



Losing the Sparkle:

Impact of the Global Crisis on the Diamond Cutting and Polishing Industry in India

DECEMBER 2009



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the Diamond Cutting
and Polishing Industry, in India**

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ACRONYMS

DTC	De Beers Trading Company
FGD	Focus Group Discussion
GEPC	Gems and Jewellery Export Promotion Council
GPN	Global Production Networks
NAFUS	National Fund for the Unorganized Sector
NCEUS	National Commission for Enterprises in the Unorganized Sector
NGO	Non Government Organization
NREGA	National Rural Employment Gurantee Act
NREGS	National Rural Employment Gurantee Scheme
OBC	Other Backward Classes
SDA	Surat Diamond Association

1. INTRODUCTION

India is no longer a major producer of diamonds, as it was in the pre-British period during ancient and Mughal times¹. However, it has maintained its links with diamond production, by undertaking the cutting and polishing of diamonds. Today, India is responsible for about 80 percent of diamond cutting and polishing, in the world. Raw diamonds are imported into the country and polished diamonds are then exported. The average annual production of the diamond industry, in India, is around 78,000 carats (2005-2007). Of this, about 80 to 85 percent is exported and between 15 to 20 percent is consumed at home (CMIE 2008).

The export of finished (cut and polished) diamonds increased dramatically after the adoption of trade liberalization, from US\$7,511million in 1999-2000 to US\$19,667 million in 2007-08, indicating a compound annual rate of growth of about 13 percent (Table 1). The share of diamonds in the total commodity exports, from India, was 12.36 percent in 2007-08. About 25 percent of the diamonds were exported directly to USA, 25 percent were exported to Hong Kong, 10 percent to Belgium, five percent to Israel and around two percent each to Japan and Thailand. Since many of these countries manufacture diamond jewellery, which is then exported to USA, USA is a major buyer of diamonds; both directly and indirectly. The present crisis in USA has therefore had a severe impact on the diamond industry.

Globally, the diamond industry is organized in a value-chain, which includes a range of activities, such as exploration and mining, sorting, cutting and polishing, jewellery manufacturing and retail. Exploration and mining are done mainly in Africa (South Africa, Namibia, Botswana, Congo and Angola), Australia, Canada and Russia. These diamonds are then sorted according to size, shape, colour and quality and sent for cutting and polishing with the Kimberly Process Certificate², certifying that they are from conflict free sources. Cutting and polishing are labour intensive processes, usually performed in countries where labour is cheap. India is thus, a major destination for cutting and polishing activity.

Jewellery manufacturing and retail are two high value added processes in the global value chain. Together, they account for more than 70 percent of the total value

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- 1 Historically diamonds were found only in the alluvial deposits in southern India. India led the world in diamond production from the time of their discovery in approximately the 9th century BC, to the middle of the 18th century. However, the commercial potential of these sources was exhausted by the late 18th century and soon India was overtaken by Brazil in the production of diamonds.
 - 2 The Kimberly Process was created by diamond exporting and importing countries in 2002, at Kimberly, to provide a global regulatory framework certifying that there has not been any human rights abuse in the process of mining the particular diamonds and that the diamonds do not come from a conflict zone.

added, while diamond cutting and polishing by itself is responsible for around eight percent of the value added. India is at the low end of the value chain of the diamond industry, which is dominated by large firms like De Beers, Al Rosa, Rio Tinto, Aber etc. India is highly dependent on the global market, both for raw materials as well as for final sales.

The global financial crisis has impacted the diamond industry in a number of ways of which the decline in the demand for diamonds in the US market and in other markets is the most important factor. This decline has resulted in large scale closure of diamond units in India. The second factor is the capital outflow from India, which has resulted in a liquidity crisis and has created a huge shortage of funds for the industry, particularly for the small units in the industry. Third, the depreciation of the rupee has raised the price of imported raw diamonds.

Of the total cutting and polishing of diamonds in India, 80 percent is done in Gujarat, while diamond trading is done largely in Mumbai (Maharashtra), followed by Surat (Gujarat). Surat is the main centre for diamond cutting and polishing but a number of towns and villages in Saurashtra (in the districts of Bhavnagar, Amreli, Rajkot, Porbandar, Junagad) and in North Gujarat (Banaskantha, Mehsana and Patan districts) are also centres for this activity. The crisis in the industry, has therefore had widespread impact in Gujarat.

This study, conducted in April and May 2009, has been undertaken to assess the impact of the global financial crisis on the diamond industry in India and to recommend measures to help diamond workers (as well as the industry, particularly the small producers in the industry) to cope with the situation. The specific objectives of the study are (i) to examine the impact of the global crisis on workers and small producers, in the diamond industry, (ii) to design interventions to address the adverse impact on workers and on the sector, in the short and medium terms, and (iii) to recommend social security options, in an attempt to provide comprehensive social protection.

2. APPROACH OF THE STUDY

This quick survey started with an analysis of the available secondary data and literature, to understand the impact of the global crisis on the diamond industry. It also included in-depth discussions with (i) industry leaders, such as office bearers of the Diamond Industry Associations, the Gems and Jewellery Export Promotion Council (GEPC), the Chambers of Commerce and other prominent industrialists, (ii) concerned policy makers and Government officials in the Departments of Industry, Labour, Commerce etc, and (iii) prominent labour leaders.

There are about 8,000 diamond cutting and polishing units in the country, employing between 800,000 to 1,000,000 workers. (RBI 2009, Government of Gujarat 2009 and Surat Diamond Association (SDA). Though, all diamond units are to be registered under the Factories Act³; according to the Government records, there are only 532 registered units, employing 127,000 workers. Of the total diamond units, about 80 percent are in Gujarat and more than half of these are in Surat.

Surat, the centre of the diamond industry, has more than 3,000 diamond units, that employ more than 400,000 workers (RBI 2009, Government of Gujarat 2009 and SDA 2009). Surat was, therefore, selected to understand the different dimensions of the crisis and its impact on producers and workers. This involved data analysis as well as discussions with industry leaders, Government officials, experts, labour leaders etc; and focus group discussions (FGDs) with producers (small), workers and the members of their households, including women. The use of participatory methods, such as FGDs and case studies, helped in understanding the crisis and its impact.

A sample survey (covering 127 workers and 34 small producers), was undertaken, in Surat. Since almost half the diamond workers from Surat had gone back to their villages, in Saurashtra, a small sample of 34 workers was selected from Bhavnagar district (a large number of diamond workers in Surat, come from Bhavnagar) in addition to the sample in Surat. Thus, the total sample covered 195 workers and producers, from Surat and Bhavnagar (Tables 2 and 3). The respondents were selected on the basis of the typologies and location of workers. Thus, though the sample size is small, the sample survey does provide a good understanding of the impact of the global crisis on the ground, particularly on workers and on small producers. Two questionnaires were designed for the field survey: one for workers and the other for producers/employers. A few case studies were also undertaken to understand the impact of the crisis at the household-level. These experiences reflect the range of situations prevalent in the diamond industry.

3. THE DIAMOND INDUSTRY AND DIAMOND WORKERS IN GUJARAT

Diamond cutting and polishing began in India in a small way in the 1960s, in Surat, when some entrepreneurs belonging to the Patel community started importing rough diamonds and exporting polished diamonds. The industry expanded gradually

3 Since even the smallest diamond unit uses power and employs more than 10 workers, all the diamond units should be officially covered under the Factories Act (Government of Gujarat 2009).

until the 1980s, when it began to grow rapidly. Proximity to Mumbai for importing raw diamonds and for exporting finished products, combined with the enterprise of Patels from Saurashtra and Jains from North Gujarat, resulted in the rapid growth of this industry. With the introduction of the economic reforms in 1991, the industry expanded further, taking advantage of the new environment.

The Beginning of the Crisis

Discussions with industry leaders⁴ and Government officials in the Departments of Labour and Industry⁵ shed light on the crisis in the industry and on the workers in the city. According to them, apart from providing direct employment, the industry supports a large number of workers indirectly; in trading activities, in hotels and restaurants, and in a host of other services. The SDA and the GEPC are the two major industry associations that take care of the interests of the industry, as well as of the workers.

Crisis in the Diamond Industry

The crisis in the industry started with the fall in the demand for diamonds in the US market, which accounted for about 50 percent of India's exports (directly and indirectly). The crisis in USA led to a 75 percent decline in the demand for Indian diamonds, as many traders preferred to use up piled stocks and stopped buying fresh stocks. Subsequently, the demand for diamonds also declined in the EU market, which aggravated the crisis further.

Though the crisis started much before Diwali (i.e. November 2008), the Diwali vacation became a turning point for the industry⁶. The GEPC stopped importing raw diamonds as stocks piled up, and when the demand did not increase even at Christmas, the situation in the industry declined further. The industry felt a severe liquidity crunch, because the capital outflow had created a general shortage of credit and banks were not enthusiastic about lending to a declining industry. The depreciation of the Indian rupee, made the import of raw diamonds expensive. The depreciation of the rupee was unable to help exports, as there was a general decline in demand, in the global market.

4 These include the President, Vice President and Secretary of the SDA; President and office bearers of Gems and Jewellery Export Promotion Council; and officials of Diamond Training Institute.

5 These include the Chief Inspector of Factories, Gandhinagar, Deputy Labour Commissioner (Surat), officers from the office of the Commissioner of Industries, Gandhinagar) etc.

6 The 10-day Diwali vacation was extended to 30 days. When the vacation finished on 8 December, 2009, 80 percent of the factories resumed work, but by January / February, only 40 percent of the factories were still operational, at that too at very low levels.

Structure of the Diamond Industry

The structure of the diamond industry is like a pyramid: at the top are a small number of large modern factories, each employing between 4,000 to 5,000 workers; below them there are the medium units, employing up to 500 workers; and at the bottom are a large number of small units, employing up to 50 workers. The large units are registered under the Factories Act. These units are keen to be registered, as they cannot export or import directly without the DTC (De Beers Trading Company) Certificate, which can be accessed only if they are registered⁷. These large units use the latest technologies; they cut and polish the top quality of diamonds (deluxe and super deluxe quality); and have modern factory environments, with air conditioned work spaces and adequate security arrangements. Between 60 to 70 percent of their workers are temporary or contract workers. These units also sub-contract work, to smaller units, that are often located in smaller towns and villages.

Small units are usually engaged in job work, though some of them do sell their products to local traders (who in turn sell them to exporters). As a result, they do not normally access bank credit. The medium sized units are somewhere in between, and are primarily engaged in job work of a slightly higher quality. Small units are almost always un-registered, while some medium units may be registered, if they are direct exporters.

Workers in the Diamond Industry

There is no accurate information on the number of units and the number of workers in the industry, because most of the units are unregistered and a large number of the workers are not on the official records. Though, there is a Gujarat High Court order that requires units in this industry to be covered under the Factories Act, (the order is ten years old), most units are not registered⁸.

As per official statistics, there are 532 diamond factories, in the state, that employ more than a 125,000 workers (Table 4). The RBI Task Force has estimated that there are approximately 6,547 diamond units in the state, employing 710,000 workers (Table 5). However, according to the Chief Inspector of Factories, Government of Gujarat,

7 They have to show that they abide by the labour laws.

8 The Department of Labour, Government of Gujarat, started a survey for the purpose of registration, only after the present crisis. However, there has not been much support from the units, because the owners of the units feel that registration will force them to provide social security to workers, whose employment is usually temporary and dependent on export orders received from abroad. Faced with this resistance, there were two options for the Government: to continue the survey and let the units close down or to discontinue the survey. The Department of Labour chose the second option.

these are 'guesstimates', as the estimates do not cover units located in Jamnagar and Porbandar, and small towns like Disa in North Gujarat. Most workers in this industry are informal workers, not protected by any social security measures, either because the units are not registered or because workers in registered units are not on official records. More than 60 percent of the workers employed in large registered units are informal workers, not on the official records⁹.

The majority of these workers are from the Patel community in Saurashtra, who have migrated to urban centres, with the help of family connections. Most units, therefore, are like family units. The Jains from North Gujarat have also migrated to diamond centres in urban areas, to join families/ relatives or kinfolk belonging to the same community, who are already in the business. In addition, there are workers from other communities like Koli, Patel, Vankar and Other Backward Castes (OBC), and workers from Maharashtra, Madhya Pradesh, Rajasthan, Bihar and Uttar Pradesh¹⁰. Most workers are barely literate, having dropped out of school. No formal training is imparted; workers are expected to acquire the skills on the job¹¹. On an average, a worker earned between Rs. 7,000 to Rs. 10,000 per month (before the crisis). Since most diamond units undertake work for larger producers or traders, workers usually float from one unit to another. Before the crisis, skilled workers were sought after by employers/ producers who offered good wages, and most diamond workers made a reasonable amount of money, considering the fact that they had hardly any education.

4. MAIN FINDINGS OF THE STUDY

A. Diamond Workers in Surat

FGDs, field surveys and case studies together provided insights into the impact of the crisis on the diamond workers of Surat.

9 Information gathered from discussions with unit owners and industry leaders.

10 It is claimed that there are no employer-employee conflicts in the industry because of this 'family' environment. The wage rates are determined by the Diamond Associations, in consultation with producers and employers. However, in July 2008, workers in the industry went on strike when the 20 percent increase in the salary, recommended by the SDA was not implemented. Though the employers accepted the demand, not all of them implemented it. (There has been no increase in the salary of these workers for the last 10 years).

11 A new worker is trained on the job for 30-45 days without any salary. In some cases when the worker does not belong to the family or community running the business, a nominal fee is charged. A worker earns Rs 3,000-4,000 a month, after the training, and goes on to earn higher wages as he progresses. Some workers earn between Rs 30,000 - 40,000 a month.

Profile of Workers: The main characteristics of the workers are as follows:

- About 80 workers (63 percent) are Patels and Jains, while the rest are from the OBCs and other communities.
- Almost all workers are migrant workers, mainly from Saurashtra¹² and some are from outside Gujarat. Only one worker was from Surat.
- The workers are relatively young, their average age being 34 years. One third of workers are less than 30 years of age, and another one third are between 30 and 40 years old.
- The level of education of the workers is very low: Only four workers (3.2 percent) have education above Standard X. About 19 percent of workers cannot read and write and 27 percent have studied up to Standard V. Most workers are school drop-outs.
- About two thirds of the workers live in *pucca* (permanent construction) houses while one third live in semi *pucca* (semi-permanent) houses. Only two workers lived in *kutcha* (temporary) houses.
- About 38 percent of workers live in their own houses, while the rest live in rented houses, the average rent being Rs.1179, per month.
- The average family size is six. About 52 percent of the workers live in nuclear families, while the remaining live in joint families (see Table 6).

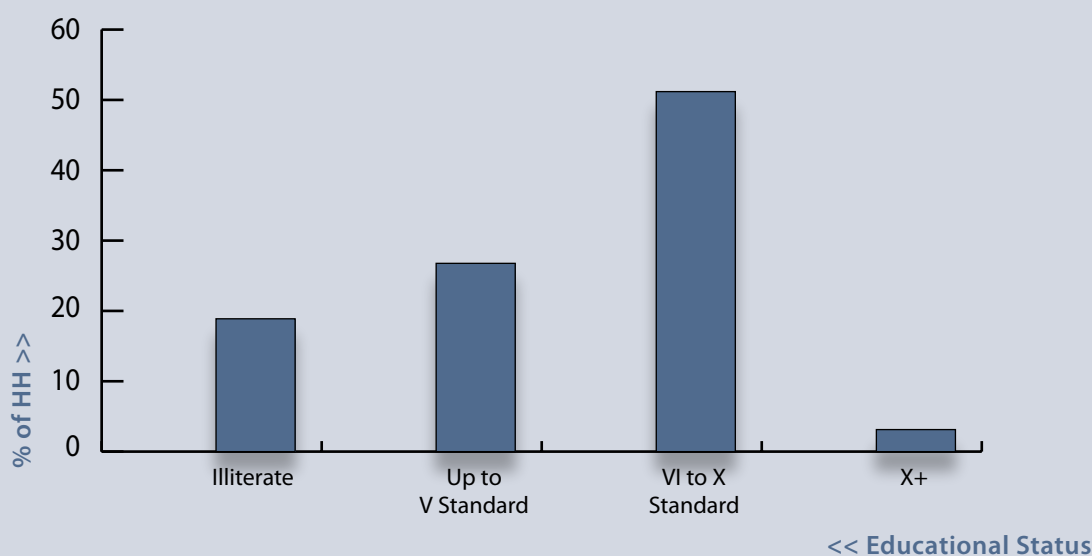


Figure 1: Educational Status of Workers in Sample (percent of total) (Table 6)

12 About 70 percent of the workers are from Bhavnagar and Amreli districts, 13 percent from Junagadh, six percent from Rajkot, and the rest from other districts of Gujarat.

Impact of the Crisis on Employment, Wages and Incomes

Impact on Employment of Workers: The crisis was unexpected, when it came, starting in November 2008. Of the 127 workers, 57 workers (45 percent) lost their jobs, while 70 workers (55 percent) managed to continue to work in the industry, but at much lower wages. Of those who lost their jobs, 19 workers managed to find work outside the industry, while 38 workers (about 30 percent) remained unemployed. The major jobs outside the industry were in the embroidery industry, casual unskilled work, petty business (like selling vegetables, other goods), agriculture and petty services like working as an office boy or a rickshaw driver etc (Table 7).

Decline in Incomes of Workers: Workers earned lower incomes in their new jobs. The average monthly income of the workers declined from Rs. 5,896 in the diamond industry before the crisis, to Rs. 3,135 after the crisis (excluding those who remained unemployed), indicating a decline of about 48 percent. As against no worker earning less than Rs.1,000 a month before the crisis, after the crisis, two workers earned less than Rs.1,000 a month, and almost half the workers earned less than Rs. 3,000 a month. Only 25 workers (20 percent) earned more than Rs. 3,000 a month. This is in contrast to the situation before the crisis, when the majority of the workers (72 percent) earned between Rs. 3,000 to Rs. 7,000 a month, and 22 workers (17 percent) earned more than Rs. 7,000 a month (some workers earned up to Rs. 11,000 a month). It is important to note that the workers who remained in the diamond industry, also experienced a decline in their monthly incomes, from Rs. 5,846 to Rs. 3,588, a decline of about 40 percent.

Decline in Wage Rates: The decline in the monthly incomes was due to the decline in the wage rates, as well as the decline in employment. The average daily wage rate of the workers declined from Rs.195 before the crisis to Rs.102 after the crisis, again a decline of about 48 percent. As against 95 percent of workers earning wages of more

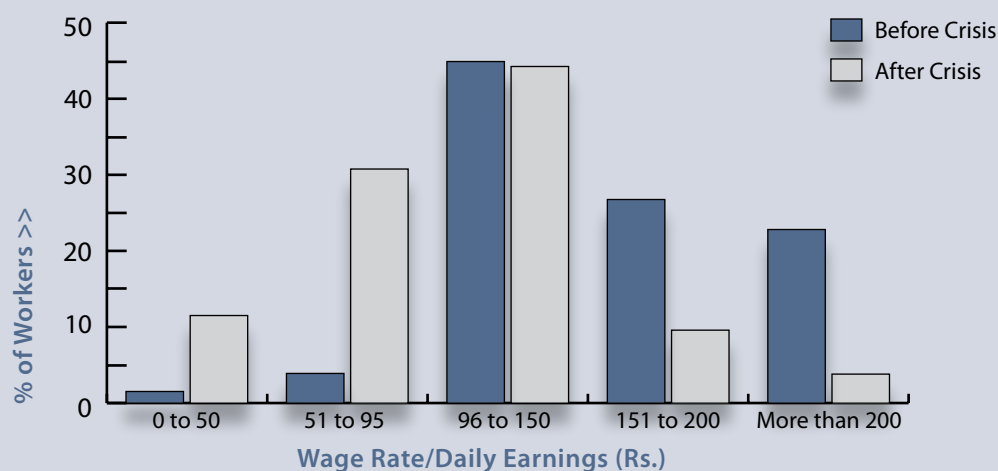


Figure 2: Daily Wage Rates / Earnings of Workers (Table 8)

than Rs. 100 per day before the crisis, only 62 percent workers earned more than Rs. 100 per day, after the crisis. The general decline in the wage rates has been due to the fact that the workers who have remained in the industry now settle for lower wages, fearing unemployment, and those who have shifted out have shifted to low productivity, low skill occupations (Table 8). Figure 2 shows that the proportion of workers in the low wage classes has increased (due to the decline in the wage rate of those who earned higher wages before the crisis), and for the same reason, the proportion of workers in the high wage classes has declined.

Decline in Working Hours and Working Days: Before the crisis, most workers (more than 88 percent) worked for eight hours and more, 20 percent workers worked more than 10 hours a day. The average working hours were 9.5 hours before the crisis. After the crisis, however, only 26.3 percent workers were able to work for eight and more hours. The average working hours declined to 5.2 hours a day. Workers also experienced a significant decline in their monthly employment. About 48 percent workers reported that they got less work after the crisis; while the remaining workers (28 in number), who were engaged in small business, trade and petty services, reported that they worked more hours after the crisis, though they earned much less than before.

Decline in Facilities at Work: Though, diamond workers were 'non-permanent', they did enjoy some facilities at work, before the crisis. All workers had access to drinking water and a toilet; a weekly holiday and an annual Diwali vacation. They got nothing beyond this, except for a few regular workers, who received an annual bonus or Provident Fund benefits. None of them received social security benefits like old-age pension, Provident Fund, medical allowance or maternity benefits¹³. After the crisis, the meagre facilities at work also declined: weekly holidays and earned leave have almost disappeared. Drinking water and toilet facilities were also not available to the workers engaged in petty services and small trading (see Table 9).

Employment Status of Workers: An overall deterioration in the employment status of workers after the crisis was observed, even within the informal employment status of the workers (Table 10). The share of regular workers in total workers, declined from 80 percent before the crisis to 14 percent, after the crisis. The element of employment security declined significantly. Again, the share of casual workers increased from only one percent to 24 percent, after the crisis. About nine percent of workers, took up some small self employment, while the share of temporary workers increased from 12 percent before the crisis to 20 percent after the crisis. In short, though all the workers continued to remain 'non-permanent' before and after the crisis, the instability and uncertainty of the employment status increased after the crisis.

13 Employers and industry leaders argued that workers do not want any Provident Fund facilities and are happy with their relatively high salaries. The workers also reported that they do not want any Provident Fund benefits because as non-permanent workers they find it difficult to claim the money when they leave their jobs.

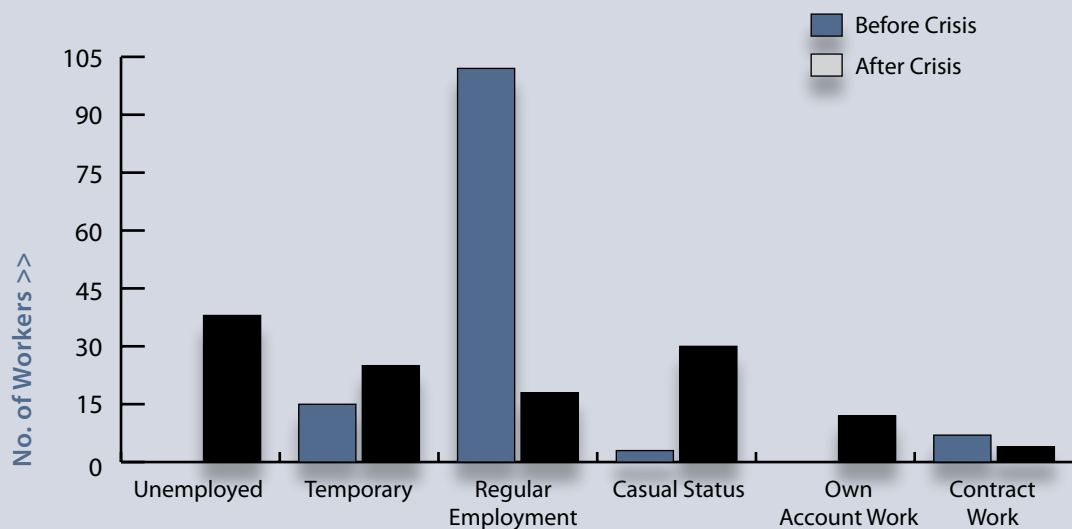


Figure 3: Employment Status of Workers Before and After the Crisis (Table 10)

Moving from Skilled to Unskilled Work: All the 127 diamond workers were skilled workers. However, when they lost their jobs in the industry, many of them were forced to take up unskilled work. As the figure below shows, one third of the skilled workers were forced to take up unskilled work after the crisis (Table 11). This means that there is a productivity loss being suffered by the economy, as skilled workers are doing jobs that can be done by unskilled workers.

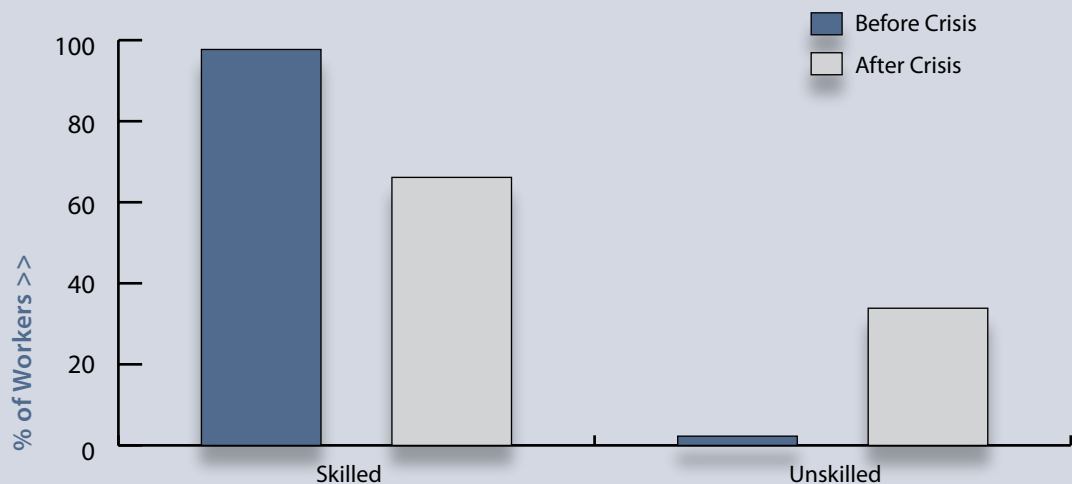


Figure 4: Skill Status of Workers on the Job, Before and After Crisis (Table 11)

Decline in Monthly Income of Households: The crisis reduced household incomes as well, as the other earners in the households were also earning lower incomes. The average household income declined from Rs. 8,905 before the crisis to Rs. 3,588 after the crisis, implying a decline of 60 percent.

Help Received from Government, Industry and NGOs

Workers in such a crisis may expect help/support from different agencies, such as the Government, employers, industry associations, NGOs etc. for (i) keeping the consumption levels from falling and (ii) aiding the search for alternative employment. As Table 12 indicates, this help, from different agencies, was far from adequate. As regards assistance in protecting consumption levels, only 29 percent of the workers received some support, which according to the beneficiary workers was far from adequate. The Government, the industry associations and employers provided support in cash and kind, for food grains and other food items and for education expenditure. The help in searching for alternative work/job was much less. The Government's support in training¹⁴ was not suitable and the support from NGOs was almost non-existent. Only some employers provided help in getting alternative work, mostly in the diamond industry itself. About 11 percent of workers secured some employment. In short, about 67 percent workers were left to fend for themselves, in an attempt to protect their living standards and 88 percent workers said that they had received no support in their search for alternative employment.

Most workers in the industry were not covered under any social protection schemes, including unemployment insurance. As the employment is informal, there is no record to prove that they have worked with any employer in the industry.

Response of Affected Households: Reduction in Remittances, Dis-saving, Mortgage and Sale of Assets and Borrowings

Decline in Remittances: Sending remittance to families back home is a common practice in this industry. Our data shows that before the crisis, 48 workers (38 percent of the sample) sent an average monthly remittance of about Rs.1,585, home. After the crisis, however, only 20 households (16 percent) sent remittances home, and the average amount of the remittance declined to Rs. 842. The decline was observed in all age groups (see Table 13).

This drastic reduction in remittances has had a severe impact on the living standards of households and the local economies in the villages, to which the remittances were sent. This issue is re-examined later in the study, together with the impact of the crisis on reverse migration.

Dis-saving, Mortgage and Sale of Assets: Since diamond workers earn relatively good wages, many of them had savings of their own. More than half the households used their savings to survive the crisis – at least in the initial months. However, the crisis continued unabated, with the result that this saving could not help these households beyond a point. About 15 households (12 percent) mortgaged their

14 On the recommendation of the RBI Taskforce, the State Government started a training programme to train the diamond workers in other trades. However, this was not very successful.

assets and the same number of households sold some of their assets, such as, gold, silver, appliances, land etc. (Table 14). Our discussions reveal that the mortgage and sale provided some support and enabled the families to tide over the crisis for some time.

Increased Borrowing: Borrowing from friends and relatives, from money-lenders and from banks (if possible) was also an important coping strategy for some workers. The number of households borrowing for consumption more than doubled after the crisis. The main reason for borrowing was to meet day-to-day consumption needs. The next important reason is health, followed by education expenses and expenditure on social functions.

More than half the borrowing was from friends and relatives. 'Others' helped in 12 cases, while money-lenders were the source of borrowing in the remaining five cases. Though, banks have been asked to help, only one household could secure a loan from a bank. It is interesting to note that the average amount of borrowing has declined from Rs. 80,965 before the crisis to Rs. 41,110, after the crisis. This may be because households have reduced borrowing for expensive social functions.

Reduction in Consumption Expenditure: A Major Coping Strategy

In the absence of adequate support from the Government and other agencies, and the inadequacy of the other strategies like mortgage / sale of assets and borrowing, workers chose to cut down on their own consumption, in different ways. All households, except 14 households (11.81 percent), reduced their consumption in one way or the other. Many of them did this as a precautionary measure, readying themselves for the uncertain future. Major reductions were made in food consumption, and in the expenditure on education, health and other items.

Reduction in Food Consumption: The most important area of reduction in expenditure was food. Nearly 90 percent of households (112 households) reduced their food consumption. About half the households reduced their expenditure on eating-out and on entertainment. About 38 percent of households reduced or stopped consuming more expensive food items, such as meat, chicken, eggs etc and 20 percent of households reduced or stopped eating fruits and vegetables (Table 14). Reduction in food quality was seen mainly in the households in the lower income groups (earning up to Rs. 3,000 a month). In the case of unemployed workers, it was observed that almost all households reduced their food consumption drastically.

Reduction in Education Expenditure: Major reductions were also made in the expenditure on education by (i) withdrawing children from school/college, (ii) by not paying school fees (as long as the schools tolerated this), (iii) shifting children from private schools to municipal schools, and (iv) cutting down expenditure on books and other school items. More girls were withdrawn from school than boys. More boys were shifted to municipal schools, as compared to girls. Efforts were also

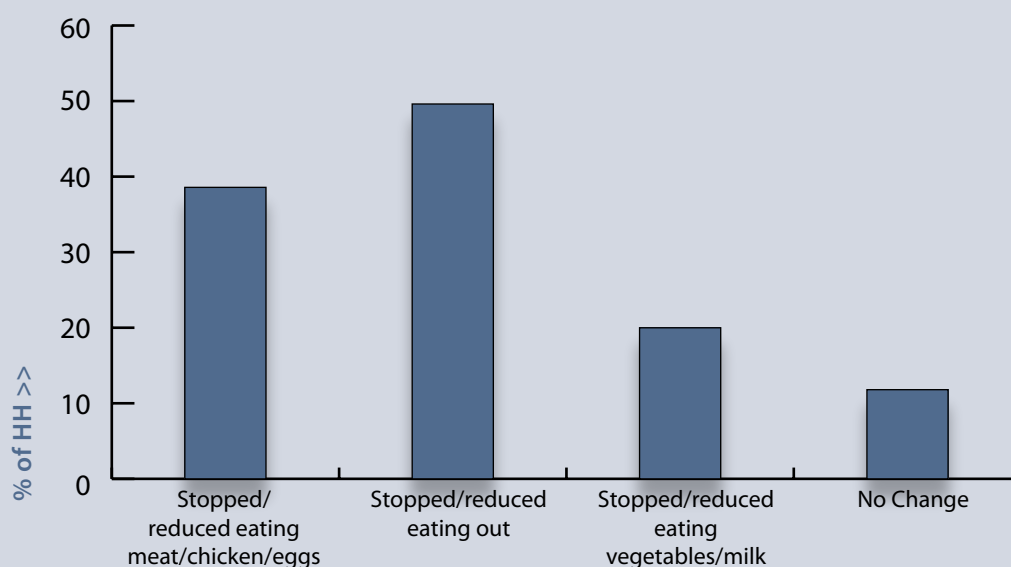


Figure 5: Reduction in Food Consumption (Table 14)

made to retain boys in the same (private) schools, by delaying the payment of fees, in the hope that they would receive some help from the Government, industry associations or from some voluntary organizations.

About 20 percent or one-fifth of the households have withdrawn children from school. More than half the households have shifted their children to municipal schools to avoid paying fees, and about one fifth of the households have not paid fees in the hope that the Government will provide some financial support for the

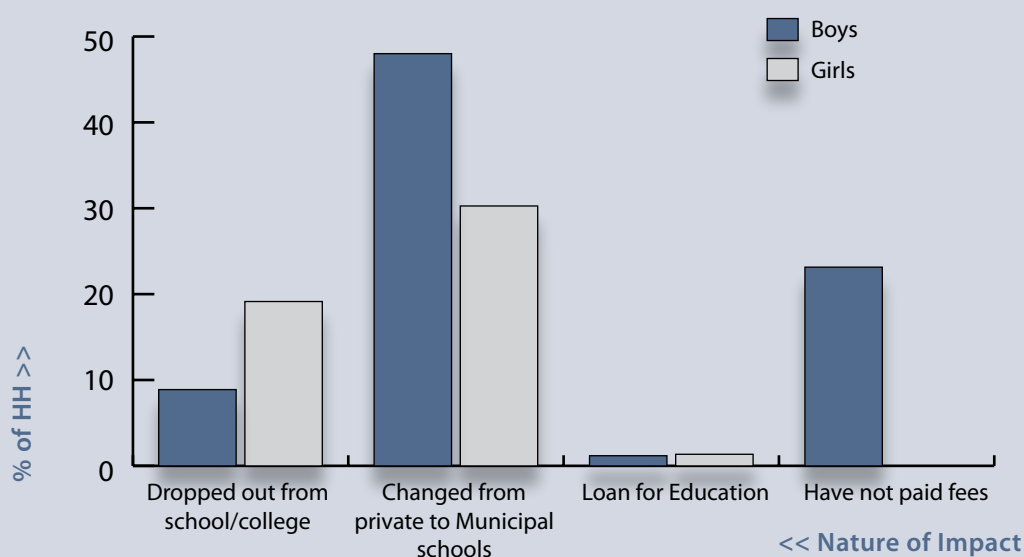


Figure 6: Reduction in Expenditure on Education (% of HHs) (Table 15)

children or that the industry may recover. In all, about 84 percent households have chosen to reduce their expenditure on education to make ends meet (see Table 15).

The reduction in expenditure on education is a matter of concern, as it adversely impacts human development and the future earning capacities of children.

Reduction in Health Expenditure: It has been observed that households in India do not hesitate to spend on health, when there are serious health problems. In fact, studies have shown that people prefer private health services to public health services, even though they are more expensive, because public health services are usually not easily accessible and are not dependable.

A major shift from private to public health facilities has not been observed in the case of the diamond workers. What is observed, however, is that after the crisis, the workers and their household members seek medical help only in case of emergencies and try to manage with home-based remedies and treatment, as far as possible. However, the ailments of children and of earning male members were treated as important enough to seek paid medical services. Overall, 66 percent or two-thirds of households changed their pattern of health expenditure, after the crisis (Table 14).

As far as other expenditure is concerned, a major reduction was also made in house rent: More than two-thirds of the households had not paid any rent for the past few months. About one-fourth of the workers have their own houses.

Social Tension, Conflict and Domestic Violence

Lack of access to any reliable support and the struggle to make ends meet has had an adverse impact on the family life of the workers. More than 50 cases of suicide of diamond workers were reported in Surat city, in the past six months. Twenty households from our sample reported suicides by diamond workers, as well as by small unit owners. In addition, one-fourth of the households reported domestic tension, including domestic violence, and almost half the households reported an increase in drinking and smoking, mainly by men. Overall, more than a third of the households reported increased tension and conflict (Table 14).

Increased Participation of Household Members in the Labour Market

Before the crisis, the main occupation of 96 percent of the sample households was diamond cutting and polishing. The remaining four percent stated construction work, agriculture or other factory work as their main occupation. Almost all workers were temporary workers, but 86.6 percent were 'regular workers', before the crisis. The rest were casual or contract workers. Significant changes have taken place in the occupations of the household members after the crisis (Table 16).

- Several non-workers have entered the labour market; 14 students out of the total sample of 194, 18 housewives of the total sample of 148 and six retired persons out of the total sample of 59, have joined the labour market. In all, 38 persons

who were non-working household members, have joined the labour market.

- There were 178 diamond workers in these households before the crisis. After the crisis, there were only 125 diamond workers. This indicates a loss of employment for 53 workers, or about 30 percent of the workers.
- A large number of workers from these households have shifted to manual, low productivity and low earning jobs. Self-employment in small and petty trade and services emerged as an important alternative.
- In short, after the crisis, household members shifted to lower paid, low productivity and less remunerative work.

Impact of the Crisis on Women

Women have entered the diamond industry only recently, in the last five to seven years. They constitute less than five percent of the total workers. There are no women employers / producers in this industry, which is male-dominated. Women workers are largely in polishing, as 'cutting' is considered to be a man's job. Women workers usually sit separately from men workers. In large units, there are separate wings for women. Though, women are viewed as sincere and hard working, they are the first to be dismissed when the market declines. The survey shows that there were 17 women workers in the sample households, before the crisis. Of them, 12 women lost their jobs after the crisis, implying a decline in employment of 80 percent. It was argued by several employers and industry leaders, that women were easier to dismiss from work because they were not the main 'bread winners' in the family. This also means that men bear tremendous psycho-social pressure which women do not face. The pressure on women in households headed by women, however, is very high.

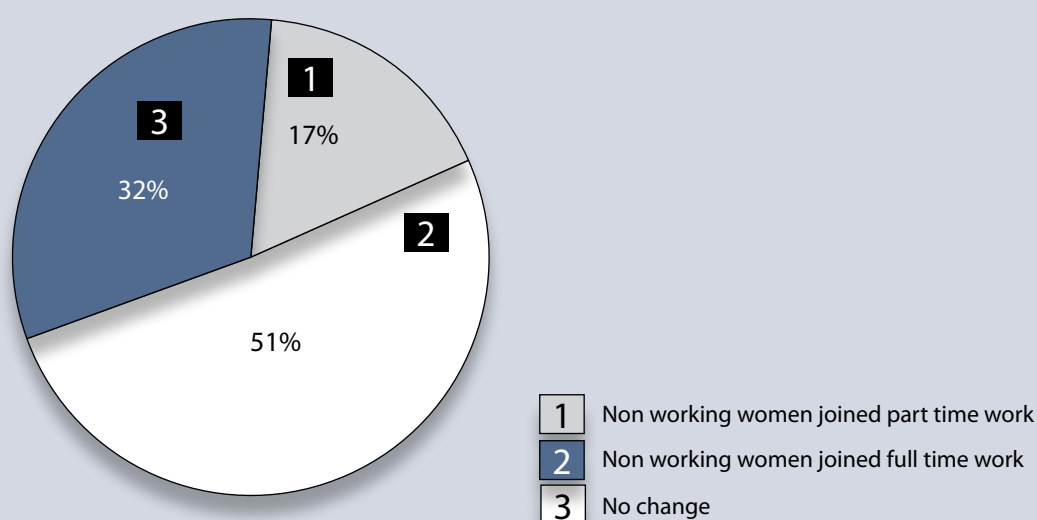


Figure 7: Women's Participation in the Labour Market (Table 17)

Women's participation in the labour market has increased after the crisis. Of the women, who were outside the labour market initially, about 17 percent have taken up part time work and 52 percent have taken up full time work. Since the reserve price for women's labour is very low, they have taken up whatever work was available, including work with very low productivity and low wages frequently involving drudgery of work. The data shows that most women outside the labour market, have taken up construction, vegetable vending, embroidery, tailoring etc. The average monthly earning in these activities was less than Rs. 2,000 and the work involved was between eight to 10 hours a day.

FGDs with women revealed that women, particularly those belonging to poor households, were willing to take up almost any work to increase the incomes of their families. Unfortunately, there are not many opportunities for them, as (i) in some cases they cannot go out to work due to the prevailing social norms (for example women belonging to the Patel, Darbar and Rajput communities are not encouraged to work outside the home), (ii) their education and skills are very poor and (iii) their domestic responsibilities confine them to the home.

BORROWING FOR SURVIVAL

Arvind Nitinbhai Vaisnav, (age 18 years) used to work in a small diamond unit in Varachha, Surat. His native place is in Saurashtra – Bhargam in Junagadh district.

He discontinued his studies after Standard VIII and came to Katargam to join a small diamond unit in 2005-06. There are five members in his family. His father works in a diamond unit, as a polisher and his mother works as a peon in a local school. His brother, who is two years younger than him, studies in the Standard X.

His monthly salary was Rs 5,500 before the crisis. Every year, he used to get a fixed bonus of Rs 2,000 before Diwali. Last year, however, the unit owner gave him one month's notice to leave. The unit closed thereafter. So, he joined the laser cutting department of another unit and worked there for two months. In April 2009, he joined an embroidery unit, located near his home. As a novice in this industry, he gets Rs 3,000 per month. He is not happy with his new job, because the working hours are long and there are sometimes two continuous shifts, on alternate days, and there is no weekly or even fortnightly holiday.

Arvind's father is still in the diamond industry, but his monthly salary has dropped from Rs 10,000 to Rs 5,000. Arvind's mother earns Rs 2,000 as a peon, a job she has had for the last two years. The school authority has provided her one room to live. The family has taken a loan of Rs 70,000 to tide over these difficult times.

They had a small retail sari shop which they had taken on rent. However, they had to close the shop, as no credit was available to run it.

As the investigation shows, women's domestic work (unpaid) has increased during the crisis. About one-fourth of the total households (36 households) reported that domestic work had increased for women. This is because (i) eating-out as well buying food from outside has declined or stopped in many households, (ii) hired domestic help has been dismissed in many cases, (iii) since they cannot afford to spend much on health services, women take care of family members when they are sick (including preparing home-based medicines) (iv) men are spending more time at home, so they require more attention and (v) women try to replace products which were earlier bought in the market by home-made substitutes, (for example clothing and food). It has been reported by the households, that the average number of hours of house-work for women, has increased at by two to three hours, per day (see Table 17).

In addition, women also suffer from increased tension and conflict at home and are often subjected to domestic violence. Several women reported during the FGDs that they faced increased tension and violence. The lower income, the uncertainty about the future and the reduced prospects for children, have given rise to increased conflict and tension. One important factor that worries women (and men) is that there is nothing to fall back on in this crisis, and there is no hope on the horizon. Men's increasing expenditure on addictions such as liquor, adds to the conflict and leads to domestic violence.

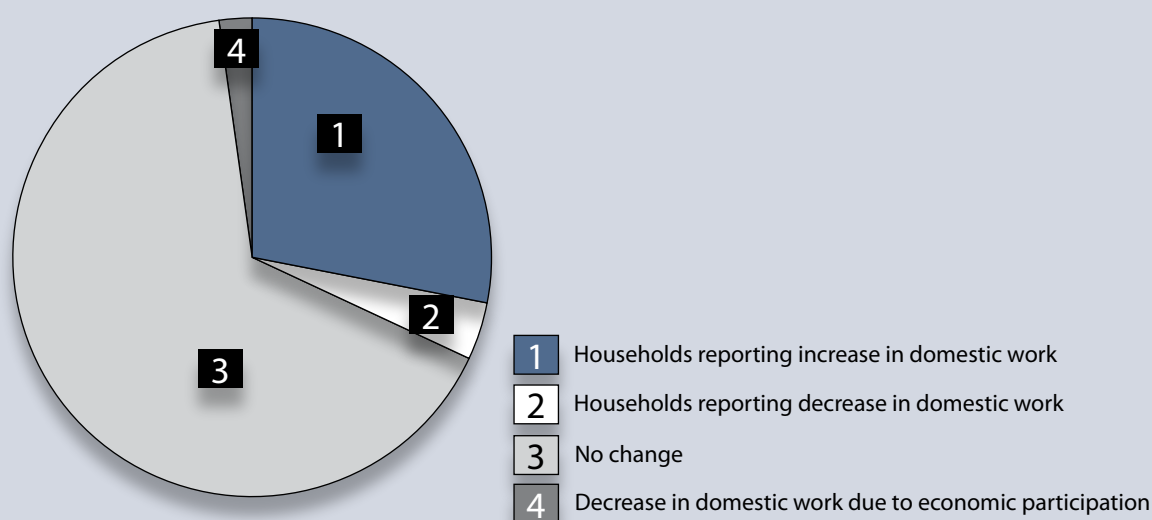


Figure 8 Increase in Domestic Work of Women (Table 17)

Migration to Escape the Crisis

It has been estimated by industry leaders, that about half of the 400,000 workers who lost their jobs have gone back to their native places. This is because Surat is expensive to live in, while the cost of living in the villages, where their families live, is lower. In

order to understand how workers returning from Surat are coping with the crisis, it was necessary to initiate a careful study. As stated earlier, a sample of 34 workers has been selected for an in-depth study from one town and four villages in Bhavnagar district. The villages selected were the villages that used to provide labour to the industry in Surat and these were selected after discussions with industry leaders, in Bhavnagar.

B. Diamond Workers who had returned to Bhavnagar

The visit to four villages in the Bhavnagar district, showed that there are several characteristics which are common to the villages from which migration has taken place. In all these villages, the main occupation is agriculture. However, agriculture is mainly rain-fed, with less than 10 percent of the cultivated area under irrigation. These villages take only one crop in the year, the *kharif* crop, and grow *jowar*, *bajri* and cotton. There are not many employment opportunities available in the non-agricultural season. People migrate or commute to urban centres or to irrigated regions, where work is available. Young school drop-outs prefer to go to urban centres, to work in the diamond cutting and polishing industry.

These villages have limited infrastructure facilities: there are no health facilities in most villages; there are inadequate sanitation facilities, including those for the disposal of waste, no interval paving of roads and inadequate infrastructure for primary schools. However, remittances from diamond workers have brought prosperity to these villages. In each of the four villages, the number of diamond workers varies from 250 to 600. As a former Chief Minister of Gujarat had observed, the diamond industry is a major 'drought proofing' activity in Gujarat villages, as it provides work even when agricultural does not, for example, in a drought situation.

The following villages were selected for the study:

Piprola village, located in Umralla Block (taluka) in Bhavnagar district has 600 households and a population of about 2,500¹⁵ people. There are about 700 diamond workers in the village and 250 of them are 'Surat-returned' workers.

Tarsara village, located in Talaka taluka, is a village of 3,123 people, which is largely dependent on rain-fed agriculture¹⁶. There are about 250 diamond workers from the village, and 50 of them have returned from Surat.

15 Less than five percent of the area is irrigated in this village, with the result that the farmers grow only one crop a year. The village has a primary school (I to VIth standard) and an ICDS centre, and children have to go to Umralla (nine kms away) for further studies.

16 The village is poor in infrastructure, with one primary school from up to the IVth Standard and one ICDS centre – both inadequate for the village. Children have to travel to Talaja (10 km away) for further schooling. The village also does not have any health facilities and villagers go to Talaja for health services.

Tarsaniya village, located in Talaja taluka, has a population of 2,590 people, and is an agricultural village with less than 10 percent of the area under irrigation¹⁷. There are 450 diamond workers, in the village, of which 150 have returned from Surat.

Ghogha is a small town, a block headquarter, where the diamond industry is well established. There are more than 600 diamond workers in the town, and more than 200 have returned from Surat.

In spite of poor agriculture, these villages look relatively prosperous due to the huge remittances sent by diamond workers.

Profile of Workers who have Returned

FGDs and field surveys have shown that the main reason for workers returning from Surat was the loss of employment in Surat, which made it difficult for them to live in the expensive city. At home, however, they do not have to pay any house rent or electricity charges; vegetables and food are cheaper, and they can depend on their parents and families for help. The workers who have returned are relatively young workers, who have not had enough time to establish themselves in Surat. About one-fifth of the workers are less than 20 years old and 70 percent are below 30 years of age. The average age of these workers is 27.2 years. About 20 percent have studied up to Standard V (two of them have not had any formal education) and the rest of them, (excepting one), have studied up to Standard X but have not passed the final exam. Only one worker has passed the Higher Secondary School Examination.

Changes in Occupation, Income and Wages

A major problem with the diamond workers who had returned to their original place of residence is that most of them are school drop-outs. They earned more than what they could earn otherwise with their semi-educated status, with a brief on-the-job training. Since they are used to making relatively good money, they do not want to take up unskilled manual work, at low wages. However, they are not educated enough to take up better paid jobs or undergo any high level skill training. As a result, they do not fit well in the labour market and are depressed and frustrated.

They left the villages to escape the lack of work and poverty, a few years ago. However they have had to return. It is not surprising, therefore, that almost a third of them are unemployed and are hoping for better days. Of the rest, three people work in agriculture, 12 work as manual workers in construction and related work, within and outside the village, and one has taken up a driver's job. Except for the four workers in Ghogha, who are employed in a diamond factory, all the workers have taken up work

¹⁷ The village has relatively better infrastructure, as it is close to the block headquarter. It has primary schools, one secondary and a higher secondary school, as well as a college within a five kms distance. It also has a bank and a railway station close by.

outside the diamond sector. A few of them have started their own petty businesses, selling vegetables or running tea stalls, and providing small services such as working as helpers to drivers or as office boys etc (see Table 18).

DECLINE IN INCOME MEANS A CUT IN EDUCATION EXPENSES

Mukhadbhai, who lives in Piprali village in Bhavnagar, was working as a diamond polisher in Surat for the last nine years. He was a daily-wager and worked for 10 hours a day. His monthly income was Rs 5,000. He is the only earning member in his family, and has to support his wife and child.

In October 2008, he lost his job because of the crisis. As he could not find any suitable work in Surat, due to his lack of skills in fields like embroidery etc, he found it difficult to live there. Ultimately, he decided to return to his home-town. He now works for about 15 to 16 days a month, as a wood-cutter and earns Rs 60 per day. He manages to earn a paltry Rs 1,000 a month from this work and is unable to pay the tuition fee and meet other education related expenses for his son. He just does not know how to manage with this small income.

Having no alternative, he has taken a loan of Rs 50,000 from a bank, at five percent interest. Like other diamond workers, Mukhadbhai has not received any help from the Government or any other organization. His only hope is the revival of the diamond industry.

The wages and incomes of these workers have declined drastically after the crisis. The average wage rate has declined from Rs. 244.70 per day, before the crisis to Rs. 75 per day, after the crisis, which is less than 30 percent of the earlier wage. The low wage rates, accompanied by fewer days of employment, have reduced their incomes from Rs. 5,642 to a paltry Rs. 806 per month. This is a fall of as much as 85 percent (see Table 19).

The average number of working hours have remained more or less the same, for the workers after the crisis as before, because manual work in agriculture and elsewhere, also requires long hours.

Change in Employment Status: Most diamond workers (in the sample) in Surat were 'regular' workers. Though they did not receive the benefits of 'permanent' workers, they did have a long-term job in their respective units. However, after the crisis, almost all of them have become non-regular workers, i.e. casual workers, and some are unpaid family workers on their own farms – all of them are without any regular employment or social security (see Table 20).

Depression in the Village / Local Economies

The RBI Task Force has estimated that about 60,000 diamond workers in Bhavnagar district have been rendered unemployed. In addition, about 30,000 workers from

Surat have come back to Bhavnagar. These workers have caused a severe depression in the wages in several pockets / villages in the district. This is because of the huge decline in the remittances. The closure of local tea / *paan* shops, and a decline in the business of grocery shops and other local businesses is also apparent. As a shopkeeper pointed out, 'there are not enough customers now'. This depression is observed in Ghogha town also, where a number of small restaurants have closed down.

Several wage rates have declined in the recent months. The wage rate for masons for example, has declined from Rs. 200 - 250 per day before the crisis to Rs. 100 - 150 after the crisis; the agricultural wage rate has declined from Rs. 80 - 100 to Rs. 60 - 80; the wage rate at the Alang Ship Breaking Yard has declined from Rs. 200 - 250 to Rs. 100 - 150; and the overall unskilled wage rate has declined from Rs. 80 - 100 to Rs. 60 or so. In short, affected pockets with returned migrants have been badly hit by the crisis.

Impact of the Crisis on Household Consumption Pattern

Reduction in Food Consumption: Shifting from Surat to the villages on the one hand and the drastic reduction in incomes on the other hand, have led the workers to reduce their food consumption. Even though food is cheap in the villages, the workers have to struggle hard to make ends meet. After coming back to the native villages, these workers have almost stopped eating-out and reduced the consumption of milk and fruits as well as of eggs and chicken. Four households in the sample have reduced the number of meals from three to two, by skipping breakfast (Table 21).

Impact on Education and Health: Education of the children of these workers has also been adversely impacted. All the children are now in Government schools. As the FGDs revealed, the quality of education is poor in these schools, as compared to the private schools in Surat. The school infrastructure is inadequate, the teachers are not regular and the level of education is poor. Five households have stopped sending their children to school altogether, an even more distressing development.

Health infrastructure is very poor in the villages. Expenditure on health has declined because of the decline in incomes and because access to health facilities is difficult. The workers reported that they go to the hospital only if there are serious health problems. Otherwise they try to contact the Government nurse, who is expected to visit the village once a week or they use home-based medicines.

Increased Participation in the Labour Market

One major change in the occupational pattern of the households is that other members of the households have started to work. Fifteen housewives and nine students have joined the labour market. Five housewives have started working on farms, five have taken up manual work and another five have started home-based work like embroidery, making incense sticks etc. The students have started working

WAITING FOR BETTER DAYS

Ranbirbhai (age 40), a Patel by birth, lives in a small *kutchha* house in Tarsamiya village of Talaja Taluka of Bhavnagar district with his parents, his wife and two small children. He used to work as a diamond polisher in Surat and was earning around Rs. 5000 per month. His brother, who lived with him, earned Rs. 2,000.

In October 2008, he lost his job. When all his savings were almost over, he returned to this native village, where he does not have to pay the monthly rent of Rs. 1200 and incur other expenses such as electricity, transport costs etc. The situation in the village is, however, very difficult. He works as an agricultural labourer and earns a daily wage of Rs. 60. Sometimes he goes to cut wood, about 10-15 km away and earns Rs. 80 per day from the contractor. Ranbir manages to earn about Rs. 2,000 per month. (His father and his son also work as woodcutters and earn about Rs. 1,900 per month.) The diet of the family is very simple, *roti*, vegetables and milk for the children. Being a Patel, Ranbirbhai does not allow his wife to work outside the home, even in the crisis.

Ranbir did not have any prior experience in agriculture. He is also not happy working as an agricultural labourer, but he has no choice. Since the income is low, he has recently taken an interest free loan of Rs. 30,000 from his friend, for household expenditure. Ranbir is now under severe mental pressure, as he is jobless almost half the month and he has to pay back the loan. He has not received any aid from the Government or from local organizations. He hopes to go back to Surat and join the same unit, where he worked, once the situation improves. He remains in touch with his colleagues and with the community involved in the diamond business.

in farms, as family helpers or as hired labour. Apart from this, the other major changes are that the number of the unemployed people has increased from nine to 22 among the men and from zero to 1 among women; the share of manual labour has jumped up from eight to 38, as there are no other employment opportunities in the villages; and the share of workers in petty services and trade has increased considerably (Table 22).

In short, a deterioration in terms of employment status, skill level of work, as well as in wages and incomes is observed.

Impact of the Crisis on Women

Women are often used as 'shock absorbers', particularly in the rural areas. This is because women are in a better position to address the shock and the crisis faced by the household. Since agriculture is a residual sector, women work on family farms, if needed, after dismissing the hired help. They collect free goods like fuel wood,

SURVIVAL IS HARD

Kalpeshbhai Narsibhai Vaghani (age 23 years) studied up to Standard IX and left his native village Pipaldi, Bhavnagar in 1999, to join a diamond unit in Surat. Before the crisis, his monthly income was Rs 3,500. Both his brothers also worked in the diamond industry. The monthly income of the household was around Rs 12,000.

Around Diwali, his elder brother became paralyzed, soon after he had lost his job. Kalpesh took a loan of Rs 50,000 from his relatives for the treatment of his brother. Before the crisis, they used to send Rs 5,000 to their grand parents and to their mother in the village, but now they are unable to send anything. Since they stay in a rented house, they have to pay a monthly rent of Rs 2,000. Kalpesh now earns Rs 2,500. His household income has declined substantially.

Kalpesh and his brother are really worried about their elder brother's health and the expenditure that they have to bear. They are planning to take up part-time jobs in addition to their primary occupation which is diamond polishing. There is no change in their food habits so far, but they have curtailed the cost of transport by using a bicycle. Their main worry is that they are not able to send any money to their grandparents and mother, who are all dependent on them.

fodder, vegetables, leaves, wood for construction of shelters, etc. from common lands or common property resources. Women perform food-processing activities, within the household as well as do the washing, cleaning and household upkeep, and often do away with hired help. Women are also observed to increase their care-work by looking after the sick, the elderly and the young.

The occupational pattern of the household members of the selected workers has changed considerably after the crisis: Fifteen housewives have taken up work in the labour market. In addition, five working women have increased their work after the crisis. Women have taken up work in a range of economic activities, such as construction work, as helpers to masons, agricultural and rural labour, home-based work like making incense sticks, as domestic helps and have increased the time spent in the collection of 'free goods' such as wood, leaves, fruits etc.

All these activities are extremely low paid activities: women earn Rs. 25 a day by making incense sticks, Rs. 70 per day as helpers to male masons, Rs. 50 per day in domestic work and Rs. 50 to Rs. 60 per day in agriculture. The work involves hard labour and long work hours. There is a clear wage differential between men and women. In masonry work, for example men lay bricks and earn between Rs.100 and Rs.150 per day, while women, who invariably work as helpers, earn between Rs. 70 and Rs. 75 per day.

As in Surat, women's unpaid domestic work has increased significantly. Eleven women or one-third of households have reported such an increase. The shortage of cash to buy goods from the market seems to be an important cause for this.

Domestic Conflict and Violence: The FGDs revealed significant increase in tension and violence in women's lives. The general complaint was that women were under great pressure because they carried the burden of increased paid and unpaid work, and the tension and violence has increased within families. Incidents of suicides were also reported.

C. Impact of the Crisis on Small Producers

As stated, the diamond industry has a pyramid-like structure, where a small number of large producers are at the top and a large number of small producers are at the bottom. Small units are usually engaged in job work, though some units do sell their products to traders / exporters directly.

The predominance of small units is mainly because it is easy to enter this industry, with a small investment, particularly to undertake job work. In addition, the level of technology and skills needed is not very high. In fact, most small (and even big) producers in the industry are school drop-outs. Small units get their workers from within the family, usually relatives, who work together without making demands for higher wages and higher benefits.

Smaller units have been the worst sufferers of the crisis due to several reasons: (i) their survival depends on job work, and the moment this stops, they have no option but to close down; (ii) they have limited access to credit for survival; (iii) they deal with low quality diamonds, the demand for which declined much more than the demand for high quality, high value added diamonds, and (iv) since they do not import raw diamonds or export finished diamonds directly, the burden of the crisis is frequently passed on to them, by big traders and exporters. As the President of the SDA pointed out, more than 60 percent of the small units have closed down in the present crisis, and the rest of the units have seen a huge decline in their business.

According to the SDA and the GSEPC, the major problems of the industry, which affect small producers in particular are: (i) **Rising Costs:** Rising prices of rough diamonds (imported) and falling prices of cut and polished diamonds have resulted in losses as well as the closure of several diamond units. The rising power cost as well as rising input prices have added to the crisis. (ii) **Low Technology and Low Productivity:** In spite of the decline in the global demand for diamonds, there is some demand for high value added superior quality diamonds in the global market. However, this demand cannot be met by most units, due to low technology levels. There is thus a need to promote the skills of workers and encourage smaller units to improve their technology and productivity. (iii) **Enforcement of the Factories Act:** The SDA believes that the enforcement of the 'Factories Act' in this sector is an extremely unwise step, particularly for small producers. To start with, the number of workers is always fluctuating due to changes in the export orders received, with the result that the producers will not be able to bear the burden of social security for all

NATIONAL RURAL EMPLOYMENT GUARANTEE SCHEME (NREGS) AND DIAMOND WORKERS

The National Rural Employment Guarantee Act (NREGA), implemented since February 2006, guarantees 100 days of wage employment to every household living in rural India.¹⁸ Effective implementation of NREGS can help in multiple ways in the current situation: (i) it can provide employment at minimum wages to the workers who have come back to their respective villages; (ii) it will not depress the wage rates in the village, as the NREGA wage rates are the statutory minimum wages (when workers join agriculture, there is likely to be a steep decline in the wage rate); (iii) it will build productive assets in the village, that could expand employment opportunities in sectors such as agriculture, animal husbandry, horticulture etc, and (iv) NREGS will restore the self-esteem of the workers, who will be productively employed and will contribute to the development of the village. In short, NREGS can work as a safety net during the crisis. NREGS can also boost the economy by raising the effective demand and contribute to social infrastructure and human development, if implemented well. However, in the villages visited, there was no evidence of NREGS being implemented. Discussions with the Village *Panchayat* and other officials revealed that no serious attempts had been made to implement NREGS in these villages.

the workers who work for them. It is feared that the implementation of the Act will bring corruption and its enforcement will lead to the closure of a large number of diamond factories (iv) Integration of the industry: There is an urgent need for the diamond industry to move up the global value chain, to improve its stability. This calls for the production of high value jewellery manufacturing, through a quantum jump in designing capabilities, so as to be able to compete with world-class brands from Italy, Germany, USA and other countries. At present, this is a tall order and one that needs huge investment and effort.

Emergence of the Crisis

As seen in Table 3, a sample consisting of 34 small producers was selected for an in-depth study. These units were located in Varachha, Katargam, Punagam and Mehdalpura.

These units felt the pressure of the crisis from September/October 2008. However, they continued production till Diwali (November) with the hope that the situation

18 The guarantee is for 100 days of casual and manual work on public works every year, and the work is to be provided within 15 days of demanding the work, within a five km distance; and it is to be provided at the statutory minimum wages. If work is not provided within 15 days of its demand, the persons who demand work will be paid an unemployment allowance, which will be at least one third of the minimum wages (Government of India, 2006).

would improve after the Diwali vacation. However, the situation became worse, and 17 units closed down. The other 17 units continued to operate their businesses, at a much lower level.

The 17 producers, who left the industry, started new ventures outside the diamond industry. Ten producers (60 percent) started embroidery units, this being a growing business in Surat; five producers started small enterprises, like grocery stores, or became vendors for vegetables and other goods, and two started small textile businesses.

Situation in the Diamond Units (Post Crisis)

Those who remained in the diamond industry continued their business at a much lower level. Several changes were observed in their operation.

Decline in Investment and Use of Credit: The average investment by the 34 diamond units was of Rs. 1.13 million before the crisis. Though some units have invested more than Rs. 2.5 million, most units invested less than Rs. 1.5 million. Since most of them were engaged in job work, they did not use credit. In fact, the trend in the industry is to use cash for business. Only four units, out of 34, borrowed money from banks.

CREDIT NEEDED TO EXPAND BUSINESS

Rajesh Singh (age 32 years), was born and brought up in Motihari, Bihar, and migrated to Surat in 2001, after an earthquake. He lives in Surat with his wife (age 30 years) and three children, who are studying in an English medium school. Earlier, Rajesh used to work as a sweet-maker in Mumbai and was settled there. He was inspired by his brother, who worked in a diamond unit in Surat, and decided to move out from Mumbai. He lived with his brother, who trained him in diamond cutting and polishing but the stipend he received was not sufficient for him to support his family.

Before the crisis, Rajesh used to earn between Rs. 8,000 to Rs. 9,000 per month. Now he earns Rs. 5,000 to Rs. 6,000 per month. He has taken a loan of Rs. 25,000 from his friend for the education of his children. Before the crisis, he used to send Rs. 2,000 to his parents but now he cannot do so. This really pains him. He has had to cut down his own expenses drastically: for example, he comes to the unit by bicycle instead of by auto rickshaw. He will never allow his wife to work outside the home.

Rajesh has taken up a part time job, where he sells spare parts for mobile phones. Due to the lack of cash, he cannot expand his business. He says that if his present business does well, he will discontinue working in the diamond unit, even if the situation improves. He needs a loan to expand his present business, which he is unable to get.

After the crisis, the average investment in the 17 units declined almost by half, to Rs. 520,000. As the Table 24 indicates, only one unit had an investment of more than Rs. 1 million, as against seven units before the crisis.

No unit sold its products directly any more, as the level of business was too low for that. Almost all the units sold their products in the local market in Surat. The local traders then export directly or indirectly through traders in Mumbai. Only three of the 34 producers (less than 10 percent) sold their products to traders in Mumbai (Table 24).

Many units were engaged in cutting and polishing their available stocks of rough diamonds. They plan to stop working when the stocks are used up. Though they would like to remain in the business by getting more rough diamonds on credit, credit does not seem to be available. It is possible that many of the functioning units will close down in a few months, if the required credit or business is not made available. Though the need for credit has increased after the crisis, no unit has been able to access any bank credit. Discussions with concerned officials revealed that bankers were most unwilling to give any credit to small producers in general, and to producers in the diamond industry in particular.

Use of Labour: Small producers use hired as well as family labour. The workers in these units are usually relatives and friends, or members belonging to their own communities in their own native villages. The low level of functioning in the units, led to unemployment of about one-third of the workers. The average number of workers per unit declined from 68 (before the crisis) to 44 workers (after the crisis). The share of hired labour also declined considerably. The average number of hired workers declined from 58 before the crisis to 34 after the crisis. The share of the units employing five or less workers increased from 53 percent before the crisis, to 73 percent after the crisis.

Situation in Business Units Outside the Diamond Industry (Post Crisis)

About half the small diamond producers have set up small units in other industries, embroidery being the most popular choice, followed by textiles and other small enterprises. As indicated in Table 24, the average investment in this sector is Rs. 520,000 and credit is available to 50 percent of the units. The produce of these units include saris and dress materials. All the units sold their products in the local market. Thus, even during the global crisis, it is feasible to start units in an industry, which has local markets. The access to credit is much easier and the markets are much safer (Table 25). The rest of the units are at a low level of the investment and business. These small and mini enterprises require much less investment and earn much less profits.

The main reasons for former diamond producers selecting the embroidery sector are: (i) it is a growing business (in Surat) with a good scope in the future; (ii) it has

a domestic market also, which has not shown any slow down in recent months; (iii) most of the workers have friends in the community in the embroidery industry (mostly Patels and Jains) who can help initially, and (iv) the new business can use the old space.

Sales and Profits

Finally, a substantial decline in the sales and profits earned is observed in the diamond industry and the embroidery units after the crisis. While, the earnings declined by almost 50 percent in the case of the diamond units, the embroidery units experienced a smaller decline (25 percent) on average, with three units earning more than before. This refers to the embroidery industry as a whole. The other small enterprises, mostly petty business, experienced a decline of up to 75 percent.

To sum up, the following observations may be made:

- The units which remain in the diamond industry and operate at much lower levels are not confident about their future. They do not know how long they will survive.
- The units in embroidery, however, are better off in terms of certainty of the demand, largely because they also sell in the domestic market.
- Labour/workers engaged in petty, low productivity, low earning activities, are not in a position to use their skills in the new ventures.

Expectations and Recommendations

In spite of the poor support received from employers, the Government and NGOs, the workers, as well as the producers, have a lot of expectations from these organizations, and they believe that they deserve better attention from these institutions and organizations. Several suggestions emerged from the discussions. These are:

Immediate Relief: The first demand is for immediate cash relief for the affected workers and producers to enable them to survive the situation. This relief should be in the form of a grant of Rs. 1,000 to Rs. 1,500 per month, for about six to eight months. In addition, an education allowance should be given to take care of educational expenses of children, and health support should be organized to help in emergencies. Some of the affected members suggested soft loans to tide over the crisis in consumption.

Social Security Package: Another major demand is that some form of social security be organized (this would include unemployment allowance, health insurance, old age pension and maternity benefits). Most workers believe that it was a mistake not to insist on such an insurance in the past. Considering the fact that diamond producers are not willing to get registered under the Factories Act, and to cover the workers under the social security package, it was suggested that the Government

THE RBI TASK FORCE ON THE DIAMOND INDUSTRY - TOO LITTLE, TOO LATE

It will be useful to examine the main recommendations of the task force appointed by the Reserve Bank of India 'to look into the distress arising on account of the problem faced by Diamond Industry in Gujarat' (February 2009). The task force made three sets of recommendations on: (i) restructuring finance in the context of the severe credit crunch faced by the industry and particularly by small units, (ii) enhancing employment opportunities of workers who lost jobs during the crisis, and (iii) providing relief to the affected diamond workers.

The first set of recommendations includes (i) restructuring of the existing borrowers' accounts, as per the RBI guidelines; (ii) lending to diamond units against stock of diamonds to tide over the crisis; (iii) financing new diamond units for creating employment, and (iv) financing by banks for procurement of rough diamonds. Industry leaders and the Industry Associations have opposed these recommendations, because there is nothing on how to implement these recommendations so as to ensure that credit reaches the diamond units. As there is a severe credit crunch in the industry at present, it is felt that there is no question of financing new diamond units.

The second set of recommendations on retraining and re-skilling include (i) organizing training courses in new trades for the unemployed through ITIs, polytechnics etc, and (ii) giving financial assistance to the trained persons under different government schemes. These recommendations also have been criticized on the grounds that there is nothing new in these. Also, short term training programmes usually do not help in generating sustainable employment. Though the Department of Labour, Government of Gujarat has tried to organize training for unemployed diamond workers, the response has been poor ¹⁹.

The third set of recommendations relates to providing relief measures to the affected diamond workers, in the form of cash assistance, soft loans, restructuring old loans, setting up education funds, group insurance schemes etc. However, nothing has been implemented so far. The suggestion of issuing Identity Cards to diamond workers, which may be the basis for implementing these measures, also has not been enforced.

A major problem with the task force, as pointed out by Industry Associations and the GEPC, is that there was not a single person from the industry on the task force. In the absence of an insider, who could represent the problems of the industry and its workers, the recommendations do not appear to be very practical or useful, in the short run. The Industry Associations feel that not enough has been done by the Central or the State Governments to help the industry²⁰.

19 From discussions with Deputy Labour Commissioner, Surat.

20 Based on the discussions with industry leaders, office bearers of industry associations, officers from the labour department.

use an innovative mechanism to provide such a cover for the workers. For example, the industry can be taxed to pay for the provision of such safety nets and the workers need to have identity cards certifying that they work in the diamond industry.

Package for Small Producers: A major demand of diamond producers is to organize a special fund to provide finance to the industry, particularly to small producers. As banks are not willing to lend to the industry, a special fund for the industry to meet its credit demand will need to be set up. Suggestions have been made about subsidies to the industry in credit, inputs, capital equipments etc.

Both the workers as well as producers felt that (i) they should have completed their education, because their limited education does not help them in accessing any other opportunities (ii) since the diamond industry is highly volatile and unstable, workers prefer to be employed in industries that serve the domestic market.

5. IMPLICATIONS AND INFERENCES

This study draws attention to the plight of workers and producers in a volatile global market. It shows that the highly competitive as well as uncertain global market for cut and polished diamonds can cause immense setbacks to earnings of poorly protected workers, as well as poorly supported small producers in the informal economy.

The impact of the global crisis on the workers impacts all dimensions of their employment: the wage rate in the industry has declined almost by half; employment in terms of hours and days has declined by more than 40 percent; and the monthly income of workers has declined by almost 47 percent. The facilities for workers at worksites have deteriorated, after the crisis. Even within the informal employment system, which denies social security to workers, there is a decline in the employment status for majority of workers from 'regular' employment to casual and temporary employment. There is a de-skilling of work, as a number of skilled workers are forced to shift to manual or unskilled work.

In the absence of any institutional support coming from the Government, Industry Associations, employers or NGOs, the majority of workers are left to fend for themselves. After mortgaging property, selling assets and borrowing, they have no alternative but to reduce their own consumption expenditure. The crisis has deprived them of their savings and increased their debt burden, due to the loans they have incurred to meet urgent consumption needs.

Reduction in food consumption, a strategy adopted by more than 80 percent of workers, has in all probability reduced nutrition levels of the workers. Reduction in educational expenditure, including withdrawal of children from school is another matter of grave concern. Depletion of human capabilities in the households of the informal workers is a huge loss to the concerned households, as well as to the economy and has long-term implications for the future.

The condition of those who have returned home is much worse. To have to return to the same place, which they had left to escape poverty and unemployment, a few years ago; is both depressing and frustrating. In the absence of adequate employment opportunities, most of them have taken up manual work on farms or in non-farm activities. Faced with a drastic reduction in wages and incomes, the households of the workers have pressurized non-workers (women, children and the old) into joining the labour market to take up work with very low productivity and wages. These households have also experienced severe depletion in food and nutrition, education and health. These workers have also depressed the local economy due to the drop in the remittances sent home and the pressure on wages. Therefore, pockets of poverty have been created in their native lands.

Small producers, who have always lacked adequate support in technology and skills, are facing a liquidity crunch and a decline in business. Their problems, which did not receive enough attention from policy makers, have now come to the fore.

The crisis has laid bare a number of gaps in our policies and indicated weaknesses in both the trade policy and the industrial policy. The crisis has given us an opportunity to reconsider our own policies.

Recommendations

In the light of the above discussion, the following recommendations are made:

Universal Social Protection for Workers: The experience of the crisis has shown that workers, who contribute to exports and economic growth, have been thrown into the volatile global market, without any safety nets or social protection. There is an urgent need to design and institutionalize a package of universal social security, consisting of some minimum critical social protection, to all the workers in the economy. Such a package should include (i) unemployment insurance or assistance; (ii) health insurance; (iii) old age pension; (iv) maternity benefits, and (v) compensation against injury, disability or death. The Social Security Bill of the National Commission for Enterprises in the Unorganized Sector (NCEUS) (May 2006), is very relevant here. A National Fund for social security should also be created for this purpose. This should be accompanied by all the legal, financial, institutional and administrative steps required to institutionalize this package.

Providing Employment Services to Workers: The study has shown that when skilled workers lose their jobs they do not get any support in finding suitable new work and are frequently forced to take up unskilled petty work (where their skills are wasted) or remain unemployed. There is a need to institutionalize assistance and support to workers in the competitive market, to facilitate their movement from one (skilled) job to another. This requires well organized employment services which include (i) a labour market information service; (ii) counselling workers on what kind of work is suitable for them and how to get it; (iii) providing training and re-training to

workers if necessary, by linking them with suitable training institutes, and (iv) help in moving to new jobs. There is thus a need to scale-up employment exchanges, to set up employment services. The Government can consider a private-public partnership in this regard.

Ensuring Food, Health and Education for All: The adverse impact of the crisis on the workers / small producers could have been avoided if critical gaps in the provisioning of social goods – health, education, skills were ensured. It is recommended that a special fund be created, preferably through Welfare Boards to provide soft loans, with subsidies to workers, to take care of their educational and health related needs.

Addressing Problems of Small Producers / Micro Enterprises: In order to ensure that credit is accessible to small producers it is recommended (i) including them in priority sector lending; (ii) reducing the rate of interest on their credit; (iii) relaxing the process of debt recovery for them; (iv) providing export credit; (v) strengthening micro credit to help them to run their business, and (vi) soft loans to tide over the crisis as well as to help them remain in business. The importance of the creation of a special National Fund for the Unorganized Sector (NAFUS) as recommended by the NCEUS is reiterated. Special bail-out packages need to be designed for these enterprises, so as to reduce poverty, generate productive employment and expand the effective demand to boost economic growth.

Giving Visibility to Workers and to Small Producers: A problem that the crisis has brought to the fore is the absence of reliable data on informal workers and producers (particularly small producers) in the economy. In fact, policy makers face a serious problem in assessing the impact of policies on workers and enterprises, as they can neither identify the affected workers nor allocate adequate funds to help them.

In the case of the diamond industry, all units are to be registered under the Factories Act, as per the order of the Gujarat High Court. However, less than 20 percent of the units are registered. Also all workers in small units and more than 60 percent of workers in large units are 'non-permanent', and cannot therefore claim social security benefits. As a result, of the estimated 8,000 diamond units in the state, only about 532 units are registered and less than 20 percent of diamond workers are on record. There is an urgent need to sort out this problem, either by providing an incentive to the industry to get registered or by amending the Factories Act, such that there is no disincentive to register units.

Special Packages for Women: The study has shown that women are among the worst sufferers of the crisis. They suffer (i) as producers / own account workers / employers, (ii) as wage earners at home or outside the home and (iii) as home makers. There is a clear 'male bread-winner' bias on the part of the employers (women are the first to lose jobs) as well as the Government (which does not address women's employment specifically). Though women provide a 'safety net' or become 'shock absorbers' by

taking on the burden of paid and unpaid work, there are no policies that address their concerns. There is a need to address all the three aspects of women's problems in a focused manner and effectively, by designing a special package for women workers, providing infrastructure and services to reduce their unpaid work, and ensuring universal child care. The crisis should be seen as an opportunity to take some important steps in promoting gender equality in the economy.

Strengthening NREGS to help return migrant workers: Effective implementation of NREGS can help in multiple ways: (i) it can provide employment at minimum wages to workers who have come back to their respective villages, (ii) it will not depress the wage rates in the village as the NREGS wage rates are the statutory minimum wages (when workers join agriculture, there will be a steep decline in the wage rate), (iii) it can build productive assets in the village that could expand employment opportunities in sectors such as agriculture, animal husbandry, horticulture etc and (iv) NREGS will restore the self esteem of the workers, who will be productively employed and will contribute to the development of the village. NREGS can work as a safety net in this crisis. NREGS can also boost the economy by raising effective demand and contribute to social infrastructure and human development, if it is well implemented.

Efforts need to be made to plan work systematically to promote overall development and employment opportunities in the village. The State Government should pay special attention to NREGS in the affected districts and for affected workers.

Fresh Look at Globalization: The study has serious implications for the growth path that the country has chosen. The first question that arises in the context of our growth path is about the gains of globalizing at the lowest end of the value chain, where the work is labour intensive, the value added is small, the employment gain is positive but the quality of employment is very poor, and the control or the decision making power is in the hands of Global Production Networks (GPN) located in developed countries. The quality of employment has further deteriorated under the pressure of competition in the global market.

This kind of globalization does not really help either in terms of gains in employment (because the quality of employment is miserable) or in terms of stability of employment and incomes of workers. There is thus a need to take a fresh look at globalization.

One option is to move up in the global value chain and acquire a place in the GPN, that allows some stability and protection against the volatility of demand in the global market. For example, in the case of the diamond industry, one can recommend manufacturing of jewellery, to acquire a larger and more stable place in the global market. However, this task is formidable, as India at present cannot compete with the well-established global companies in jewellery making.

The adverse impact of the global crisis on the workers of export industries emanates

from the non-integration of the labour policy with the trade policy and an industrial policy that aims to promote export-growth. This raises questions about the validity of the strategy of depending on exports, as the main driver of economic growth and promoting industrialization through producing goods for the global market. To put it differently, by treating exports as a goal in itself, rather than a means to increase employment, improve the well-being of workers and a means to reduce poverty and promote human development, the real developmental goals have been kept outside the purview of globalization-related policies, including the trade policy. In order to integrate developmental goals with the growth process, it is necessary to ensure the well-being of workers through universal social protection. Clearly, there is a need to rely more on domestic markets for economic growth.

Focusing on the expansion of domestic demand helps in multiple ways. To start with, it ensures relative stability of growth, as growth is located within the domestic economy. It also ensures poverty reduction since domestic demand increases with the increased purchasing power of people, particularly the poor.

In the final analysis, the study has clear implications for the the kind of development that we are pursuing in the Indian economy. The intensive impact of the global crisis on the diamond industry (which contributes more than 12 percent to the commodity exports in the country) and on the 800,000 to 1,000,000 workers employed therein is a matter of concern. In order to minimize the impact of such a crisis, India should be better prepared by putting in place social protection, employment services and facilities that enable basic human development and inclusive growth.

APPENDIX

Tables

**Table 1 Exports of Gems and Jewellery from India
(1999-2008) - Value and Destination**

Year	Total ex-ports in US \$ Million	% share of selected countries in exports from India					
		USA	Hong-Kong	Belgium	Israel	Japan	Thailand
1998-99	5,928.02	38.66	20.84	13.96	3.65	5.8	2.07
1999-00	7,511.42	38.96	24.19	11.4	4.56	5.99	2.29
2000-01	7,396.05	36.96	23.63	12.31	3.71	5.22	2.58
2001-02	7,331.17	35.98	23.04	11.8	3.53	5.22	3.25
2002-03	9,053.38	37.05	20.8	11.35	4.57	4.62	2.57
2003-04	10,601.37	34.99	22.08	9.97	4.51	3.36	1.91
2004-05	13,733.40	29.48	19.96	9.83	5.09	3.65	2.14
2005-06	15,527.10	28.15	21.44	9.59	5.24	3.12	2.12
2006-07	15,964.52	29.76	21.67	9.19	5.48	2.69	2.12
2007-08	19,667.03	25.28	25.93	9.98	5.27	2.28	1.98

Source: Foreign Trade and Balance of Payments, Centre for Monitoring Indian Economy, July 2005- August 2008.

Table 2 Details Regarding the Producers and Workers Sample in Surat

Location	No. of Workers	No. of Producers
Varachha	67	14
Katargam	45	17
Punagam	11	4
Mehdulpura	4	0
Total	127	35

Source: Sample Survey in Surat

Table 3 Details Regarding Workers Sample, in Bhavnagar District

Town / Village	Block	No. of Workers
Ghogha	Ghogha	4
Piprola	Umralla	10
Tarsara	Talaja	10
Tarsariya	Talaja	10
Total		34

Source: Sample Survey in Bhavnagar

Table 4 Registered Diamond Factories by Districts in Gujarat (2006-2008)

Name of the District	Year					
	2006		2007		2008	
	No. of Registered Factories	Workers	No. of Registered Factories	Workers	No. of Registered Factories	Workers
Ahmedabad	2	197	2	197	1	150
Amreli	0	0	0	0	0	0
Banaskantha	4	220	4	220	0	0
Baroda	7	2,060	2	16	0	0
Bharuch	1	13	1	13	0	0
Valsad	20	352	20	685	3	600
Bhavnagar	7	71	14	142	0	0
Dang(Ahwa)	0	0	0	0	0	0
Gandhinagar	0	0	0	0	0	0
Jamnagar	0	0	0	0	0	0
Junagadh	0	0	0	0	1	297
Kheda	0	0	0	0	0	0
Kutch	0	0	0	0	0	0
Mehsana	1	20	1	20	5	996
Panchmahal	0	0	0	0	0	0
Rajkot	5	2,014	5	2,014	4	2,478
Sabarkantha	0	0	0	0	0	0
Surat	323	30,596	343	35,325	453	118,884
Surendranagar	1	8	1	8	0	0
Anand	5	31	5	34	0	0
Dahod	0	0	0	0	0	0
Narmada	0	0	0	0	0	0
Navsari	109	3,171	113	4,536	65	4,462
Patan	0	0	0	0	0	0
Porbandar	0	0	0	0	0	0
Total	485	38,753	511	43,210	532	127,867

Source: Office of the Chief Inspector of Factories, Government of Gujarat, Ahmedabad

Note: This data is far from accurate. Two of the major diamond centres, Bhavnagar, and Amreli have, according to the official data, only seven and two diamond factories respectively. Also, Jamnagar and Junagadh, two districts known to be prominent centres for the production of diamonds, do not have any diamond factories, according to official data.

**Table 5 Employment of Diamond Workers, Before and After Crisis
(RBI Task Force)**

	Before crisis		After crisis		
Name of the District	Number of Diamond units(Approx)	Number of Diamond workers (Approx)	Functioning units (Approx)	Diamond workers who Lost Jobs (Approx)	Number of workers
Who Surat	2,500	4,00,000	1,238	2,00,000	2,00,000
Ahmed-abad	900	1,00,000	315	42,000	58,000
Mahesana	32	9,450	20	5,670	3,780
Banaskan-tha	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

Source: RBI Task Force Feb 26, 2009

Table 6 Profile of Workers in the Sample of the Diamond Industry

Respondents		Education level of Workers					
Social Group	Num (%)	Age group	Illiterate	Up to Standard V	VI to X Standard	X Standard and above	Total
SC	0 (0.00)	0-20	0	2	7	1	10 (7.87)
ST	3 (2.36)	21-29	0	2	28		30 (23.62)
OBC	75 (59.06)	30-39	13	14	17	3	47 (37.00)
	49 (38.58)	40-49	6	13	11		30 (23.62)
Family Type		50 +	5	3	2		10 (7.87)
Joint family	56 (44.09)	Total	24	34	65	4	127 (100.00)
Nuclear family	67 (52.76)		(18.89)	(26.77)	(51.18)	(3.14)	(100.00)
Living Alone	4 (3.15)						
Religion							
Hindu	126 (99.20)						
Muslim	0 (0.00)	Age group	Within Dist.	Within State	Outside State	Total	
Christian	1 (0.80)	Up to 20		10		10	
Others	0 (0.00)	21-29		29	1	30	
Gender		30-39		46	1	47	
Male	126 (99.20)	40-49	1	29		30	
Female	1 (0.80)	50-59		9		9	
Type of House		60-69		1		1	
Kutcha	2 (1.60)	Total		125	2	127	
Semi-Pucca	43 (33.90)						
Pucca	82 (64.60)						
Ownership of House							
Own	47 (37.60)						
Rented	80 (62.40)						

Figures in parentheses indicate percentages

Source: Sample Survey in Surat

Table 7 Income range and occupation of Diamond Workers in sample (Surat): Before and After the Crisis

Range of income	Before		After Crisis												
	1	2	1	3	4	5	6	7	8	9	10	11	12	13	Total
No income				38											38
Less than Rs. 1,000			1			1									2
Rs. 1,001- Rs. 3,000	14		48		2	4	1	2	1	2				2	62
Rs. 3,001- Rs. 5,000	45		15					1			1				17

Rs. 5,001- Rs. 7,000	45		6											6
Rs. 7,001- Rs. 9,000	13										1			1
Rs. 9,001-Rs. 11,000	9											1		1
More than Rs.11,001		1	0		0	0	0	0	0	0	0	0	0	0
Total	126	1	70	38	2	5	1	3	1	2	1	1	2	127

Note: 1: Diamond worker, 2: Trading in Diamond, 3: Unemployed, 4: Agriculture, 5: Embroidery, 6: Factory worker, 7: Unskilled labour, 8: Rickshaw driver, 9: Vegetable vendor, 10: Office boy, 11: Manager, 12: Studio help, 13: Small business

Source: Sample Survey in Surat

Table 8 Daily Wage Rates / Earnings of Workers		
Wage Rate (Rs.)	% of workers (Before Crisis)	% of Workers (After Crisis)
0 to 50	1.57	11.54
51 to 95	3.94	30.77
96 to 150	44.88	44.23
151 to 200	26.77	9.62
More than 200	22.83	3.85
Total	100.00	100.00

Note: The wage rates after the crisis excludes unemployed workers

Source: Sample Survey in Surat

Table 9 Working Conditions in the Work Place, Before and After the Crisis				
Facility in work place	Available Before Crisis	%	Available After Crisis	%
Drinking water	126	99.21	89	70.07
Toilet	125	98.43	88	69.29
Dearness Allowance	1	0.79	1	0.79
House rent	1	0.79	1	0.79
Education allowance	2	1.57	0	0.00
Weekly leave	127	100.00	79	62.20
Earned leave / Annual leave	112	88.18	50	39.00
Medical leave	0	0.00	0	0.00
Maternity leave	0	0.00	0	0.00
Bonus	7	5.51	3	2.36
Provident Fund	4	3.15	2	1.57
Pension	2	1.57	0	1.57
ESIS	0	0.00	1	0.79
Health insurance	2	1.57	2	1.57
Education allowance	2	1.57	2	1.57

Source: Sample Survey in Surat

Table 10 Employment Status of Workers, Before and After the Crisis

Employment Status	Before Crisis		After Crisis	
	Number of Workers	%	Number of Workers	%
Unemployed	–	–	38	29.92
Temporary	15	11.81	25	19.68
Regular	102	80.31	18	14.17
Casual	3	1.17	30	23.62
Own Account Worker	0	0.00	12	9.44
Contract	7	4.45	4	3.14
Total	127	100	127	100

Source: Sample Survey in Surat

Table 11 Skill Status of Workers, Before and After Crisis

Skill Status	Before Crisis	After Crisis
Skilled	124 (97.7)	84 (66.14)
Unskilled	3 (2.3)	43 (33.86)
Total	127 (100)	127 (100)

Note: The figures in the brackets indicate percentages

Source: Sample Survey in Surat

Table 12 Help Received from Different Sources

Source	Type of Help	Number of HHs	%
Government	Assistance for consumption needs	18	14.17
	For Work/Employment	1	0.79
Employer	Assistance for consumption needs	18	14.17
	For Work/Employment	14	11.02
NGOs	Assistance for consumption needs	2	1.57
	For Work/Employment	0	0.00
Industry Associations	Assistance for consumption needs	0	0.00
	For Work/Employment	0	0.00
No Help received	Assistance for consumption needs	83	67.35
	For Work/Employment	112	88.19

Source: Sample Survey in Surat

Table 13 Remittances sent by Workers Before and After the Crisis

Age Group	Before Crisis		After Crisis	
	Number of Households (HHs) that sent remittances	Average remittance per month per HH (in Rs.)	Number of HHs that sent remittances	Average remittance per month per HH (in Rs.)
Up to 20	4	1000.0	4	875.0
21-29	14	2500.0	4	1000.0
30-39	17	1606.3	7	1000.0
40-49	7	928.6	3	433.3
50-59	4	800.0	1	200.0
More than 60	1	1500.0	0	0.0
Total	48	1,650.0	20	842.1

Source: Sample Survey in Surat

Table 14 Consequences for the Family

A. Dis-saving, Mortgage and Sale of Assets		C. Reduction in Health Expenditure	
Item	% of HHs	Change	% of HHs
Liquidation of HH Savings	51.18	Shifted from private to public facility	3.94
Pawning of Assets (Gold, Silver, House etc)	11.81	Stopped/reduced going to outside facilities except in an emergency	62.99
Selling of Assets (Gold-Silver, Land, House, Appliances etc)	11.81	Medical care given at home as far as possible	50.00
Total	74.80	No Change	33.07
B. Reduction in Food Consumption		D. Change in Domestic Violence/Tension	
Change in Food Intake	% of HH	Change	% of HH
Stopped/reduced eating meat/chicken/eggs	38.58	Increased Tension/Conflict as Income is not enough	23.62
Stopped/reduced eating out	49.61	Increased domestic violence	12.59
Stopped eating Breakfast	0.00		
Stopped/reduced eating fruits/vegetables/milk	20.00	E. Change in Addiction	
Skipped a meal a day	0.00	Started / Increased smoking	35.58
No Change	11.81	Started / Increased drinking	14.17

Source: Sample Survey in Surat

Table 15 Reduction in Expenditure on Education (% of HHs)

Nature of Impact	% of HHs Affected	
	Boys	Girls
Dropped out from school/college	8.90	19.15
Changed from Private to Municipal schools	48.00	30.27
Loan for education purposes	1.20	1.37
Have not paid fees	23.15	0.00
Reduced expenditure on education	10.00	12.00
% of HHs affected	84.04	
No change in education expenses	14.96	

Source: Sample Survey in Surat

Table 16 Occupation of Household Members Before and After Crisis (Total)

Occupation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
Student	180				7				1	3					3		194
Housewife		130		1	4				7		3				3		148
Retired			53	1	1	1							3		3		59
Unemployed				4							3						7
Diamond workers				58	110	2			2		1		1	1	3		178
Agriculture Labour				1		2					8						11
Clerk							1										1
Computer operator								1									1
Embroidery worker				6	1				15								22
Factory worker				4	1					1					3		9
Manual worker											1						1
Labour				4							1						5
Canteen boy				1													1
Self employed				2	1										4		7
Rickshaw driver												1					1
Petty Service				1													1
Child (up to 5)																55	55
Total	180	130	53	83	125	5	1	1	23	4	17	1	4	1	16	55	701

Note: 1= Student, 2=Housewife, 3=Retired 4=Unemployed, 5=Diamond Worker, 6 =Agricultural labour, 7=Clerk, 8=Computer operator, 9=.Embroidery worker, 10=Factory worker, 11=Labourer, 12=Rickshaw driver, 13=Office boy 14=Manager, 15=Self employed, 16=Child (up to 5 years old)

Source: Sample Survey in Surat

Table 17 Participation of Women in the Workforce and the Domestic Work of Women

A. Economic Participation of Women		
Impact	No. of HH	%
Non-working women joined part time work	21	16.54
Non-working women joined full time work	65	51.18
Working women with increased working hours	0	0.00
No change	41	32.28
B. Domestic Work of Women (Hours spent)		
Impact	No. of HH	%
Increase in domestic work	36	28.41
Decrease in domestic work	5	3.94
Decrease in domestic work due to economic participation	4	2.19
No change	84	66.14

Source: Sample Survey in Surat

Table 18 Returned Workers in Bhavnagar: Occupation of Workers in the Villages

City / Village Name	Agri-cultural Labour	Driver	Manual Labour	Diamond Cutting & Polishing	Un-employed	Self-employed	Total
Ghogha				4			4
Piprali		1	5		4	2	10
Tarasara	3		5		2	1	10
Tarsaniya			6		4	1	10
Total	3	1	16	4	10		34
As a %age of Total	8.82	2.94	47.06	11.76	29.41	4	100.00

Source: Sample Survey in Bhavnagar

Table 19 Returned Workers in Bhavnagar: Average Monthly Incomes, Before and After the Crisis

Income range/ month in Rs.	Number of workers Before Crisis	Average income in Rs. Before Crisis	Number of workers After Crisis	Average income in Rs. After Crisis
0-250			1	210
250-500			2	400
501-750			5	600
751-1,000			7	908
1,001-3,000	3	3,000	9	1,916
3,001-5,000	17	4,470		

5,001-7,000	10	6,550		
7,001-9,000	4	8,550		
no income			10	
Grand Total	34	5,642.5	34	806.8

Source: Sample Survey in Bhavnagar

Table 20 Returned Workers in Bhavnagar: Employment Status of Workers, Before and After Crisis

Employment Status	Before Crisis	After Crisis
Own account workers	1 (2.94)	4 (2.94)
Regular Workers	20 (58.82)	0
Contract Workers	12 (35.29)	
Casual Workers	1 (2.94)	20 (67.64)
Unemployed	–	10 (29.41)
Total	24 (100)	34 (100)

Source: Sample Survey in Bhavnagar

Table 21 Returned Workers in Bhavnagar: Reduction in Food Consumption After the Crisis, by Monthly Incomes

Monthly Income (After Crisis)	Stopped eating outside	Reduced Stopped Consuming milk –fruits	Reduced Stopped taking meat-eggs etc	Stopped eating breakfast	No change
0-1000		11	1	1	
1000-1250	4	1	2	1	
1251-1500	5	1	1		2
1501-1750			3		1
1751-2000	3		2		1
2000 +					1
No Income	3	3	3	2	
Total	15	16	12	4	5
	(44.11)	(47.05)	(35.29)	(11.76)	(14.70)

Note: Figures in the brackets indicate percentages

Source: Sample Survey in Bhavnagar

Table 22 Returned Workers in Bhavnagar: Occupation of HH Members, Before and After Crisis

Before Crisis	Sex	Occupation After Crisis											Total
		1	2	4	5	6	8	11	14	18	20	23	
Occupation													
1	Male	20					4		1				25
	Female	14					4						14
2	Male	0											
	Female	0	35				5	5	5				50
4	Male	0		1					1				2
	Female	0		1									1
5	Male	0			9								9
	Female	0											
6	Male	0			12	7	5		22	1			47
	Female	0			1				1				2
8	Male	0					8		1				11
	Female	0					3						3
11	Male	0											
	Female	0						3					3
14	Male	0			1				5				6
	Female	0							2				2
18	Male	0								1			
	Female	0											
20	Male	0									2		
	Female	0											
23	Male	0										1	
	Female	0											
Total	Male	20	0	1	22	7	13	0	30	2	2	1	100
	Female	10	35	1	1	0	4	8	8	0	0	1	75

Student=1, House wife=2, Non worker=4, Unemployed=5, Diamond Workers =6, =Agricultural Workers =8, Embroidery Workers etc=11, Labour work=14, Driver=18, Tailoring=20, Trading=23

Source: Sample Survey in Bhavnagar

Table 23 Situation in the Selected Diamond Units in Surat (After crisis)

Units	Before Crisis	After Crisis	As a percent of total number of units in sample
Diamond Cutting and Polishing	34	17	50
Embroidery	–	10	29.42
Textile	–	2	5.88
Other Petty Business	–	5	14.7
Total	34	34	100

Note: Other business includes small grocery shops etc.

Source: Sample Survey in Surat

Table 24 Diamond Enterprises in Surat: Average Investment, Credit use and Market: Before and After Crisis

BEFORE					AFTER			
Investment category (Rs. 000)	Number of units	Avg Investment (Rs.)	Local Markets	Market in Mumbai	Number of units	Avg Investment (Rs. lakh)	Local Market	Market in Mumbai
Market 0 to 100,000	8	0.6	8	1	4	0.75	4	0
100,000 to 500,000	12	3.1	12		8	2.90	8	0
500,000 to 1,000,000	6	9.33	6	1	2	7.50	2	0
1,000,000 to 1,500,000	6	12.66	6	1	2	12.00	2	0
1,500,000 to 2,000,000	1	20	1		1	18.00	1	0
2,000,000 to 2,500,000	0	0	0		0	0	0	0
Above 2,500,000	1	350	2	3	0	0	0	0
3,500,000	34	1,131,000	35		17	520,000	17	0

Source: Sample Survey in Surat

Table 25 Situation in the Selected Units in Embroidery Industry in Surat

Investment category (Rs.)	Number of units	Type of work (Embroidery)			Use of credit			Markets	
		Sari work	Dress	Both	Yes	No	Rate of interest (%)	Local Markets	Mumbai
0 to 100,000	2	yes			1		no	2	—
100,000 to 500,000	4	yes			2		6 -14.5	4	—
500,000 to 1,000,000	2	yes			2		10-12.5	2	—
1,000,000 to 1,500,000	2	yes	no		1		13.00	2	—
1,500,000 to 2,000,000	0			yes					—
2,000,000 to 2,500,000	1			yes				1	—
Total	11				6			11	

Source: Sample survey in Surat

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Impact of the Global Crisis on the Diamond Cutting and Polishing Industry in India

The Indian diamond industry is highly dependent on the global market for raw materials as well as for markets. The global economic crisis reduced the demand for diamonds by half, and the traders cut back diamond production even further as a precautionary measure. As a result, the workers in this sector were severely affected. The crisis also impacted the sector through the financial sector and the fall in the exchange rate.

The survey conducted in Gujarat, finds that more than half of the workers left the industry. The remaining were unemployed or had to shift to other less paying activities (helper to driver, office peon, rickshaw driver, embroidery etc) and petty trade (selling vegetables, street vending etc). Those who remained in the industry experienced decline in incomes.

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