



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

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Out Line of the Presentation

- Introduction
- Chronicle of Global Economic Crisis and Diamond Industry
- Global Diamond Production Network
- Profile of the Study Area and Spread of Diamond Cutting and Processing Industry of Gujarat
- Social Composition of Diamond Workers in Gujarat
- Process of Diamond Cutting and Polishing Industry of Gujarat
- Impact on the Industry: Causes, Consequences and the ways out
- Impact on the Workers: Coping Mechanism
- Responses from the Government and other Institutions
- Suggestions and Recommendation (Short and Long Terms)

Global Economic Crisis :2007-2010

- Present economic recession (or the Great Recession) is an economic recession that has a root in the United States that started in December 2007, (U.S. National Bureau of Economic Research). It spread to other industrialized economies of the world. The recession is measured by the pronounced deceleration of economic activity and increase in Unemployment. It has resulted in the collapse of large financial institutions, the bailout of banks by national governments and downturns in stock markets around the world. In many areas, the housing market has also suffered, resulting in numerous evictions, foreclosures and prolonged vacancies.
- Three Top Economists Agreed that present crisis is the Worst Financial Crisis since Great Depression of 1930s :
(Nouriel Roubini, New York University, Kenneth Rogoff, Harvard University, Nariman Behravesh, Chief Economist And Executive Vice President for IHS Global Insight).

Global Economic Crisis :2007-2010 Contd....

- **Causes :**
- Housing Bubble,
- Easy credits to repair the Collapse of Dot. COM bubble
- Increase in Sub-prime Lending:
- Predatory lending
- Deregulation
- Failure of economic forecasting
- Market Failure or Failure of Globalization
- **Consequences:**
- Crash of Financial Institutions or Credit Crisis Northern Rock,UK Lehman Brothers US)
- Wealth Impact; Cut in Expenditure
- Unemployment

Crisis in Europe:

- The crisis rapidly developed and spread into a global economic shock, resulting in a number of European bank failures, declines in various stock indexes, and large reductions in the market value of equities
- Not only rich countries but poor and under developed economies of the world are also influenced by economic recession
- Not only the organized industrial sector was affected by Global Economic Recession; it also has influenced the Informal Sector

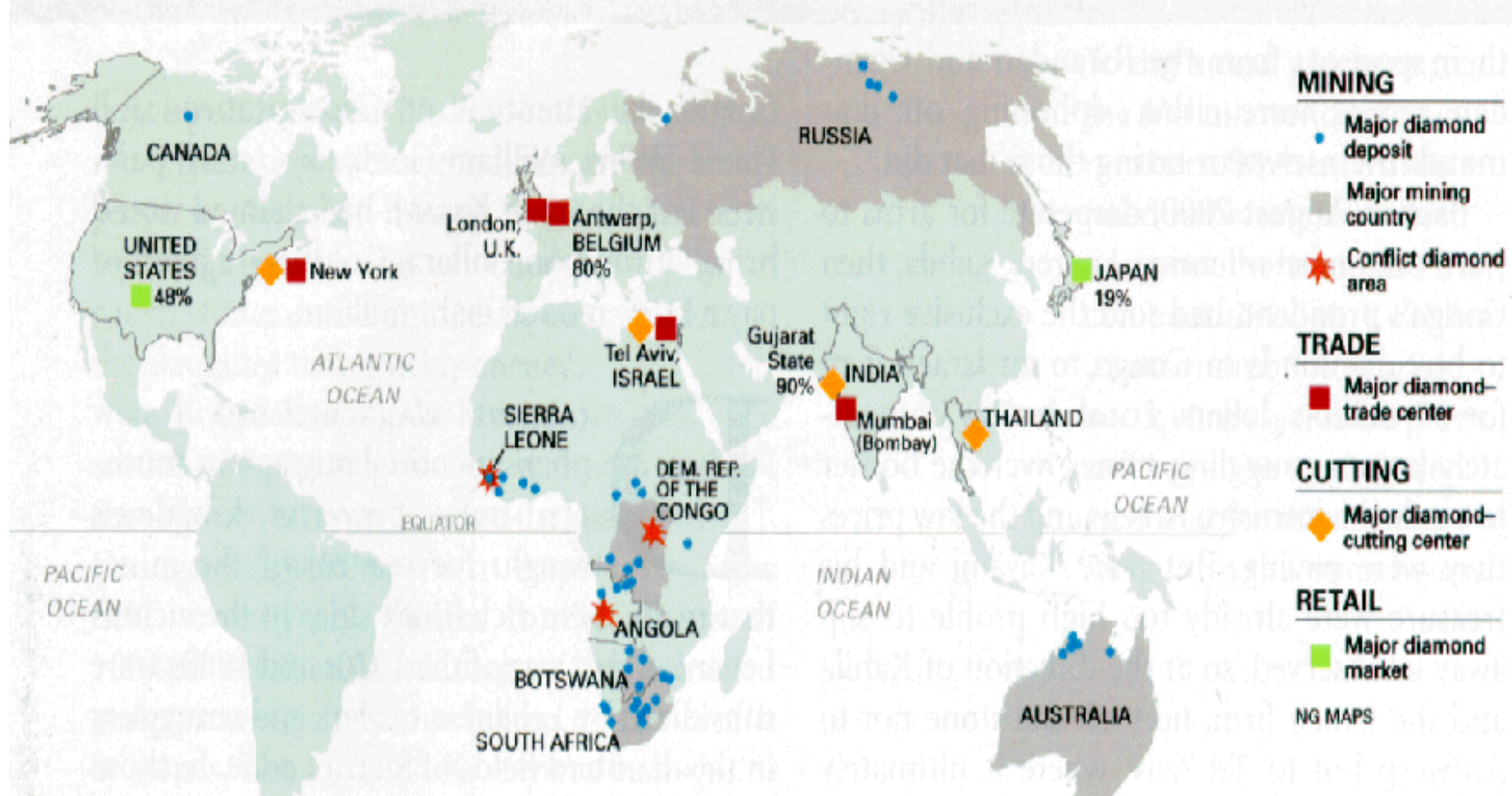
Crisis on the Global Diamond Trade:

- So far as sector profile is concerned diamond industry was hit first as consumer as a matter of fact and survival will reduce expenditure in luxurious item

Global Diamond Trade

The World of Diamonds

Earth's diamond mines produce some 800 million stones—both gem quality and industrial—a year. Eighty per cent of the diamonds destined for jewelry pass through Antwerp before they reach the cutting wheel. Laborers in India cut and polish nine out of ten gems; the majority will eventually reach stores in the United States.



Global Diamond Production Network

- Diamond is mined mostly in Africa, Russia
Canada, Australia (DeBeers, Rio Tinto, Alrosa are the prominent Miners)
- Polished in Surat, Antwerp, Israel, Honkong
- Consumed in America, Hong Kong UAE
- Around 10 million people depend directly or indirectly on Diamond (mine workers, polihser and retailers)

Diamond Mines



Diamond Miners in Africa



Diamond Polishing and Cutting in Gujarat



Diamond Polishing in Gujarat ...Contd.....



Retail Diamond Market, New York



Diamond District New York,...contd...

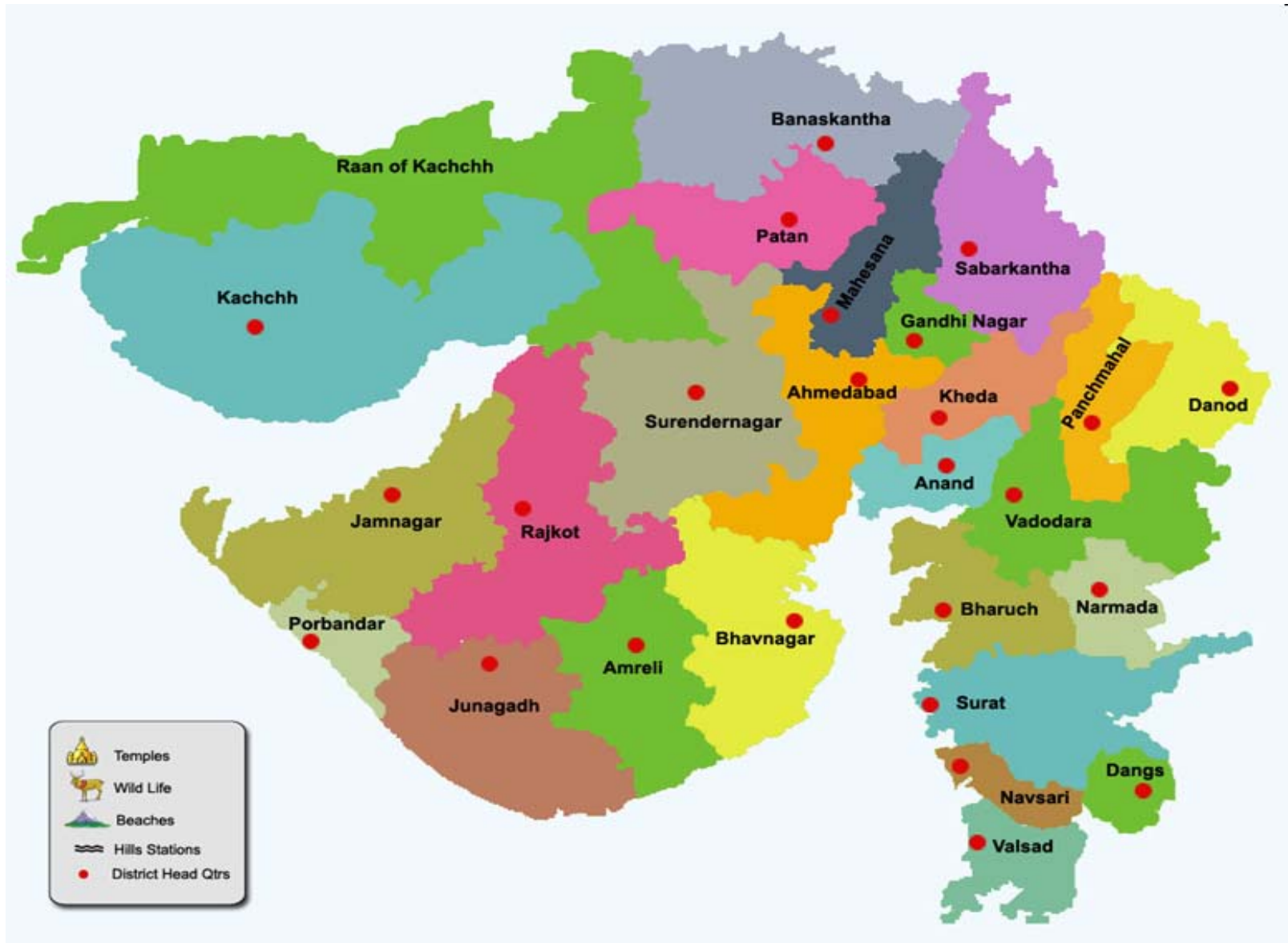


Retail Diamond Market in Hong Kong



Diamond Cutting and Polishing Industry in Gujarat



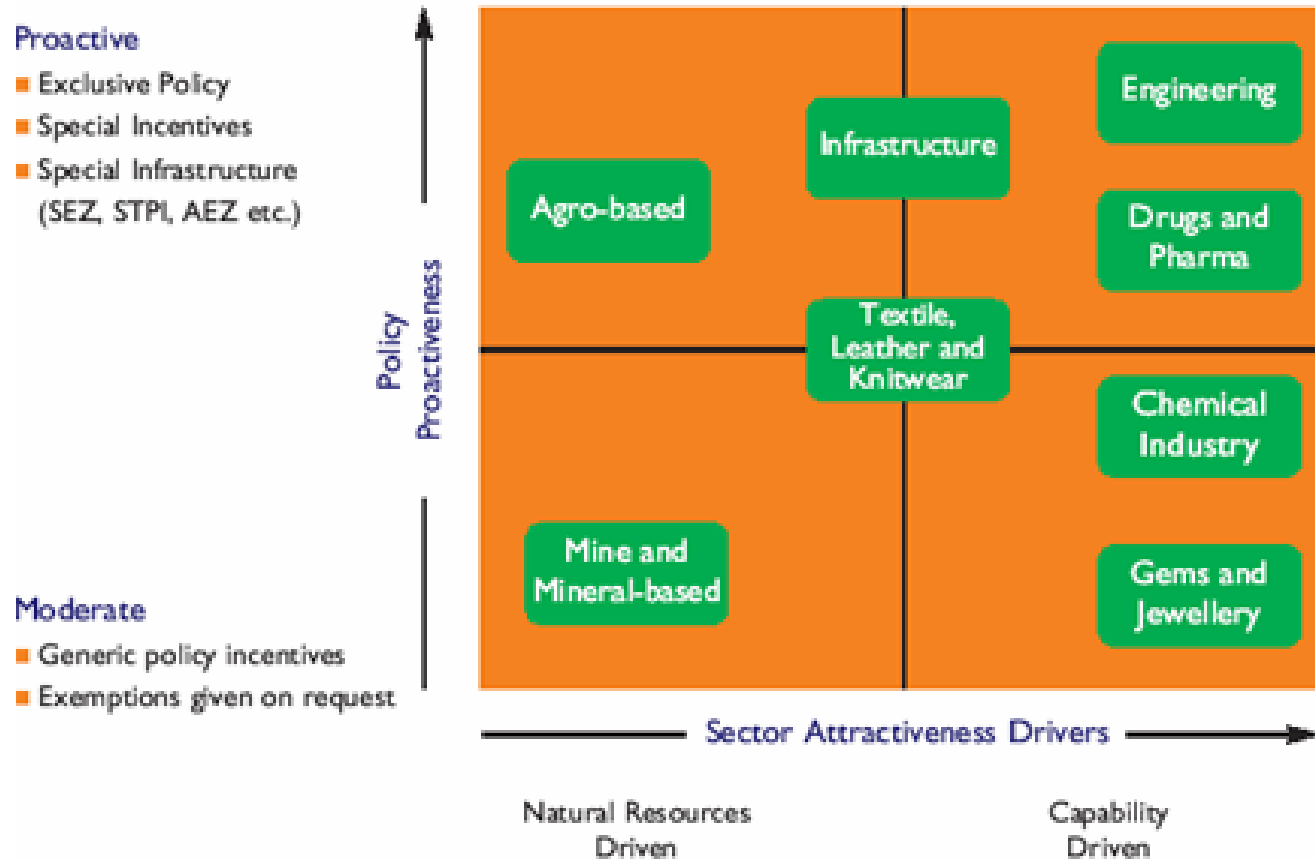


Profile of Gujarat Economy

Population	50.5 million (5%)
Area	196,000 sq. km. (6%)
NSDP (in 2003-04 at 1993-94 constant prices)	US\$ 19.27 billion (6.3%)
Manufacturing sector	US\$ 5.17 billion
Fixed Capital Investment	US\$ 17.9 billion (18.5%)
Industrial Production	US\$ 39.72 billion (16.2%)
Exports	14% of India
<i>(Source: ASI)</i>	<i>Figures in brackets show % share of India</i>

Gujarat , a province of Indian sovereign located in the western part is one of the fastest growing state. It's industrial and state GDP growth rate is higher than the Indian economy .It has a growth rate of 9% and Industrial growth of 15% and has 16% industrial production. The major driver of the Gujarat Economy are Petro-Chemicals,Power,Ports and Infrastructure, Pharmaceuticals and Gem and jewellery.

Drivers of Gujarat's Economy



Gujarat's Share in Indian Economy

Refined Petroleum Products	50%
Drugs & Pharmaceuticals	45%
Chemicals & Allied Products	31%
Soda Ash	98%
Caustic Soda	35%
Polyester Filament Yarn	45%
Textiles	15%
Sponge Iron (HBI)	35%
Fertilizers	30%
Cement	9%
Salt	70%
Groundnut	35%
Cotton	18%
Psyllium Husk	100%
Castor Seeds	70%
	(45% of world)
Market Capitalization	30%

(Source: IndexTb, IC, Gujarat)

Contextualizing Diamond Industry in Gujarat Economy

10 out of 11 polished diamonds are produced in Gujarat and Gems and Jewellery industry of India is synonymous with Gujarat and that to Surat. It contributes 90 per cent of total diamonds processed in India and has around 10,000 units in Surat. It is the world's second largest producer of gold jewellery. It has the largest contribution to the total national jewellery of almost 85 percent. It contributed 80 per cent to national diamond exports (2004-2005). It also has some of the most popular institutions such as Indian Diamond Institute, Gujarat Hira Bourse, Gems and Jewellery Export Promotion Council. The diamond industry of Surat is worth \$50 bn.

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

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 Polish ed Diamo nd	5042	6659	6187	5982	7105	8603	11163	11831	10910	14180

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

Size of the Diamond Cutting and Polishing Industry in Gujarat

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*

Diamond cutting and Polishing Process and the Type of Workers

Cutting a Rough Stone: Cutting a raw stone into a faceted and polished gemstone is a multi-step process. Each step is critical to the final outcome. The steps are

- **Marking:** A rough stone is marked prior to cleaving or sawing to determine the direction of the grain or "cleavage", eliminate waste, and bypass inclusions or imperfections. The natural shape of the rough stone will also be a major factor in deciding how to cut the stone.
- **Cleaving:** Cleaving refers to splitting a stone along its grain by striking it. A rough stone is cleaved if there are conspicuous defects and/or inclusions which would prevent it from being made into a single gemstone.
- **Sawing:** The rough stone is cut to a shape that approximates the shape of the finished cut stone but without the facets.
- **Girdling:** The rough is placed in a chuck on a lathe. While the rough stone rotates on the lathe, a second diamond mounted on a dop is pressed against it, rounding the rough diamond into a conical shape. This step is also referred to as rounding or bruising.
- **Faceting:** The cutting and polishing of each facet is accomplished by attaching the stone to a dop stick and pressing it against a revolving lap (see "Facetron" below). During this faceting stage the angles of each facet must be cut in order to maintain symmetry and produce maximum brilliance.
- **Brillianting:** If the primary Faceting or "Cross-Working" is done by a separate craftsman, the final 40 facets of a round brilliant cut diamond's 58 facets will be cut by a Brillianter.

Polishing Process

- In local language the process is known as follows;
- 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 earn Rs.7000.00 to Rs.12000.00 per month. Depending on the skill and quality of rough the worker sometime 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

Impact of Recession on Diamond Industry and Workers in Gujarat

- Although we have a constant watch on the diamond industry and the diamond workers since the impact of recession has been reported by the print media
- Period of observation on the diamond Industry :- January 2009 to 31st August 2010
- The method used for collecting information on impact of recession on the diamond workers is primary that comprised of focused group discussion, one to one discussion with the worker while organizing training programme for the workers on livelihood improvement.
- The study also took support of secondary information regarding the size ,income and export contribution of the diamond Industry in Gujarat
- During the said progarmme we had the opportunity to interact with the workers while organizing training programmers

Spread of Diamond Industry in Gujarat

- Spread: Diamond Cutting and Polishing units were initially started in Surat and Navsari some time during 1950s by Saurashtra *Patels* and Palanpuri *Jains*
- As recession arrives the industries got decentralized and move to other districts and *Taluka* Places (Block –Units below the district) of Gujarat
- Diamond cutting and polishing units are now operating different places like Bhavnagar, Ahmedabad, Amreli, Junagadh, Rajkot, Banaskantha and Mehsana
- Some of the new places are *Keshod* of Junagadh district that came up as polishing units in the recent recession

Social Composition of Diamond Workers

- In general owners are Patels and Jains. Many of the owners started their career as polishers. Further in many cases workers are also from Patel community. However our study reveal a detail profile of the workers.
- In Bhavnagar, Amreli and Junagadh most of the workers are from the Koli Patel (Talpada koli) community. However owner in this area are from Patel community
- In Navsari district most of the owners are Jains
- In Ahmedabad workers from any community as well as Interstate Migrant Workers are employed by the owners
- In Surat most of the workers are Patel Community from Saurashtra Area of Gujarat. How ever in recent year the composition is also changing. Earlier 95 percent of the workers belong to Saurashtra Patels but now 25 percent of the diamond workers are from Uttar Pradesh, Bihar, Orissa and Kerala

Global Recession and the Diamond Workers

- Due to low demand in US, the produced diamond remain unsold. There was liquidity problem in India
- There was a reduction in rough diamond supply as a result of recession
- Units started closing after *Diwali* vacation and by march 2009, 70% percent of the units were closed

Chronicle of Recession

- Most of the worker are unaware about their place in the global diamond production net work. However the owner were aware about the world diamond trade
- The impact of recession felt by the diamantaries in the end of 2008. Workers came to know about recession (known as *Mandi* to the workers)
- Thus the primary reasons for the slump in demand industry in Gujarat are global in reason and they themselves had nothing to do

Impact on the Diamond Industry

- Leaving a few most of the diamond unit owners in Surat, Bhavnagar, Ahmedabad closed down their units because of inability of sell their polished stock
- There was also shortage of rough diamond
- Demand from US market has fallen by 30%
- The sellers were forced to sell their forced diamond at a 30 percent less price
- Small and medium owners were the worst hit
- The industry closed down completely at least for 3 months in Bhavnagar and 6 Month each in other parts of Gujarat
- After waiting a while the unit owner converted their units to embroidery business. Some also shifted to mineral water bottling. In manpasand area of Bapunagar 30% of the erstwhile diamond units were converted to embroidery business.

Impact on the Livelihood of Diamond Workers

- As most of the units where the workers were working are closed down; the workers become unemployed. For six months more than 50% of the total workers remain fully unemployed and others remain under-employed
- Unemployment was the biggest consequences for the workers on the onslaught of the recession in the diamond industry.
- The workers for the first few month unable to understand the complexity of the problem. They do not have the information regarding the severe recession .The workers just know to polish more and more number of diamond to earn more. This is at the cost of workers effort the global community get the beautiful diamonds. This activity is also rent poor in nature. Hence the diamond network should thought upon the issue of information asymmetry in the network.

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
Junagadh	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

Major problems faced by the workers

- Fall in income due to unemployment
- Lack of sufficient buffer stock to manage the shock
- Majority of the workers faced the problem of arranging the fixed cost of managing the family like payment of rent, electricity, monthly grocery, transport expenses
- Many workers reported that during good time they have purchased home on installment. Now they are unable to pay the installment and is a major source of tension
- Most of the diamond workers put their children on schools and payment of monthly fees was another big problem for majority of the workers

Unemployment and Cutting of Expenses

- Due to fall in income the workers are finding all kind of way to cut expenses
- To avoid expenses, if there is a marriage only one person of the family member attend
- Cut in expenses in public transport
- Vegetables are purchased in the evening when their prices are low
- 43% of the diamond workers shifted to Agriculture

Coping Mechanism

- After waiting a while and surviving with the existing earning and borrowing from relative the worker searched for alternative employment
- Most of the workers are semi literate and without any alternative skill
- Most of the workers are not accustomed to hard work under the sun
- Most of the workers belong to middle caste and hence would not adopt work below their dignity
- 50% of the workers from Saurashtra, North Gujarat gone back home after the end of school examination

Coping through Alternative Employment

- Women joined hand with the unemployment workers: They supported the family members much.
- Tailoring and Stitching, Garment making
- Embroidery
- Construction work
- Vegetable Vending
- Fast food centre
- Security Guard
- Incense stick making
- In Bhavnagar the diamond workers reported to be employed them selves in the Ship Breaking Industry
- Those who gone back home started employing themselves under the National Employment Guarantee Programme

Other Strategy of Survival

- Working as domestic help
- Pulling Hand Carts
- Selling snacks in Offices
- Rolling Beedi (local cigarettes)
- Falling Back to traditional occupation on the line of Caste. In our discussion with unemployed workers at *Galsana*, the weaving community employed in diamond cutting in Botad, now fallen back to their parental occupation of weaving as a consequences of recession
- Bundling plastic spoons

(Source; SEWA,Ahmedabad)

Unemployed diamond worker on queue to get relief at Ahmedabad



Governments Response

- It was not imagined that industry will be affected in such a manner and in short period of time
- As the problem was reported in media in more exaggerated way Government of Gujarat tried the level best to address the problem of the diamond workers and diamond industry
- Government wrote the central government for package
- Government also approached to the Reserve Bank of India to address the issues
- Reserve bank of India set up a Task Force to deal with the issue
- Reserve bank recommended the Nationalized Bank to look into the credit and liquidity issues.
- Reserve Bank suggested to create an Education fund to address the issues of fees
- Industries department, Government of Gujarat initiated the *Ratnadeep* skill up gradation programme for the unemployed Diamond Workers

Governments Support

- Government has distributed tool kits for the unemployed diamond workers to take up alternative employment through *Manav Garima Yojana*
- Government with the district industries centre organized seminar for the diamond workers to sensitize about the different livelihood schemes of the government
- Government also distributed Sewing Machines to the women family members of the diamond workers
- Mahatma Gandhi Labour Institute, Ahmedabad also organized few training programmes for the diamond workers to manage the recession and what they can do for a sustainable livelihood until the industry recovers

Suggestions and Recommendation

- On the onslaught of any such severe recession the diamond units owner should not totally close 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 diamondaries 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.

Suggestions and Recommendation ...Contd....

- Modernizing 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 specializing 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 Globalization 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.

Suggestions and Recommendation ...Contd....

- 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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Umeed gives a ray of hope to jobless diamond industry workers

Express News Service Posted: Jun 23, 2009 at 0012 hrs

Ahmedabad In its bid to provide alternate income generation means to the jobless diamond industry workers, the Gujarat Urban Development Mission (GUDM) will launch a training programme-Umeed-for the workers aged between 18 and 35 years.

Narmata Shah, manager, Umeed, said this at a two-day training programme on 'employment opportunities for diamond workers,' organised by the Ahmedabad-based Mahatma Gandhi Labour Institute (MGLI).

"Umeed is an ongoing initiative under the Rs 13,000-crore Garib Samruddhi Yojana of the Gujarat government. It aims to provide a platform where employable youth are trained to meet the skilled manpower requirements of business and industry of a locality. We are trying to create awareness about the scheme among the ratna-kalakaars," she said.

Shah further said that four organisations have been identified as region-wise resources agencies for conducting training under Umeed. "These are SAATH, CAP Foundation, Aid-et-Action and SkillPro Foundation," she said.

Nearly 50 former diamond industry workers from the Bapunagar area of Ahmedabad are attending the training programme.

Sarbeswar Sahoo, assistant professor, Economics (MGLI), who is also the coordinator of the programme, said, "The Rural Technology Institute, Gandhinagar is also undertaking skill development programme for the workers where they will be taught to make mobile phone covers, TV remote covers and key chains among others."

A representative from the Reserve Bank of India will attend the programme on Tuesday to educate the workers on various schemes the bank has announced to support them, Sahoo said.

The workers seemed satisfied with the entire exercise, though a few have already found some new sources of income.

Chandresh Patel, who had been associated with the diamond industry for the last 30 years, said, "I have started working in a mineral water factory after waiting for months expecting a revival in the diamond industry. Since our options are very limited, such training programmes will definitely help in securing income for a lot of ratna-kalakaars."

Naveen Vyas, another diamond worker who now makes artificial jewellery, said: "Diamond workers are facing a major crisis, as the entire export-oriented industry was unregulated and there was no social security net for them. The state government must introduce measures to regulate it."

GUDM is the nodal agency for implementing projects under the Jawaharlal Nehru National Urban Renewal Mission (JNNURM).

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