand in detail the impact of global economic recession on the livelihood of diamond cutting and polish workers in Gujarat India; despite the fact the Diamond Cutting industry has recovered and now there is an excess demand for workers. Gujarat is now facing a shortage of around two lakh (200,000) workers.¹² This shortage has a link to the gone recession and hence it is important to analyze the impact of economic recession so that in the coming years if recession reoccurs the industry and workers will be able to withstand any pressure from such economic vagaries.

The objectives of the present paper are to analyse the following in the context diamond cutting and polishing workers during recession;

- a. Profile of Global diamond Industry and contextualizing Gujarat Diamond Industry there in
- b. Process of Diamond Cutting and Polishing business
- c. Profile of diamond cutting and polishing Workers
- d. Impact of Recession on the Livelihood of diamond Workers
- e. Coping Mechanism
- f. Government's Response and Measures
- g. Suggestions and Conclusion

Methodology

We are associated with Mahatma Gandhi Labour Institute, an autonomous institute established by the Government of Gujarat to undertake research studies, organizing training programmes, seminars and workshop for the workers in the organized and unorganized sector. While the economic recession impact on diamond industry was on high especially the

¹² Gujarat's diamond industry faces acute shortage of skilled workers:
http://www.ummid.com/news/2010/August/07.08.2010/surat_diamond_industry_faces_labor_shortage.htm

first half of the year 2009; we thought to address the issues of the workers. In order to motivate them we have organized few training programmes on livelihood Improvement Schemes, Social Security Programmes as well as skill up gradation programme for alternative livelihood for the diamond workers of Bapunagar and other areas of Ahmedabad city of Gujarat. During the course of the two days training programme, I had the opportunity to interact with more than 100 workers and small unit owners and tried to understand the impact of recession on their livelihood and what are their requirements and need. One to one informal discussion on the impact of global recession was done with the workers. In order to make a comparison we have organized another training programme on livelihood improvement programmes for the diamond workers in the month of May 2010 to understand the present situation.

The study primarily followed the focused group discussion method to assess the impact of recession on the livelihood of diamond workers in few places of Gujarat. The first one was done in the month of February 2009 at the *Galsana* Village of Dhanduka Taluka of Ahmedabad. The village is near to one of the emerging cutting polishing centre known as Botad of Bhavnagar District. The other group discussions were held very recently in a period where diamond industry is picking up. However the imprint of recession is evident from the discussions. Group discussions were held with group of male workers and small unit owners at Bhavnagar district of Gujarat. Apart from group discussion we had discussion with leading persons, academics and concerned citizen having knowledge of Diamond workers to understand the situation. We had a detail discussion with the president of Bhavnagar Diamond Industry Association. The next discussion was done with a group of women workers at Bapunagar area of Ahmedabad to understand the impact of recession especially on women. We have also made an one to one discussion with the Instructor of Gujarat State Diamond training institute to understand the detail process of diamond cutting and polishing industry and the impact of recession. We had a discussion with *Saurashtra* Cooperative Bank, Bapunagar's branch manager to understand the coping mechanism adopted by the *Kathiawar patidar* community and how the bank has supported the livelihood of the diamond workers and their family members at the time of recession. Further, I had a discussion with the officials of Ahmedabad Diamond Industry Association to assess the impact of global economic recession on the livelihood of the diamond workers. The third and final discussion was held at Surat; the diamond city of India. Our first discussion was with the present

president of Surat Diamond Industry Association and came up with a good number of suggestions. We had a discussion with the official of Gem and Jewelry Corporation of India's branch office Surat regarding the challenges posed by recession and what will be the future of Diamond Industry in India in a situation where China is emerging as a new player in diamond cutting business. We proceeded to the Indian Diamond Institute; Katargam of Surat to discuss on the issue of coping mechanism of diamond workers. We had a discussion on the *Ratnadeep* skill up gradation programme of the Government of Gujarat undertaken during the recession so that the workers can take up alternative livelihood. In the end we had a discussion at Centre for Social Studies especially on the issues of social composition of diamond workers with the issue of recession. Besides this I had a telephonic discussion with some of the workers who left Surat and gone back to their native place like Junagadh district. The primary study is supplemented with the secondary data available regarding the total number of units in the diamond industry, workers employed and the export contribution of diamond industry etc.

Profile of Global Diamond Trade and Contextualizing Gujarat Diamond Cutting and Polishing Industry

Diamonds are one of the world's, and specifically Africa's, major natural resources. An estimated US\$13 billion worth of rough diamonds are produced per year, of which approximately US\$8.5 billion are from Africa (approximately 65%). Other countries producing rough diamond are Angola, Australia, Botswana, Congo, Namibia, Russia and Canada. The diamond industry employs approximately ten million people around the world, both directly and indirectly, across a wide spectrum of roles from mining to retail. Global diamond jewellery sales continue to grow, increasing three-fold in the past 25 years, and are currently worth in excess of US\$72 billion every year.¹³ The diamond supply chain also (known as diamond pipe line) is the process of bringing diamond from the earth to the consumer. It can be presented as follows;

¹³ The Diamond Industry Fact Sheet: www.diamondfacts.org

Diamond Pipe Line

Exploration	Mining	Sorting	Cutting and polishing	Jewellery Manufacturing	Retailing

Rough diamond themselves are not useful *per se* and value addition is required for making them valuable to the consumer for final consumption. To reiterate *Surat* city of Gujarat is the most important place of this supply chain where rough diamonds are brought, and then cut and polished with it's rich craftsmen. Good quality of diamonds are usually distributed to one of the main diamond cutting and trading centres in Antwerp, Mumbai, Tel Aviv, New York, China, Thailand or Johannesburg. Once they arrive at the diamond centres, experts (known as 'diamantaires') cut and polish the rough diamonds into shapes, such as the round brilliant, the oval, the pear, the heart and the emerald. Polishing follows cutting, before the diamonds are again classified by their cut, colour, clarity and carat weight – also known as the 'Four Cs'. These diamonds are typically sold to diamond wholesalers or diamond jewellery manufacturers in one of the 24 registered Diamond exchanges (known as bourses) located across the world. (*ibid.*) The Diamond Trade Company (the distribution arm of De Beers) sorts and distributes 45% of the world's rough diamond supply. The balance is sorted and sold in centres such as Antwerp and more recently Mumbai. The DTC exclusively sells to 93 clients that are called "Sight holders". In the analysis followed our focus will be to understand the impact on this sector only. The final process of the Global Diamond Trade ends with consumption or retail of the diamond trade. The value of diamond jewellery sold each year is approximately US\$72 billion, which includes the cost of the diamonds, precious metals and other gems. The USA represents the largest market (50%), followed by Japan (15%), Italy (5%), India (3%), China (2%), The Gulf (2%) and other countries (23%). According to independent research, diamond jewellery is the most highly sought-after category of luxury goods, both by women for themselves and by men for gifts. (*ibid.*) Thus

the tentacles of diamond industry are not confined to a single continent or country. Rather it's complicated process spread among countries and hence the employment and income opportunity is enormous. It also benefits the member countries in a number of ways. For example Africans are using the revenue from diamonds to create wealth for themselves. The diamond trade contributes approximately US\$8.5 billion a year to Africa and is helping the continent in four key ways: like enhancing GDP, improving health especially fighting against HIV/AIDS epidemic, improving education and providing employments. Diamond cutting industry in Gujarat has similar benefits to it's craftsmen, the diamond ateliers and other who indirectly depends on the mercy of the diamond cutting industry like fast food, tea and beverage industry, transport, garment and textile, the betel and tobacco industry, entertainment industry and so on. Following section examines the implications of diamond cutting industry in Gujarat like it's size and composition, spread, income, export and employment capability etc.

Profile of Diamond Cutting and Polishing Industry of Gujarat

Gujarat Provinces of India is located in the western part that was craved out of Maharashtra State in the Year 1960. In recent year it's state GDP is growing at 12% per annum more than the national average. It's industrial growth is much faster than any other state. Similar is the case with agricultural growth growing at higher rate than the National average. Gujarat is unique in many ways like it has a longest coast line of 1600 km and home to number of biggest ports. Gujarat is the only home to the Asiatic Lions, Wild Ass in India. It produces largest amount of salt both inland and marine, it has the unique ship breaking yard at Alang, and it is the only producer of Agate (*Akik*) in the World. It is also one of the most urbanized province in India. Last but not the least the only state in India having the diamond cutting and polishing industry. Diamantaries tried to start the diamond polishing units in other states but could not succeed. Diamond polishing remain a domain of Gujarat especially the *Saurashtra Patels*. Further Surat remains the home to the largest number Diamond and cutting polishing units as well as workers. The Indian diamond cutting centres are mostly concentrated in Surat in Gujarat. However, there are many units in other parts of the State viz, Ahmedabad, Mehsana, Banaskantha, Patan, Rajkot, Amreli, Junagadh and

Bhavnagar.¹⁴Not only that diamond units also in operation at the *taluka* (block) level. For example diamond units are in operation in taluka like *Savar Kundla* of Amreli,Botad,Palitana in Bhavnagar,Keshod in Junagdh,Palanpur in Banaskantha etc.Diamond industry are unique in many way like they are highly employment intensive a single unit with an investment of Rs 20,000.00 (300 Euro) 6 to 7 person can get employment. This need laths (known as *Ghanti* or the polishing machine locally) run with help of a ½ hp motor consuming very little amount of electric power and a space of one room. Unlike other industries it doesn't have the problem of pollution. Diamond industry of Gujarat having a turn over of around \$15 Bn annually, employs approximately around 1 million of workers. As per the information available with the Government of Gujarat, there are approximately 6547 diamond processing units employing approximately 0.7 million people in the State. Of this, approximately 38 % of the units and 57 % of the workforce are in Surat, while Amreli District, with 22% of the units, occupies the second place in terms of number of units, and Ahmedabad, with 14.3% of the workforce, occupies the second position in terms of labour. (Reserve Bank of India: 2009) .Growth of the diamond industry and diamond workers is not a very old phenomenon and dates back to 1950s.¹⁵Diamond units and workers data are not exact as the turn over is very high in this industry and a worker some time changes multiple units and owners during the same year. Even the diamond industry association of Surat was unable to report the exact number of the workers and unit.Breman report the growth of diamond industry as follows. As an ancient port of great fame, Surat has been a centre for production of wealth and splendour.Diamonds today are a global commodity and are imported as rough and exported as cut and polished or value added diamond. In 50s patels from Saurashtra and Jain from Palanpur started the diamond cutting and polishing industry in Surat as well as nearby Navsari.During the last 60 years there are time of recession and boom in this trade. The growth of the industry can be understood from the following table;

¹⁴ Report of the Task force for diamond sector (2009):Reserve Bank of India,Ahmedabad

¹⁵ Jan Breman et.al. (2000): Down and Out:Labouring Under Global Capitalism, Oxford University Press, New Delhi

Table-1

Size of the Diamond Cutting Industry in Surat

Year	No of Diamond Ateliers	No of Workers
1955	100	500
1960	1000	20,000
1978-79	57000	41,000
1982	9000	57,500
1990	NA	90,000
2009	6547	8,00,000*

Source: Breman J. (2000)

* Estimated by RBI for entire state: The actual number may be more. From Group discussion it is reported that around 0.5 million workers were engaged in diamond industry in the peak period

Thus around 1 million workers are depending on the diamond cutting and polishing industry in Gujarat during the peak season. The major canters on the basis of their size and contribution are Surat, Bhavnagar, Amreli, Ahmedabad. Recession occurred during 1982s and many workers those gone back home had set up diamond units in their native places and this is how Bhavnagar and Amreli as diamond cutting areas have been developed. Subsequent recession has resulted in decentralization of the diamond industry in Gujarat.

Distribution of Diamond Industries in Gujarat (Fig-1 and Fig-2)



Gujarat exported cut and polished diamonds worth US\$14.2 billion in 2007-08. To reiterate, the industry has grown from its small origin in the 50s and has established itself as the world's largest manufacturing centre for cut and polished diamonds for the last many years contributing 60 percent of the world's supply in terms of value, 85 percent in terms of volume. Export and import of cut and polished diamond from India can be clear from the following table drawn from the data of Gem and Jewellery Corporation of India.

Table-2

India's Imports of Rough and Polished Diamond

(In US\$ Million)

Items/Year	1981-82	1991-92	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08
Import of Rough Diamonds	627.00	1882.00	6270.99	7141.04	7669.67	8699.67	8766.89	9796.68
Import of cut and polished Diamonds	0.00	0.00	632.07	1187.34	2849.36	3009.23	1986.53	5430.70

Source: GJEPC¹⁶

Table-3

India's Exports of Cut and Polished Diamond

(In US\$ Million)

Items/Year	1988-89	1999-2000	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08(p)
Export of Cut and Polished Diamond	5042	6659	6187	5982	7105	8603	11163	11831	10910	14180

Source: Gem and Jewellery Export Promotion Council of India (GJEPC)

¹⁶ The Sparkle of Success: The Indian Gem and Jewellery Industry, GJEPC publication (2009)

Table-4**India's Four Decades of Exports of Gem and Jewellery****(In US\$ Million)**

Year	Total Gems and Jewellery	C & P Diamonds
1968-69	62	40
1978-79	887	846
1988-89	3145	2910
1998-99	6212	5026
2001-2002	7556	5972
2002-2003	9106	7110
2003-2004	12155	8627
2004-2005	15678	11181
2005-2006	16708	11856
2006-2007	17102	10903
2007-2008 (P)	20889	14180

Source: Gem and Jewellery Export Promotion Council of India (GJEPC)

Thus the import of rough diamond has increased constantly along with the polished diamond. Similarly the export of polished diamond has increased from US\$5042 Mn in 1988-89 to US\$14180 mn. in 2007-8. Today after creating a niche for itself in the diamond worked with small diamonds, India is developing skills for cutting and polishing larger stones and fancy cuts. Indian diamond polishing factories are on a par with the world's best and are at the cutting edge of technology. The extent of India's dominant position is evident when compared to the performance of the two major competing centers - Israel and Belgium.¹⁷

Diamond industry of Gujarat not only contributed to the State and National Economy through export; but it also provide livelihood more than million people directly and indirectly. Almost all the sector like transport, garment and other depend on the diamond industry. Not only that the diamond industry work as a modern cottage industry that helped

¹⁷ Gem and Jewellery Export Promotion Council of India

Gujarat fight against vagaries of drought that was quite frequent years back. Diamond industry helped the farmers survive drought in Saurashtra. It has also provided some measure of diversification in the near static agricultural operations of rural economy of Gujarat.¹⁸

Diamond Cutting and Polishing Process in Gujarat

Like diamond pipe line, in diamond cutting and polishing, to come to the final polished diamond the rough diamond has to pass through 4 to 5 stages and hence there are different types of workers as well. The owners through the manager distribute the rough diamond to the workers. Following processes are involved to obtain the final product;

1. Talia Tarasi –Bottom Work
2. Ghat Tarasi -Bruting
3. Table –Polishing or table work
4. Mathala –Top Works
5. Athpel -8 Facets

The wage rate paid is on the basis of per piece and the wage varies for the steps discussed. Manager will keep an account of diamond polished by the worker and now a day in the end of the month the calculated wage will be paid to the worker. On an average a worker earns Rs.7000.00 to Rs.12000.00 per month. Depending on the skill and quality of rough the worker sometimes earn more. Diamond industry in proper health is a very good source of employment for the semi and even illiterate and it does not involve any hard work.

Social Composition of the Diamond Industry of Gujarat

Understanding the social and demographic composition of the diamond cutting and polishing industry is important for framing policy point of view. In Bhavnagar District the owners mostly belong to the Patel Community whereas the small unit holders as well as the workers are drawn mostly from the *Talpada Koli* Community. We have also observed that there is significant participation of women workers in the diamond cutting and polishing units. In Bapunagar of Ahmedabad the social composition of the industry has a variation. Although owners are the *Saurashtra Patel*, the workers are drawn from a diverse community

¹⁸ H.N.Patakh:Case of The Diamond Cutting and Polishing Industry ,paper presented in National Seminar on Social Security for the Unorganized Labour,organized by MGLI on 21-22nd July 1989

and caste as well as Interstate migrant workers from Madhya Pradesh, Uttar Pradesh, Maharashtra and Orissa. Workers from minority community, the *devi pujaks*, and *dalits* are now working in the diamond industry of Ahmedabad. In Ahmedabad like Bhavnagar there is a significant participation of women in the diamond industry. However composition of Surat Diamond industry is a special case study.¹⁹ *Saurashtra Patels* dominate in almost every sphere of the Varachha area of Surat. They have achieved a dignified social and economic status in Gujarat. Diamond cutting is the domain of Saurashtra Patel community. Interestingly workers, owners, brokers sub-brokers all belongs to the Patel community and hence there does not exist a master servant production relation²⁰. The worker has the liberty to change the owner at wish and it is the industry where owners run behind the workers. Kinship and social identity play significant role as the whole industry is based on Trust. The result is a low transaction and enforcement cost. This type of social structure may create trouble for the industry in a time of recession.

Global Meltdown and it's impact on Livelihood of Diamond Workers: Analysis

In the introduction we already have discussed about the chronicle of the present global financial crisis and it's impact on various sector including the diamond. To mention again the diamonds, after cutting and polishing, are returned to the supplier and are ultimately exported by the businessmen engaged in the activity. As the finished product is exported, the survival of the industry depends on overseas markets, especially in view of the limited domestic demand. The diamond industry in Gujarat accounts for 72% of the world's processed diamonds and 80% of India's diamond exports. Owing to a drastic fall in export orders from the US and European countries, the two largest markets for cut and polished diamonds, the diamond industry in India has come under the grip of a global economic slowdown and has been pushed to the brink of recession. This unprecedented slack in demand has forced traders to shut their units and there seems to be no sign of recovery or improvement in the market as the US economy continues to remain in turmoil and there is

¹⁹ Kiran Desai and Nikhil Raj (2002): No glow at Surat's Cutting Edge in Hard Labour at a Tender Age: Ruma Ghosh Singh et.al. (Eds), V.V.Giri National Labour Institute Publication

²⁰ M Engelshoven (1999): Diamonds and Patels: a report on the diamond industry of Surat,- Contributions to Indian sociology, - cis.sagepub.com

no alternative to the US market. The immediate cause for concern is the large-scale layoffs of diamond workers resulting in acute distress to them. While the entire economy, both in India and the world at large, is faced with the prospect of a severe recession, the large number of workers affected in the diamond industry has begun to engage the attention of the Government and banking circles. (ibid. 2009).

Group discussion among the workers in Ahmedabad and Bhavnagar reveal that the ordinary workers have no idea of recession and how it influence. Recession known as *mandi* in local parlance is forecasted by known and even they were unaware about it's nity and gritty. During our training programme for the diamond workers support that the workers have no botheration about the economic issues. The workers get one month vacation on the eve of *Divali* a festival observed in India especially by the business community in the month of October and November .In the year 2008 November or December the impact recession felt by the owners and as the worker joined the units before Christmas the owner tried to inform the workers regarding recession or *Mandi*. As the overseas market for diamond collapsed, the workers have to search alternative livelihood. This is how the crisis began. This is the case among workers in Bhavnagar and Surat also. One by one unit closed and many of the owners got shocked to know the recession. In Surat we also tried to understand the impact of recession on the livelihood of the diamond workers. Almost all the units were closed down for period of 3 months in Bhavnagar to 6 Months in Surat and Ahmedabad. Produced diamond could not be sold in the International Market. There was panic among unit owners as well as the workers. Frequent report in media added panic to the existing situation and workers were not in a position to forecast the length of the recession and when the industry will recover.

Impact of recession on the Diamond Industry and Coping Mechanism

Discussion with the knowledgeable person revealed that around 80% percent of the diamond units in all the three places were closed. The unit owner were not in a position to sell the polished diamond and in many cases they have sold it at a throw away prices. While organising the training programme for the diamond workers in the month of April 2009, it was found out that the diamond owners converted their units into alternative business mostly embroidery, garment making, mineral water bottle plants, imitation jewellery, mobile

accessories and covers, incense sticks making etc. In Ahmedabad, *Manpasand* area of Bapunagar earlier was full of diamond polishing units but after the recession most of the units around 30% were converted into embroidery job work business. While discussing with few owners I asked whether they will get back to diamond polishing as it has recovered. The owner said, they are not willing to come back to diamond polishing any more. Government also tried to assist the unit owners to go for alternative business through the District Industries Centre. From the discussion it is also revealed that for the closing down of the units are consequences of global crisis; however the owner could have run the units for a while say till the diamond industry recover. They could have done it had they have not diverted their profit during peak period to other speculative activities like investment in stocks and share and mostly in real estate. Housing bubble was the root cause of the present crisis in U.S.A and similarly the diamantaries in Surat and other parts of Gujarat were affected because of diversion of fund to real estate and housing that was equally badly hit by the economic recession. Further lack of education and training on the issues of quality improvements and technological up gradation were also some reason for mismanaging the recession. Government looking at the crisis requested the Reserve Bank of India to support, guide and revive the diamond industry in Gujarat and as a result Task Force under the leadership of Reserve Bank to prepare a Report on the problem faced by Diamond Industry in Gujarat. To quote the report 'Pursuant to the deliberations in the meeting held by the Governor of RBI with the Minister of Finance, the Minister of State for Finance of the Government of Gujarat and senior officials of government and banks on February 11, 2009, a Task Force was constituted, comprising representatives of the State Government, the SLBC convener, other banks and SIDBI to look into the distress arising on account of problems faced by diamond industry in Gujarat and to make practicable recommendations for mitigating the difficulties.' (RBI 2009.*ibid*).The Task Force recommended the following to address the problem of the diamond industry of Gujarat;

- Expeditious restructuring of the existing borrowal accounts as per RBI guidelines RBI has issued detailed guidelines for suitable restructuring of borrowal accounts. Banks will take suitable measures to expeditiously release the benefits of restructuring. In order to enhance the liquidity support to the industry, banks will examine the scope for lending against stock of polished diamonds held by units in their inventory.

- Finance for new diamond sector units for creation of employment opportunities Banks may consider proposals for credit support to new diamond sector enterprises, which will generate employment for the workers. Banks may also explore the possibility of financing procurement of rough diamonds from reputed agencies for cutting and polishing, to maximise employment of workers.

Thus, the big diamond industry owner to some extent survived despite closure due to their existing social and economic status. But the small and medium unit owners were unable cope even after closing down their units. They have shifted to alternative business as discussed. The said discussion was important for the reason that diamond workers livelihood depends on the proper functioning of the industry only.

Impact of recession on the Diamond workers and Coping Mechanism

So far as impact of recession on the diamond workers and their family members were concerned it was extreme. Report on the various aspect of crisis of diamond workers was a regular in the print media. Group discussion with workers in the different places of Gujarat mentioned earlier reveal critical issues relating to the unemployed diamond workers and their family member. Most of the diamond workers of the first generation are semi literate having primary education. In her study on impact of recession on diamond workers, Indira Hirway (2009) also has found the low level of education among diamond polishers.²¹ Very few of them have any idea about their place in diamond production network and from where the rough comes and where it goes. There is *information asymmetry* among the diamond miners, polishers and the retailer as well as the consumer. The worker doesn't have any idea regarding the concept of recession and what are the causes and what are the consequences. They just know how to produce more number of diamonds per day and earn more. As the units closed down suddenly the workers become unemployed immediately. The Reserve Bank of India tried to assess the growth of unemployment in the diamond industry in Gujarat. Following table reveal the details of unemployment in the diamond industry aftermath the recession.

²¹ Indira Hirway (2009): loosing the sparkle; Impact of Global Crisis on the diamond cutting and polishing Industry in India, UNDP India

Unemployment Statistics of the Diamond Industry

Name of the District	No. of Diamond units (approx)	No. of Diamond workers (approx)	No. of functioning units (approx)	No. of Diamond workers engaged (approx)	No. of workers who have lost their jobs (approx)
Surat	2,500	4,00,000	1,238	2,00,000	2,00,000
Ahmedabad	900	1,00,000	315	42,000	58,000
Mahesana	32	9,450	20	5,670	3,780
Banaskantha	300	20,500	90	10,000	10,500
Patan	50	2,000	37	1,500	500
Rajkot	290	39,000	90	10,000	29,000
Amreli	1,450	60,000	250	12,000	48,000
unagadh	125	10,000	20	2,000	8,000
Bhavnagar	900	70,000	170	14,000	56,000
Total	6,547	7,10,950	2,230	2,97,170	4,13,780

Source: Task force report of Reserve Bank of India, 2009

The above table provide the detail of unemployment arisen out of recession in respective district. In Surat around 200000 workers lost their jobs and the problems of unemployed workers of Surat was much discussed and need to be understood and addressed properly to deal encase more recession .The impact of unemployment was also equally bad in other places like Ahmedabad and Bhavnagar.The situation was such that few films were made on the unemployed diamond workers.²² The film vividly depicts how a migrant worker from Saurashtra comes to Surat to earn a livelihood and how his dream shattered due to the recession.Indira Hirway in her study capture in detail the impact of the recession and the coping mechanism. In our discussion we found the following impact on the livelihood of the workers and how they have managed to cope with the situation.

- In Surat and Ahmedabad workers from *Kathianvad* and *Saurashtra* area are engaged in diamond polishing since last 20 years or so. In many cases they even accommodate

²² *Have Maare Heera Nathi Ghasva* , (I don't want to polish diamonds anymore),Atul Patel, Modern Movies Pvt. Ltd.Surat

nearest relatives with them who works as diamond cutters and polishers (*Ratna Kalakar or Hira Ghasu*).80% of the diamond cutters and polisher lives in rented house. In Surat also the situation is same. Most of the workers live in rented house along with their family members. This is because very few workers saved enough to have a house of their own.Further the workers visit his native place once or twice annually. Thus the workers have some fixed expenditure each month. As the units closed down the workers became unemployed. For a month or two the workers survived with existing resources. Every month the workers have to have an income to pay for the house rent, food and grocery, education fee if the child is in school, examination fee and other miscellaneous expenses. Recession occurred during a time when paradoxically the food inflation was high. This really put enormous pressure on the workers and their family member. One female member during group discussing suggested that they should have a facility like credit card with lesser limit. So that during crisis they would not go to others for the day to day expenditure.

- In order to survive the diamond workers who used to work under a roof has to go for alternative employment. As discussed because of low level of education and lack of alternative skill made them difficult to get a proper employment .Participant in the training programme informed me that they go for work like construction works, security guard, vegetable vendings,driving and helpers, head loading, working in the embroidery units, tea and betel shop etc. In *Galsana* village of *Dhanduka* taluka one respondent on whom the whole family depends informed that now he is going to work in others field as an agricultural labour to support his family. As the work is done under sun light lack of habit made it difficult for the diamond workers to go for hard manual work. They suggested that they would prefer to do any similar work like tailoring and stitching or making imitation jewellery or mobile cover. Majority of the workers goes for garment making, tailoring and stitching.
- In Bhavnagar most of the workers commutes from nearby villages and hence after math of recession they went back home and engaged themselves in agriculture those having land. Some of the unit's holder invested in Cumin Seed cultivation and earned a good income to support their family members.People having no land went to Ship breaking yard at Alang near Bhavnagar to get employment. Others tried to get employment in rural area through the National Rural Employment Guarantee

Schemes. Many workers who returned from Surat are now working under NREGA²³.

- Workers tried to cope with the recession through cut in consumption. Group discussion reveals that many diamond workers put their children in good school and colleges for education. Due to fall in income they were unable to pay the fees of school as well as education. In situation like this if fees can be waived and study material for the diamond workers provided the workers can take care of other expenses themselves.
- Many workers were unable to pay the installment for the loan they have taken for purchasing house. Premium for the insurances cover were also not paid.
- Recession has resulted in decentralization of the diamond cutting and polishing industry in Gujarat. New units are coming up in places like Keshod of Junagadh. The unemployed workers and unit owners started new units there.
- Implication of recession on present Scenario of diamond Industry: The diamond industry has started picking up in the beginning of this year. As half of the worker went back home and others had took up alternative employment; there is acute shortage of skilled workers. The workers should have been retained.
- Recession that has been responsible for huge financial losses for the unit holder and taking this as an excuse the owner are paying the same wage to the workers. There is a resentment among workers aftermath of recession regarding wage issues
- Social status of the diamond workers after recession has gone down drastically. Respondents of group discussion informed that once the dignified diamond workers now are looked down upon. Now workers are finding difficulty to arrange bride for themselves because of instability and lack of employment security in the industry. majority of the respondent agreed that given the opportunity most of them would not like to continue in the diamond industry
- Most of the male workers say 95 percent consume a pan masala called Mawa, tea. One mawa costs around Rs.4.00 and on an average one worker consume 4 to 5 mawa and same amount of tea. They shared that on an average they spend Rs.50.00

²³ 'NREGA helps jobless diamond workers in Surat' Press Trust of India, New Delhi March 15, 2010

on such spends thrift activities. There was no financial planning and saving habit was quite low. There is low level of financial literacy. Being migrant workers they find difficulty in opening a bank account.

Response of the Government

As the crisis came suddenly and in a large scale government tried to handle the problems of diamond workers and their livelihood through the existing livelihood and social security schemes as well as some new scheme as other wise suggested by the Reserve Bank of India Task Force. Task force suggested the following for the rehabilitation of diamond workers;

❖ Re-training, re-skilling and rehabilitation of displaced diamond workers

Suitable training programmes will be organised at district level by the district administration to train displaced diamond workers for alternative employment. The district authorities may also identify and sponsor all eligible workers for appropriate financial assistance, loans under various Government Schemes. In order to address this government has started a Scheme for the unemployed diamond workers known as *Ratnadeep* skill enhancement training assistance package' during 2009. Five Institutes were short-listed that includes (1) Indian Diamond Institute, Surat (2) National Institute of Design (NID) Ahmedabad (3) National Institute of Fashion Technology (NIFT), Gandhinagar (4) Gujarat Diamond Industries Training Institute, Rakhial, Ahmedabad and (5) National Institute of Jewellery design to impart the training. The scheme proposed to provide skill based job oriented training to jobless diamond workers maximum for four months. Each trainee will get daily stipend of Rs100 (\$2). Maximum monthly stipend ceiling has been fixed at Rs2500. Training for skills such as polishing, diamond assortment, bruiting, grading, planning and marking, jewelry making etc. will be provided under the package. Curricula of Skill enhancement training module were decided in consultation with Gujarat Council for Vocational Training and Indian Diamond Institute of Surat. After completion of training the government will do necessary to ensure that trained workers get bank loan in priority through **Vajpayee Bankable** scheme, Prime Minister Employment Guarantee Programme. The aim was dual on the one hand the worker will be trained

to get or start an alternative employment and on the other hand get a stipend that will help them to fulfill basic minimum necessities.

Financial relief measures for diamond workers suggested by RBI

- ❖ With a view to helping the diamond sector workers to tide over the distress caused to them on account of loss of jobs, work, soft loans with elongated repayment cycle, will have to be considered, based on their identification by their employers. The diamond sector units will need to sponsor such workers to the banking system. Banks may consider rescheduling of existing housing, educational and personal loans of diamond workers on a case to case basis. Small monetary limits may be considered by banks for workers through General Credit Cards (GCCs), with relaxations, as may be appropriate. An education fund will have to be constituted to help payment of school fees of children of displaced diamond sector workers.
- ❖ Industries Department of Government of Gujarat also distributed a tool kit for self employment like bicycle vegetable vending cart, beetle-nut shop (*pan ka Galla*) under ***manav garima yojana*** for taking up alternative employment. For interim support 5 kg of grocery item and oil for once was supplied to the unemployed diamond workers.
- ❖ District Industries Centre, Ahmedabad, The Saurashtra Cooperative Bank, Bapunagar and Usha-Martin Sewing Machine company came together to support the family members of the unemployed diamond workers. Manager of Saurashtra Cooperative Bank informed that it is the female members of the diamond workers that helped them to survive under crisis. The name of the scheme was 'Women Employment Scheme' especially for the female members of the unemployed diamond workers. In order to lower transaction cost to obtain the Sewing Machine the cooperative bank open a facilitation centre at the bank at Bapunagar with two women volunteer. On an average 200 application were received during the peak of recession and now only 1 or 2. Bank processed all the desired documents of the beneficiary and act as a guarantor for repayment of the loan. One instalment was made free for the beneficiary. Around 1729 sewing machines were distributed among women members of the unemployed diamond workers of Bapunagar, Ahmedabad.

Response from the Trust

In Varachha area of Surat also known as Mini *Saurastra* many trust are set up by the Saurastra Patel Community. These trust in the beginning of the crisis supported the unemployed workers and family members in many way like distribution of rice and other food grains, reimbursement of education and education fees of the children, health and medical expenses of the workers. But the trust could not support the workers for longer period of time because of the longer duration of the recession.

Conclusion and Recommendation

The study concludes that Diamond industry is one of the most important and beautiful industry of Gujarat and deserve attention. This is the industry that employs large pool of skilled workforce. It pollutes less, it is democratic and the worker is free to work, change job at will and there is no restriction posed by the employer. It is the employer who runs after workers and is careful on his words that may retain the workers. But this doesn't mean that the Industry doesn't need any improvement. As china is entering diamond polishing business it may pose a threat to the Indian diamond cutting and polishing industry .But owner says that China will take a long time to learn this; but in the Global World Labour would move wherever they get better opportunity and along with that he will take his skill. Hence it important that this billion dollar industry has to be retains and survives for the millions of workers and other indirectly depending on this. Workforce has to be trained, modernize and the informal atelier has to upgrade them to compete with new entrant in diamond industry. Following conclusions are emerged from our study;

- ❖ On the onslaught of any such sever recession the diamond units owner should not totally closed down the industry. Rather they can employ the same number of workers for lesser number of days as well as hours. They can keep the factory open for two weeks and each day for few hours. Even if they get a less wage they will not go back to native place or switched over to any other alternative employment. This will help the diamantaries during the recovery of the industry.

- ❖ Inculcating the consumption of diamond among domestic consumer. Some initiatives are already taken by GJEPC to increase diamond consumption in India. This will help in keeping the diamond industry buoyant.
- ❖ Modernising the diamond industry with a skilled manpower and technology up gradation is the need of hour. Although there are Institutes like Indian Diamond Institute, Gujarat State Diamond Training Institute, National Institute of Design, a separate ITI specialising training diamond workers has to be set up in strategic location to train the semi literate work force to cater the need of the industry. The Modular Employable Skills related to gem and jewellery can be integrated to this and train the workers. Apart from skill training there should be training on personality development, English speaking, house keeping and computer literacy. This will help the industry to tackle the challenge posed by Chinese diamond cutting and polishing industry.
- ❖ Another important point to think upon on the issue of Globalisation and the way it function especially in the context of global production network where diamond industry is one such. Economic Problem created else where has affected the life of workers in another world. Thus international community who consume the product produced by workers in a country like India should extend their help and cooperation for their revival instead of leaving them alone to deal the issue themselves alone.
- ❖ In order to address the challenges of recession in case any in future a detail survey of the workers is indeed important. All the workers should have an identity card so that policy can be implemented quickly and easily.
- ❖ To train the workers on issues related to Financial literacy and Planning so that they can utilize their hard earned money properly.
- ❖ Housing facility in the line of rehabilitation of slum dwellers can keep the worker back home. A roof on the head helps workers to withstand difficulties for a prolonged period.

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