CHAPTER - IV

GEMS AND JEWELLERY EXPORTS

INTRODUCTION

Jewellery making is one of the oldest industries in India. It has been a traditional craft in India, each region in the country specialising in different designs and skills. The Indian artisans and craftsman have developed mastery over the manufacturing of soil gold ornaments, gem, entrusted jewellery, delicate ornaments with fuigree work, enameled jewellery as well as costume jewellery.

Jewellery is one trade which is still placed in the cottage industry category. However, the growing recognition of Indian workmanship by foreign buyers has resulted in boosting the export of art and polished gems. Thus, this has been a major growth sector in our exports.
The unique physical and chemical properties and rare occurrence in most ideal geological settings of diamonds made them the most sought after mineral all over the globe. Apart from its attraction as a gem, it has its uses in a wide spectrum of industries. Therefore, the demand for the 'crystal' is ever increasing and the pressure is on geologists and mining engineers to hasten with the discovery and location of new diamond fields and their exploitation.

Diamonds found in mines and river beds look quite unattractive. They get brilliance and purity through cutting, facetting, and polishing. A good diamond preserves as much of the original weight as possible. The process of converting rough diamonds into polished ones includes cleaving, sawing, grinding and polishing. A peculiar feature of the diamond industry is that it can make steady progress even under adverse economic conditions. For instance, in spite of oil crisis, world trade in diamonds has made rapid studies.

Glorious Past

India has a glorious history of diamond mining and trading and was, at one time, the undisputed leader in this field. Diamond production in India, is, in fact, traced back to almost the 8th century, B.C. The first ever diamond in the world was recovered from India and some of the best and most famous diamonds of the world like the Great Moghual, Kohinoor, Hope, Pitt, Nizam, Orloff,
etc. also came from India. During the 16th and 17th centuries diamond mining in Andhra Pradesh and Madhya Pradesh remained a flourishing activity. In fact, India was the sole producer and supplier of diamonds to the world before the discovery of the Brazilian fields in the 17th century and the later emergency of South Africa, Russia, Australia as major producers.

As against the present world production of over hundred million carats of natural diamonds valued at over dollars 5.6 billions, India's production in 1991-92 was a meagre 18,000 carats. Approximately two-thirds of the present production in the world are of the variety which can be cut and used in the gem industry. The bulk of world's diamond production comes from Australia, Russia, and other African countries. Australia with an output of 35 million carats occupies the leading position volume-wise.

India is now one of the largest exporters of cut and polished diamonds in the world. It accounts for 70 per cent of the world sales in spite of having very little production of rough diamonds. The world production of diamonds is put at 60 million carats but not all of gem quality. India produces just 0.03 per cent of world diamond output, but it emerges an important centre for cut and polished diamonds. India supports a large diamond cutting and polishing industry. One factor contributing to the growth of the diamond industry in India is its labour intensive character. Today there are more than 30,000 diamond cutting units in the country and nearly 600,000 artisans are engaged in it in full time
vocation. Indian artisans are especially famous for cutting and polishing small diamonds. India imports nearly 30 million carats of rough diamonds for cutting, polishing and export.

The export of diamonds after cutting and polishing has been earning substantial foreign exchange for India and is already varying for top slot in the export list. In the recent years, this industry has achieved a meteoric rise.

Sources of Indian Diamonds

The sources of Indian Diamonds\(^1\) can be grouped as:

a. diamondiferous kimberlite.
b. Diamondiferous conglomerate, and
c. Detrital deposits in older alluvium and recent stream gravels.

As is well known, Indian diamonds are restricted to two major regions, namely:

i. Panna Diamond Belt, M.P.
ii. Wajrakarur - Lattavaram belt in A.P.

In the Panna belt, there are three known source rocks for diamonds they are (a) Kimberlite Pipe (b) Conglomerate Ohiri and Itwa Conglomerates of the Rewa Group, and (c) Quaternary gravels.

The Panna belt is unique as it is the only example of a working modern mining and processing plant exploiting a primary

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source of kimberlitic diatreme with an annual production of around 17,000 cts. Besides, it sustains numerous unorganised workings for alluvial diamond spread over a stretch of 80 kms. The primary source rocks for diamonds, kimberlite pipes are located at Majhagawan and Hinota (980-1120 Ma Plus 40 Ma) in the Western extremity of the belt and are intrusive into the Kaimur Group of the Vindhyan Basin.

The other important sources of diamonds are the conglomerates occurring at different stratigraphic levels of the Rewa group comprising Panna Shales, Itwa sandstone, Jhiri shale and Gahadra sandstone. The conglomerates are thin, a few centimetres to a metre thick. Thus it is interpreted that the explosive 'precious' event took place within the perimeter of the Vindhyan basin in an interlude of sedimentation, whereby the diamonds were carried into the sink by the fluvial system.

The third source rock for diamonds is that found in Quaternary gravels spread along the courses of Ken, Ranj and Baghain rivers and their tributaries, and the lateritic gravels trapped within the Baghain sandstone.

As in Madhya Pradesh, diamonds occur in three different geological environment in Andhra Pradesh viz.

i) Kimberlite pipes of Wajrakarur-Lattavaram area;

ii) Secondary conglomerates of the Kurnool group;
iii) Quaternary gravels of the Krishna and other river basins.

Nine kimberlite bodies, including two recently discovered by NGRI and GSI have so far been located in 100 sq. km. area in Wajrakarur—Lattavaram belt of Anantapur district. The bodies are small in area and are circular to elliptical or dyke like in shape emplaced within the Archean Granite gneisses.

The Banganapalle formation comprising the conglomerates in its basal parts within the Western part of Cuddapah Basin occurs in a discontinuous manner over a strike length of 250 kms. The conglomerates range in thickness from 1.50 cms with increasing incidences in the ferrugenous portions.

Quaternary gravels of Krishna, Tungabhadra, Pennar, Maneru and other rivers have been worked in the past. The gravel horizons are 0.3 to 2.5 m thick having thin overburden.

In integrated multi-disciplinary programme of diamond exploration under the National Diamond Project using traditional methodology in the diamond fields of Madhya Pradesh and Andhra pradesh was completed in the Seventh Five Year Plan ending in 1990 by the Geological Survey of India (GSI) working in collaboration with the Mineral Exploration Corporation of Limited (MECL), the National Mineral Development Corporation (NMDC), and the Department of Mining and Geology (DMG), Government of Andhra Pradesh. The work carried out so far, however, has not succeeded in locating any new economically viable deposits.
In Andhra Pradesh till recently, only six Kimberlite bodies were known in the Vajrakarur area of Anantapur district. In the last few years, in quick succession six more bodies have been discovered. Only eight out of the total 12 bodies were found to be diamondiferous. The narrow elongated dyke shaped pipe no. 7 extending over a kilometre in length has a fair concentration of diamond with incidence up to about 9 ct/100t. The other diamondiferous pipes names pipes 1, 3, 4 and 6 show an encouraging zone of about 250 X 180 m with an incidence of 5 ct/100 t.

A joint Indo-French collaboration programme evaluated the work done under the National Diamond Project in 1989. This study recommended exploration in Krishna gravel areas and its possible primary sources in the Wajrakarur-Kurnool kimberlite diamondiferous province in Andhra Pradesh. In Madhya Pradesh, the search for primary sources and detailed investigation for certain conglomerate blocks were recommended. Besides the above known occurrences of Andhra Pradesh and Madhya Pradesh, diamonds have been found in the States of Orissa, Maharashtra, Rajasthan and Karnataka.

From the evaluation of data available so far, one may be constrained to conclude that conglomerates and gravels are not likely to be a significant source of diamonds. Most of the pipes in Wajrakarur fields have probably been eroded near to the root zones. Yet, at the same time, potential regions of kimberlites and lemproites are large in Andhra Pradesh and Madhya Pradesh. There
are also other regions such as Kalahandi in Orissa which have good potential.

The few kimberlite pipes discovered so far cannot be the source of all the diamonds in the various conglomerate horizons and gravel beds spread over extensive areas. It is most likely that other primary kimberlite source rocks have contributed diamonds to the present loaces. The Indian peninsula covers an extensive areas. It is most likely that other primary kimberlite source rocks have contributed diamonds to the present loaces. The Indian peninsula covers an extensive region of a stable craton which has not undergone orogensesis in the past 1500 Ma. Many of the experts have opined that although kimberlites can be dispersed on a continental scale, the diamondiferous ores appear to be confined to areas of stable craton such as one found in India. Published material relating to mineralogical, Chemical and Physical properties of kimberlites has been prolific. This factor together with major technological advances in a number of key areas has resulted in substantial refinements and development in diamond prospecting techniques. Researches have served to highlight the extraordinary variability of kimberlite both petrophysically and petro chemically, and the recent recovery of second primary source of diamond i.e., olivine rich lamproites has added considerably to this diversity. This extreme variability of kimberlite explains why a multi-disciplinary approach is required to improve the chances of success in such an exploration programme. In this context,
geologists have started studying the Indian lamprophyres, which are prolific in many localities, particularly in the rift related Gondwana basins of Eastern India.

The Indian's innate love and craving for gold and diamonds is matched equally by the super craftsmanship of hundreds of thousands of the lowly jewellers and diamond cutters polishers. In fact, there is no town or city in India where you do not find a few of this community, howsoever impecunious they may be. In certain regions, one finds certain sects/sub-communities where this trade has run into a few generations. No doubt, India should command a healthy respect in gems & jewellery trade in the world.

**Major Production Centres of Gems and Jewellery in India Product and Statewise.**

**Gems and Jewellery**

1. Precious stones and Diamonds (cut & polished)
   - Surat, Navsari, Palanpur (Gujarat), Bombay, Jaipur, etc.

2. Precious Metal (incl. Gold Jewellery)
   - Delhi, Jaipur, Bombay, Calcutta, Madras, Bangalore, Mangalore, Cuttak, etc.

3. Imitation Jewellery
   - Varanasi, Mathura, Meerut, Agra, Purdilpur (UP), Srinagar (J&K), Bombay (Maharashtra), Delhi, Hyderabad (A.P.), Jaipur, Udaipur (Rajasthan), Gwalior (M.P.).

To cater to this growing demand overseas, India has got about 25,000 diamond cutting units located mainly around Surat,
Navasari, Bhavnagar and Palanpur in Gujarat and Bombay. However, the three towns of Suat, Navsari and Bhavnagar account for almost 50% of this diamond cutting and polishing activity in the country. In matters of employment, this trade provides livelihood to nearly one million, which number includes the artisans, sorters, graders, and the men in trade from ordinary brokers to the factory owners.

The high labor coefficient of this diamond industry coupled with comparatively low investments and plenitude of skills and cheap labor are the main factors which give great optimism for the sustained high growth of gems and jewelry exports.

Trends in Gems and Jewellery Export

After a phase of dormancy of over 200 years, the diamond trade and the related activities were revived in the early sixties, mainly due to the liberal import policies permitted by the government, the improved international environment in this trade and the huge volume of demand building up for gems and jewelry all over.

Whole of this range has shown phenomenal growth during the recent years. Making a very humble start with Rs. 4 crore earnings in 1960-61, this trade has shot up to over Rs. 5,000 crores per annum during seventies (Table 4.1), while showing the upward trend in the export of gems and jewelry, also brings out the magnitude of this sector's contribution to our kitty. Its share in the total exports has grown from 9.6 per cent in 1980-81 to
16 per cent in 1990-91, although it had earlier peaked at 22.4 per cent in the year 1988-89.

After slight downward trend during 1991-92, the percentage share of exports of Gems and Jewellery in India total exports reached to a record level of 28.77 at the end of 1993-94. On the other hand exchange earnings of Gems and Jewellery rose from Rs. 642.1 crores to a more than double figure of Rs. 1,307 crores by the middle eighties and there from the growth of export of these items had been galloping and touched the peak figure of Rs. 11,268.2 crores at the end of 1993-94. It is very interesting to note here that nearly 29 per cent of India's total exports consisted of Gems and Jewellery at the end of 1993-94.

Exports of these items rose by 103.6 per cent in the year 1984-85 when compared to that of 1980-81. Between 1994-85 and 1987-88 exports of Gem and Jewellery rose by 101.8 per cent. The same tempo almost maintained during 1980-81 and 1984-85. The growth in exports of these items was 185.6 per cent at the end of 1993-94 when compared to 1988-89.

A somewhat lower export growth rate of 11.5 per cent in terms of US $ during the first 10 months of 1994-95 (April-January) is attributed to the high base last year. To sustain the

the 36 per cent growth rate on year-to-year basis is a tough task, even though the diamond-studded gold jewellery is popular. Fashions in this segments change rather rapidly and the world market for gold studded jewellery is becoming more and more competitive.

**Net Foreign Exchange Earnings**

Table 4.2 shows the net foreign exchange earnings from India's Gems & Jewellery exports. The Gem and Jewellery export sector is also higher import oriented. Imports of items constituting raw materials for this industry, namely rough precious, semi precious stones, pearls, gold and synthetic stones have also grown over the years. Overall imports of the industry rose from Rs. 402.9 crores in 1980-81 to Rs. 2,060.3 crores in 1987-88 and further to Rs. 3,732.3 crores in 1991-92 (see Table 4.2).

The Table shows that the net exchange earnings of the industry which remained between Rs. 201.3 crores in 1981-82 and Rs. 370 crores in 1986-87 had considerably increased by more than 100 per cent during the subsequent years. For instance the net export earnings rose by 242.4 per cent in 1986-87, 299 per cent in 1991-92 when compared to 1985-86. Lower net foreign exchange from gems and jewellery is mainly due to the fall in exports of diamonds. In 1987-88, imports of rough diamonds increased by 37 per cent, while exports of cut and polished diamond increased by only 25 per cent. However, a disturbing trend is that the net foreign exchange earning of this sector is very low and declining. This is so because all the requirements of rough diamonds are met through imports.
Import of raw materials of Gems and jewellery as percentage of exports of these items remained a sizeable proportion throughout the eighties which can be seen from table 4.2. More or less this percentage had been varying between 70 to 80 per cent on the whole.

Net export earnings from gems and jewellery have gone up from around Rs. 1,839 crore in 1991-92, Rs. 2,046 crore in 1992-93 a rise of 11.3 per cent. But in 1993-94, net earnings more than doubled by 102 per cent to Rs. 4,131 crores from Rs. 2,046 crore in the previous year (see Table 4.3). This trend is certainly encouraging. The net value addition i.e., exports over imports, comes to around Rs. 3,817 crore in the ten-month period of April-January 1995 - a rise of about 22.2 per cent. 3

The industry can be roughly classified into two major sectors; cut and polish diamonds and diamond-studded gold jewellery. In 1993-94, diamond exports at Rs. 11,410 crore accounted for about 88.3 per cent of the total gems and jewellery exports of Rs. 12,927.4 crore. In 1992-93 diamond exports at Rs. 8,316.2 crores accounted for 87.7 per cent of total exports of Rs. 9,483.4 crore (See Table 4.5). In the first 10 months of 1994-95 (April-January 1995), India's exports of diamonds of at Rs. 9,695 crores accounted for 86.6 per cent of total exports of Rs. 11,329 crore as against Rs. 8,880 crore accounting for 87.4 per cent of the total of Rs. 10,161 crore the previous year.

3. Ibid, p.5.
Composition of Gems and Jewellery Exports (Table 4.3 to 4.5)

In the beginning of eighties the world diamond trade was faced with a recession which had a greater impact on large sized diamonds than on small sized diamonds in the exports of which India specialises.

Gems and jewellery trade comprises the following segments.

(a) Precious stones (b) Diamonds (c) Semi-precious stones (d) Gold jewellery (e) Silver Jewellery (f) Imitation jewellery (g) Pearls (h) Synthetic stones.

In the total exports of gems and jewellery diamonds alone account for more than 90 per cent share. In fact cut and polished diamonds remain single largest item which has made significant contribution to the export effort of this sector. The other two main items in the order are gold jewellery and pearls.

Diamonds export from the country a decade ago in 1979-80 was worth just Rs. 550 crores, which gradually increased to Rs. 590 crores in 1980-81, Rs. 728 crores in 1981-82, Rs. 913 crores in 1982-83, Rs. 1,172 crores in 1984-85 and Rs. 1,344 in 1985-86. It was only after that the export spurted to Rs. 1,960 crores in 1986-87 and further to Rs. 2,440 crores in 1987-88, before scaling a new high at Rs. 4,230 crores 1988-89.
Diamonds continue to have the lion's share, accounting for 93 per cent of the total gem and jewellery exports. Exports of diamonds totalled Rs. 4,230 crores during 1988-89, registering a 74 per cent increase over the Rs. 2,440 crores export recorded in 1987-88. India is the largest manufacturer-exporter of diamonds in volume, accounting for 55 million carat out of a total world production of 90 million carats roughs. In terms of value, our diamond exports account for 3 per cent of the world trade. India exported 8,492 million carats during 1987-88 as compared to 7,518 million carats in the previous year, an increase of 13 per cent thereby making India as the world's largest manufacturer -- exporter in terms of number of pieces and carats.

Exports of all other commodity groups with the exception of gold jewellery and pearls, rose markedly with precious/semi-precious stones and sales to foreign tourists recording impressive gains. Exports of precious/semi precious metals shot up to Rs. 98.5 crores, thus registering an increase of 61 per cent over the previous year. Sales to foreign tourists also increased by 114 per cent to Rs. 12.91 crores in 1993-94.

The value of diamond exports rose by 28 per cent in 1993-94 when compared to 1984-85. Table 4.3 reveals that the share of diamonds in the total exports, however, came down to 88 per cent at the end of 1993-94 where as its share was more than 90 per cent in the preceding years. It can also be noticed from table 4.3 that the share of other items in the total exports of gems and
jewellery was rising gradually, especially in the case of pearls, synthetic stones, fashion jewellery, etc., U.S.A., Japan, Hong Kong, Belgium and Switzerland are important markets for cut and polished diamonds. Besides, USA, Hong Kong and Germany constitute important centres for precious and semiprecious stones. Majority of our gold, Jewellery exports are made to UK, UAE, Kuwait and Dubai; destination wise in terms of directional pattern, while Indian gems and jewellery are exported to a large number of world markets namely the U.S.A., Japan, Belgium and Hong Kong are the major export destinations. These four markets account for about 80 per cent share in India's total exports of this thrust export sector. All these markets happen to be the thrust markets for export expansion of gems and jewellery. Other important destinations for India's gem and jewellery exports, as can be seen are Switzerland, Thailand, Germany, the UK, Singapore, Israel and France.

It can be seen from Table 4.6 and Fig.6 that 30.2 per cent of Gem and Jewellery exports was exported to the USA in the year 1993-94 exports of these items to USA, though increased in monetary terms when compared to the preceeding years, the overall percentage share of USA, however, declined from 37.6 per cent in 1987-88 to 34.4 per cent in 1992-93 and further to 30.2 per cent 1993-94 (See Table 4.6 and also Fig.7).

The share of Hong Kong in the total intake of Gem and Jewellery from India significantly increased from 11.3 per cent
in 1987-88 to 16.9 per cent in 1992-93 and further to 22.4 per cent in 1993-94.

**Government Policy Measures for Export Promotion**

The government has been taking a number of measures to increase the exports of gems and jewellery. The decline in the export of these items is a result of continued recession at the onset of nineties and the collapse of the Soviet market.

It is amidst this background that the Government made appropriate changes in the Export-Import policy and the handbook of procedures for boosting the exports and gems and jewellery. These changes, as announced by the Ministry of Commerce recently, mainly related to import of rough diamonds and thereafter export of cut and polished diamonds which forms an important part of the exports of the gems and jewellery sector. Rough diamonds are the basic raw material for this sector and as such steps were needed to streamline their imports to facilitate the exports of gems and jewellery.

As a result of these changes, even the exporters of plain gold jewellery eligible for replenishment benefits for direct import of gold will be able to get their replenishment licences without waiting for the proof of actual realisation of export proceeds. This, however, shall be subject to the condition that necessary adjustment, as may be due, shall be carried out subsequent on furnishing the evidence of realisation. Also the
exporters of plain gold jewellery under the scheme have been entitled to import of rough diamonds and other gems on the replenishment licences.

To boost exports of silver jewellery and articles, the Government introduced two new schemes in December, 1986 namely the scheme for export of silver jewellery and article against silver supplied by the foreign buyer and the Export Promotion and Replenishment Scheme for silver jewellery and silver articles. These Schemes are similar to the schemes for the export of gold jewellery. In the case of exports of silver jewellery and articles, a minimum value addition of 20 per cent has been stipulated over the price of pure silver content at ruling international prices.

The decline in the export of Gems and Jewellery was due to the recession in the global diamond trade, particularly in small and medium diamonds. The Government has taken several important measure to promote exports. These including opening of dollar accounts abroad by diamond exporters to finance their trade, allowing DTA exporters of gold jewellery fulfilling certain conditions to import gold directly under a new scheme introduced in December, 1991, etc., as a result of measures in the subsequent years.

The impressive growth of gems and jewellery sector has been due to the response of the industry to the liberalisation of import of machinery and equipment needed in that sector. 107-items of machinery, tools and equipment used in the gems and
jewellery industries have been placed under OGL with a concessional import duty of 35 per cent. As an incentive, gold jewellery units set up in Special 100 per cent Export Processing Zones, the value addition requirement has been modified to be 15 per cent for studded jewellery and 10 per cent for plain gold jewellery. All gold jewellery exports outside these zones and complexes have to achieve a minimum value addition of 15 per cent whether the jewellery be plain or studded.

It can be seen from Fig. 8 that the number of members and registered exporters has been continuously increasing during the last five years since 1989-90 except 1990-91. This gives an indication of the growing strength of gems and jewellery export Promotion Council.

**New Export Scheme for Gold Jewellery**

Government announced a new scheme for the manufacture of gold jewellery for export purposes in the free trade zones in the country. To start with, such manufacturing units will be permitted in the Free Trade Zones at Madras, Cochin, Noida, and Falta (Calcutta). The decision to extend the facility of setting up such units at other free trade zones will be taken up subsequently.

In the case of gold manufacturing units operating in these zones, the facilities to be allowed for import of capital goods, prototypes, technical samples, consumables, spares and packing
material will be separately worked out as approved by the Board of Approvals.

The units in these zones are permitted in accordance with the procedure applicable to free trade zones to directly import raw material, intermediates and components, including gold alloys, carat gold, coloured gold, precious metals including platinum and palladium, sockets, frames, gems and stones.

The assessment about the quantity of imported material required for manufacture by a particular unit will be determined on the bases of the potential for export and its periodical requirement according to cycle of turnover. The limit of quantities determined initially may be reduced or enhanced by the Board of Approvals in the light of export performance.

Further measures during Eighties

To encourage exports, the government has initiated gold jewellery manufacturing in export zones. These units are allowed to directly import all the gold, gold components or alloys they required. The Export Import Policy (1981) treated gems and jewellery exports as a thrust area and incorporated a number of provisions to boost up exports. The policy contains the following welcome features so far as gold jewellery exports are concerned.

First, gold jewellery exports permitted even on the basis a valid conformation from the GCA\(^5\) (Gold Control Administration) that the gold dealers licence is under renewal. They need not wait till a fresh renewal licence is received before. Second, the new policy has reviewed wastage of gold allowed to different slabs varying from 2 to 10 per cent as against the earlier range of 2 per cent for plain jewellery and 3 per cent for studded jewellery. Third, the government has decided to allow inclusion of the gold wastage under HHEC scheme of gold jewellery exports. Four, the 9 carat gold jewellery has been brought under the HHEC in view of the widening market for it.

In order to improve export performance of jewellery sector the government has amended the policy regarding imprest licences for gems and jewellery and those relating to the Diamond Trading Corporation (DTI) besides allowing the export of writing and printing paper, including air-mail tissue paper below 34 GSM on decontrol basis.\(^6\)

**More Jewellery Items under OGC**

The 15 items placed under OGL relating to gems and jewellery are bottom press pots, washules, top pots, steel stepped claw, thumboperated claw holder/ screw operated, yellow liquid, table gel, emery sticks, grain setting apparatus, spare parts boxes


for various tangs, pots for bottom and top to work on fancy cut stones, click rings for various tangs, auto sticks for brutting with various accessories, emery wheel for point grinding machine, and scouring machine spare parts.  

Some Important Organisations

The gold jewellery complex in Jhandewalen in Delhi and the units located in the gold jewellery complex at Bombay have sophisticated equipment to produce jewellery according to the changing requirements of foreign buyer. The Jhandewalan Complex in Delhi, for which the Minerals and Metals Trading Corporation (MMTC) - now called MMTC Ltd. - is the sponsoring body, has exported jewellery valued at Rs. 2.36 crores from February 10, 1989 to April, 1992. In 1987-88, for the full year, exports were worth Rs. 1.18 crores. The export earnings are slated to go up further in the coming years, according to official sources. The foremost pioneering organisation striving for promotion of jewellery exports from India is the gem and jewellery Export Promotion Council (GJEP). The GJEP gives every year annual awards for top performance in gems and jewellery exports in respect of value addition, technical advancement in production. Gem and jewellery Promotion Council negotiated with Japan to allocate separate quota to India for the export of gold jewellery. It has also called for concerted efforts to augment training facilities relating to design adaptation and other jewellery manufacturing processes.

The Minerals and Metals Trading Corporation (MMTC)\(^8\) is also engaged in exporting items relating to gems and jewellery, plain gold jewellery category, cut and polished category etc. The Minerals and Metal Trading Corporation (MMTC) proposed to increase the exports of cut and polished diamonds, gemstones and gold jewellery to Rs. 350 crores in 1994-95 from the expected level to Rs. 110 crores in the current financial year.\(^9\) In 1989-90 itself, the projection of Rs. 110 crores represents an increase of nearly 100 per cent over the previous year's figure of Rs. 59.7 crores.

Higher exports of diamonds and gold jewellery are expected as a result of the 100 per cent export-oriented complexes in New Delhi and in the Santa Cruz Export Processing Zone (SEEPZ) gathering momentum in the coming years.

Keeping in view the projected exports, MMTC has planned direct marketing efforts through setting up of foreign offices at major business centres, appointment of agents and distributors and participation in exhibitions abroad.

A team of Delhi-based correspondents was shown a unit in SEEPZ which is 100 per cent export-oriented. The diamonds and jewellery complex in SEEPZ has been sponsored by MMTC. The

\(^8\) Quota for India Jewellery Export to Japan Sought, The Economic Times, July 19, 1990.

unit Inter Gold (India) Limited is engaged in the export of gem studded jewellery, being manufactured with sophisticated imported machinery with latest designs. A number of jewellery units have come up at the Santacruz Electronic Export Processing Zone (SEEPZ) the units started exporting only in 1988-89.

The action initiated to bring in more units operate in the Jhandewalan (Delhi) and SEEPZ complexes as well as creation of necessary facilities, both in terms of providing gold as well as other financial assistance, would lead to substantial growth of these exports in the coming years as stated by MMTC.

As part of the services and infrastructural facilities, MMTC has been permitted by the government to import and stock gold of 0.995 fineness for sale to the jewellery manufacturing units in the export-oriented complexes. The corporation has made arrangements with the Union Bank of Switzerland for import of gold. Strongrooms have been constructed for keeping the imported gold.

It is acting as a nodal agency in SEEPZ to assist the units by supply of raw materials like gold. The exports in the Zone have already crossed Rs. 50 crores in the first nine months of the current financial year. MMTC mainly imports rough diamonds from free market sources in Antwerp. The goods are mainly of African and Brazilian origin. It has also been

tapping other primary producing sources for direct supply of rough diamonds. Moreover, it has ventured into imports of precious and semi-precious stones. These are supplied to trade within the country for cutting and polishing for exports. The aim is to provide roughs at competitive prices to exporters for increasing exports.

MMTC has taken steps to enter into agreements with some African countries for joint exploitation and mining of rough diamonds. MMTC has initiated steps to the move in a bid to procure a good share of rough diamonds directly to the India diamond industry from countries like Ghaz, Sierra Leone Liberia, Tanzania, Central African Republic, Angola, Ivory Coast etc which have huge deposits of diamonds and other precious stones.

At present diamond mining and marketing in these countries is virtually controlled by the South African based De Beers Consolidated Mines Ltd. However, governments of some of these countries are reportedly in favour of MMTC's proposal to have joint mining and marketing of roughs with the corporation on an equitable basis.

MMTC's main objective in entering into mining arrangements with these countries is to gradually end the Indian diamond industry's dependence on CSO for most of its rough requirements.
The export potential is considerable. If the hallmarking facilities are created both at the Jhandewalan and SEEPZ Complexes without any further delay, exporters are bound to gain as hallmarking of gold purity is important for foreign buyers.

100 per cent Jewellery Export Complexes

The Government decided way back in 1989 itself to set up gold jewellery export complexes in Ahmedabad, Jaipur, Srinagar and Calcutta. The Government has taken steps to promote establishment of jewellery exporting units in the country's seven export processing zones. These are located at Noida in Uttar Pradesh, Santacruz, Kandla, Cochin, Madras and Falta in West Bengal.

The government has initiated these measures as it wants to increase the exports of both gold and studded jewellery which have been stagnating at around Rs. 10 crores. This activity provides employment to a large number of persons in different parts of the country.

The government has already identified gems and jewellery as a thrust area for export promotion in coming years. The Handicrafts and Handlooms Export Corporation (HHEC), a public sector undertaking, is exporting old and studded jewellery against gold supplied by foreign importers of jewellery from this country. The policy initiative taken by the Union Government in the recent past included simplification, streamlining and relaxation of procedures under the Gold Control Act and relaxation in bank credit facilities.
During the period April 1, 1988, to February 28, 1989, jewellery exports were valued at Rs. 4.20 crores. Exports are expected to rise further in the coming years as more units are likely to commence their operations.

A separate agency in the name of Hindustan Diamond Corporation was set up in Ahmedabad for procuring the raw materials. The Handlooms and Handicrafts Exports Corporation (HHEC) a public sector undertaking is exporting gold and studded jewellery against gold supplied by foreign importers of jewellery from the country.

Diamond Trading Company is premier world organisation concerning diamonds and jewellery exports. DTC has also released new rotating tang (Diamond Cutting Device) called Rotang in India for the first time which speaks of the importance they give to India in the processing of hard and difficult diamond roughts, particularly from Australia mines.

DTC has also introduced some of the new diamond cuts named after various flowers such as (i) Fire Rose (ii) Sun Flower (iii) Zinnia (iv) Marigold and (v) Dahlia, in India which may prove interest. After having churned their billions of greenbacks from the Indian Diamond industry, as was evident from the First ever symposium in early February, 1989. In Bombay, a lot of research had gone into analysing the Indian diamond industry and a very objective approach was shown by the high authorities of DTC present on the occasion.
Exim Policy 1992-97

A revised edition of the Exim Policy 1992-97 and Hand Book of Procedures 1992-97 incorporating the amendments made up to 30th March 1994 was announced by the Ministry of Commerce on 31st March 1994. There is no change in the gem and jewellery policy as given in Chapter VIII of Policy and Hand Book of Procedures except that the period of export obligation in respect of DTC imprest licence has been permanently increased from 120 days to 150 days and in case of bonafide default in fulfilment of export obligation by a DTC/diamond imprest licence holder, the same may be regularised if the licence holder pays to the licensing authority a sum in rupees which equivalent to the shortfall in export obligation expressed in free foreign exchange. Alternatively the DTC/diamond imprest licence holder can surrender to the licensing authority rep licences of the product category Sr. No. 2.1 to 2.5 of Appendix I of the Exim Policy of a value equivalent to twice the amount of shortfall in export obligation expressed in free foreign exchange provided the default is not more than 5 per cent vide para 138 A of the Revised Hand Book.

Suggestions for Amendment to Export-Import Policy 1992-97

Diamond/ DTC Imprest Licences

* Need for removal of actual user condition on diamond/ DTC imprest licences.

* Export/supplies made from the date of receipt of application for imprest licence by the licensing authority may be accepted towards discharge of export obligation.

* The period of export obligation against DTC imprest licence may be increased from 120 days to 150 days (This has been accepted).

**Points Relating to 'F & G'**

* Validity of licences under the scheme should be increased from 8 to 12 months.

* REP licence, other than gold should be transferable.

* Supply of cut and polished coloured gemstones other than emeralds on actual user basis.

* Replenishment licence for gold portion against export of studded jewellery be issued without waiting for realisation.

**General**

* Restoration of replenishment benefits against sales of gem & jewellery foreign tourists.

* Restoration of provisions for issue of replenishment licence against loss of original BC/E.P. copy of shipping bill.

* In case of part payments received, the application may be made on the basis of final payment.

* Increase of advance payment realised, the replenishment application may be made on the basis of date of exports.
* Replenishment licence against re-export of rough diamonds be allowed to be made on quarterly basis as was the practice in the past.

* Need to introduce provision for grant of duplicate copy of replenishment licence.

**Gold/Silver Jewellery Scheme – Scheme – C.**

* Export of Gold / Silver jewellery and articles upto 20 kg may be permitted without value restrictions from the Foreign Post Offices.

**E.O.U/ F.T.Z.**

* Need to permit sale by gem & jewellery units in EPZ/ EOU's to DTA upto 25 per cent of their production or compensate by appropriate licence for the excess value addition achieved.

* Need to waive the condition of export within 120 days from the date of purchase of gold from MMTC, if the units have paid the entire price of gold in advance to MMTC.

**Exhibitions and Trade Fairs:** The government encourages organising of exhibition and trade fairs in the form of India International jewellery shows, India International Jewellery Design competitions
etc. to augment exports of gems and jewellery from our country.**

Exports of Gems and Jewellery: Problems, Prospects and Suggestions

Though the systematic studies and exploration so far carried out by various organisations in India in the known fields and their extension areas have led to the better understanding of diamond mineralisation in different geological settings and marginal success in locating a few kimberlite pipe rocks, no remarkable results have so far been obtained in locating any sizable diamondiferous are body of any economic significance. However, it is unlikely that in a country where rich treasures of diamonds have been mined in the past, the diamond bearing areas restricted to only a few bodies in the known fields. It **

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** India International Jewellery show was held at World Trade Centre, Bombay during March 19-22, 1994. The fair was inaugurated by Hon'ble Shri Sharat Pawar, Chief Minister of Maharashtra. The exhibitors catalogue was released by Dr. Sanjeeva Reddy, Director General of Foreign Trade. The IIJS' 94 attracted a total of 13,000 visitors. As many as 183 foreign buyers from 31 countries visited the show. This year the exhibition was held between the Hong Kong and Bangkok Fairs, which resulted in it being a greater success.

There were in all 130 stalls. These comprised of stalls exhibiting plain gold and studded jewellery (79), which included 25 stalls from EPZ/EOU Complex, Costume/ Fashion Jewellery (21) and Machinery (30). Other attractions of India International Jewellery Design Competition sponsored by DeCTA, H. Goldie & Co. and State Bank of India. A glittering fashion show which exhibited jewellery of 25 different companies who sponsored the show was held at Regal Room at Hotel Oberai Towers. A galaxy of models displayed the jewellery to the top dignitaries who attended the show.
is, therefore, logical to believe that still there is a large potential for discovering new diamondiferous bodies in the vast pre-cambrian shield areas of India. It is, therefore, necessary to launch an all-out effort to locate new diamond occurrences particularly of primary source by review of all the available geological information; identifying potential target areas and evolving best exploration methodology to suit the specific requirements of the Indian geological settings of diamond bearing rocks.

The exploration of minerals in general, and more so of diamond, is admittedly a difficult, time-consuming and risky venture. The uncertainties regarding the return on investment and the long gestation period of such ventures inhibit investments of large sums of money in such endeavours. However, such ventures also yield high returns if proper strategies are framed.

The existing policy of the government envisages the exploration and exploitation of diamonds in India only by the Government or the public sector. National organisations like GSI, MECL, NMDC, etc. have been largely responsible for exploration and exploitation of diamonds in India. However, the Government has recently liberalised its industrial policy by opening the door to foreign participation in various industrial sectors requiring modernisation and the introduction of State-of-the-art technologies. In the same vein, the mineral sector in India is also likely
to opened up to permit the entry of private sector and foreign investors in the areas of exploration and exploitation of some of the minerals which were hitherto reserved for State sector.

Demand in world markets for a wide variety of colour stone including emerald, sapphire, rubies, tourmalines, garnets, periodots, agates, and moon-stones is increasing. Thanks to the efforts of the International Colour Gemstone Association and the promotional campaigns launched by it in various consuming centres of the world, future for precious and semi-precious stones is viewed with optimism. With buoyant markets and growing preferences for colour stones, there is scope to raise the exports of this item to the level of Rs. 800 crores in the next few years. India's strength lies in the cutting and polishing of small size diamonds on account of the skills and efficiency of the artisans. The colour stone mining countries like Colombia, Zambia and Zimbabwe still remain largely in the field of cutting and polishing of medium and large size gems. It augurs well that the policy initiatives taken by the government comprise liberalized imports of roughs, higher rates of import replenishment against exports at par with diamonds, permission to import components and consumables, and simplification of procedural formalities.

Lack of Compatibility in Marketing Practices

Notwithstanding the excellent export performance of the Indian diamond industry, its marketing practices still lack
compatibility with other world marketing centres notably Belgium and Israel. While these countries have well developed and systematically organised Diamond Exchanges and Diamond Bourse to facilitate trade transactions with speed and efficiency, in spite of the long felt need for such a set-up in Bombay, only a limited facility has been created in recent years by the establishment of Bharat Diamond Bourse.

India remains a leading centre for the export of small size diamonds in terms of number of pieces cut and exported. Unlike Belgium and Israel it lacks the facility of trading in diamonds. Establishment of a full-fledged Diamond Exchange with all the necessary infrastructure and incentives to widen the range of merchandise through imports for export of medium and large size diamonds can help this sector further expand its exchange earnings.

Product and market diversification is another area which needs attention for export expansion of this highly potential area. While product diversification has to be in the field of cutting and polishing of medium and large size diamonds as also in the form of valued added precious metal diamond studded jewellery, market diversification has to lay emphasis to tap the markets in Middle East, Far East and the South East Asia.

Research and development is yet another area which has been hither to neglected by the Indian diamond industry.
There is need to undertake research and development to improve the tools and techniques of production, upgrade processing technology and improve cost competitiveness. This is particularly essential when other developing countries like China, Indonesia, Thailand, Malaysia and Sri Lanka which enjoy the advantage of cheap labour and have made a start with latest technology in diamond cutting pose a possible threat to the Indian industry. In the long run the emerging competition from these sources can cut into the growing market opportunities for small diamonds now available to the Indian Industry.

Keeping in view the developments taking place in other centres, warrants thrust and concerted efforts on indigenous mining in States including Jammu and Kashmir, Rajasthan, Andhra Pradesh, Tamil Nadu and Orissa where traces of availability of gem medium and large size gem stones; and development of infrastructural facilities for the production of precious metal studded jewellery.

India needs to create special infrastructure for assaying and hallmarking and design development facilities. We must also mount strong publicity campaigns to promote our exports more vigorously. Better product development and special design fashioning are the other features that must get more attention, if we have to maintain our leading role as the potential supplier of gems and jewellery to the sophisticated buyers.
On the marketing side there is an urgent need to focus on publicity campaigns, organization of exclusive shows, participation in international fairs and export on consignment sales basis. Before the industry can look to a major breakthrough in the gold jewellery export sector, it has to gear itself for export production, product development, overseas sales strategies and marketing practices compatible with those followed by the leading exporting countries.

**Strengthening of Marketing and Other Infrastructure**

An effective marketing infrastructure is needed for gold jewellery exports in order to fully exploit the potential demand from such countries as North America, Latin America, Japan, Belgium and Switzerland.

There has been no systematic distribution and marketing arrangements in tune with the customer trading practices prevailing in the leading centres of the world. The industry is not able to keep pace with the improved marketing techniques and strategies.

While other competing countries are able to take merchandise to the very door steps of buyers through the medium of consignment sales, courier service and export under customs bond, India lacks such facilities. Japan used to be the second largest importer of diamonds from India. Now, it depends on
Israel. This has been attributed to erratic supplies of Indian diamonds.

There has been no significant improvement in the working conditions of diamond factories. A lot has to be done in respect of tool and equipments, health and sanitation in the factories and living conditions for the artisans. The wage levels of the workers need improvement. The low output per man is not due to the absence of skilled workers but due to inadequate use of existing machinery and also lack of knowledge relating to some areas of manufacturing. It is suggested that gold imports should be allowed, but at the same time it should be ensured that no outflow of foreign exchange is needed. Regarding the shortage of trained manpower in the industry, systematic attempts should be made to assess the manpower requirements for the future and train the manpower in the industry accordingly.

Need for Gold Imports

Gold imports into India should be openly allowed on a condition that the rupee proceeds of such imported gold shall be non-repatriable. Subject to this condition, gold imports, with an import duty of 10 to 20 per cent should be unrestricted for tourists, non-resident Indians and even foreigners. The proceeds should be kept in Indian rupees or invested in rupees.
This will put a stop to smuggling of gold into the country and to that extent reduce the demand for foreign currency in the open market, consequently increasing the value of the rupee in terms of US dollar and other major world currencies. Large amounts of unaccounted Indian capital, running into several thousand crores of rupees, is estimated to be lying abroad. Since the domestic price of gold is substantially higher than the international gold price, the holders of the capital abroad can be introduced to repatriate some part of it into the country in the form of gold consequently attracting substantial additional Indian capital abroad. Further, jewellery to be exported should be allowed to be carried by exporters/ buyers under baggage rules; this is important for participation in trade fairs as well as for carrying samples to foreign buyers. No bank guarantee bond should be insisted upon for jewellery carried on the consignment basis, the exporters feel and say that all precious metals like platinum used in the manufacture of jewellery should be replenished and raw materials required for making jewellery should be allowed to be imported against advance lincses.

For obtaining raw materials, the industry has to heavily depend on one source, namely, the Diamond Trading Company (DTC). This has resulted in poor raw material supplies. The DTC avoids competition among cutting centres to realise maximum prices from roughs.
Direct import of gold by government agencies can also be considered with a view to create a buffer stock and sell the metal in the market whenever abnormal situations arise. India stands now near the world producers particularly South Africa, Australia, USA and Canada where the gold content in ore is about 15 grams per tonne. Besides, USA, Canada and Australia have shallow, opencast mines. These factors give a big price advantage to these countries.

The ruling international price for gold can easily wipe out India producers of gold. Hence, in case the government considers allowing gold imports, a stiff import duty should be levied to protect indigenous gold miners interests. The government should allow non-resident Indians (NRI) to bring twenty five per cent in the money which is repatriated as gold, and also allow tourists to bring in limited quantities of the metal paying customs duty. It is further suggested that NRIs and other foreign parties should be allowed to participate in gold mining ventures in the country. Sale of small amounts of gold should be allowed at airport counters, in the country at international prices. This sort of loosening up of the supply will reduce the dependence of the industry on smugglers for its raw material, and also the control of prices by smugglers.

Improving Value Addition

The diamond industry has been experiencing low value addition. This is so because the polishing centres have specialised
in processing makeable as against sawn/sawable roughs that are being cut and polished in other countries. Makeable roughs are rough diamonds having an irregular grain structure. Naturally, the cutting and polishing processes are arduous and labour intensive. As they fetch a much lower price in world markets, the skilled and unskilled workers are poorly paid. In dollar terms, the picture is less rosy. With the steady decline in the rupee-dollar rate, each rupee worth of export fetches fewer dollars.

It is interesting to note that in countries like Israel and Belgium, which are the older, traditional centres of the diamond industry, the value addition is only around four to five per cent. Worried by this, the Israeli government has recently offered refund of labour charges up to 40 per cent if the industry agrees to process low value stones. Why then is India moving towards processing high value stones? This is in order to ward off competition from Thailand, Sri Lanka and China. These countries have recently emerged as major competitors to India.

India is now processing over 65 million carats of rough diamonds which is more than two-thirds of the world production but no amount of increase in its exports of polished diamonds can result in any substantial increase in the added value realised until it can find an alternative source of rough supply enough to check the arbitrary price hikes of the DTC (and which is most unlikely)

or to divert majority of its produce of polished diamonds into jewellery where added value is higher (although there is not guarantee) that DTC will not eat up that higher added value as well as it has done so far in the case of Indian polished diamond exports.

One can only hope that with the modernisation of the Indian diamond industry and its rapid growth at places like Ahmedabad with full governmental support there will be a substantial increase in the productivity as well as per carat yield from the low grade roughs which will push the added value higher. Besides, it would depend upon the DTC as to what kind of rough diamonds it decides to supply to the Indian industry because value addition is as much a function of the raw material available as it is of applying human skill to cut and polish them into sparkling gems from mere pebbles.

In spite of an increased direct supply of roughts from the U.K. (the source), improved bank finance from the Indian banks and a total exemption from income-tax on all export earnings if the added value from the diamond exports continues to be always in the doldrums and efforts have to be made to make it touch some respectable figure then something is wrong somewhere which only the trade can redress. In this context, checking diamond smuggling may be an impossible task in totality but measures can be taken by the trade to see to it that its much refurbished image is not once again tarnished as was the case in the early 60s when
the diamond merchant was rated with smugglers. The industry has to be its own watchdog to prove worthy of the trust placed in it by the government and the people.

**Improvement of Technology**

The diamond industry is not well placed in respect of R & D. The Indian Diamond Institute at Surat has an R & D division which serves as a source of information for the entire diamond industry in India. It maintains close contacts with similar institutions in the country and obtained assistance from various institutes abroad. The R & D efforts are being directed towards development of large-sized diamonds sawing machines and tools and double-spindle bruting machines.

India is famous in the field of cutting small diamonds, but the realisation per carat is low due to outmoded processes, techniques and tools which often result in an average quality finish.

**The Industry Suffers from Infrastructural Inadequacies**

Government in other countries go out of their way to encourage gold jewellery manufacturing and export by laying stress on mass production on automated machines. This is where India is in a position to score over them, because our stress should be no handmade jewellery of artistic designs, which could give a feeling of exclusiveness to prospective buyers. Exporters also
suggest that the import of machinery, tools and consumables must be allowed on concessional rate of duty to all gems and jewellery manufacturers. This should not be restricted to giving an undertaking "meant for exports only" as it will help modernise the local industry. It is difficult to demarcate production meant for exports with that for local use. With the modern techniques of cutting and polishing a net three to four per cent increase in the yield would be possible; most of the diamond cutting units are using traditional methods of cutting and polishing resulting in higher weight loss and poor quality. India can now aim at becoming a major exporter of studded jewellery in the world market, an area neglected by the Indian jewellers. 13

It is felt that India could profitably combine its skill with latest international designs to promote the export of gold jewellery in a big way.

So far as technological upgradation of India's diamond processing industry is concerned, the following areas deserve immediate attention. (a) table mounted scaves (b) dops (c) tangs (d) suitable eye glasses or loupes from indigenous materials (e) a scientific process for retrieval purification sizing and micronising of the bruted diamond powder and (f) suitable diamond powder for cutting and polishing of gems. 14

By and large, artisans work on piece rate basis and use outmoded tools and techniques. Some of the artisans in the

industry are casual workers who do cutting and polishing work to supplement their agricultural income. This casual involvement is not conducive to the healthy growth of the industry.

The Indian diamond industry belongs to the cottage and small-scale sector. The individual factory owners are unable to invest in R & D. At present, R & D efforts are not carried serious drawback of the diamond industry, particularly because the industry is export-oriented and has to face competition from other countries. Artisans have to constantly improve their skills to meet the global challenges. The interaction because the field and the laboratory is to be improved.

Strategies for Augmenting Exports - Destinationwise

China and Israel, the two new entrants in the international market for diamonds, may well end India's status as world's dominant exporter of small diamonds unless the Indian diamond industry takes effective steps to become competitive.

The challenge from China and Israel is real and has to be taken note of seriously if the Indian diamond industry wanted to continue as a leading diamond exporter in the international market. With New York and Hong Kong, the two major diamond trading centres refusing to buy the quantities offered either because of increase in prices or because of less offtake resulting in high inventory levels of unsold diamonds, the hardening of price of rough diamonds and relative inefficiency of

Indian labour are responsible for the current difficult situation in the Indian industry.\textsuperscript{16} The current market situation, however, has not deterred China from making more cut and polished diamonds. It has even managed to persuade Australia which is a major exporter of rough diamonds to set up a training school to provide the necessary skills for its labour.

For Israel the problem is one of finding enough labour for cutting and polishing diamonds. But it is making a feverish bid to enter the international market for diamonds, particularly small diamonds and there are reports that it is on the threshold of coming up with technological innovations to overcome its labour disadvantage. There is no way out for the Indian diamond industry but to become competitive. The transition from a semi-monopolistic situation to a competitive seller in the market is a difficult task, but it has to be gone through. There is need for appropriate change in marketing techniques with emphasis on direct selling. While existing marketing arrangements have yielded good dividends, changes should be thought of in view of new players entering the international market. For instance, efforts must be made to sell directly to West Asian buyers who have both the purchasing power and the desire to acquire diamonds instead of exporting to New York and Hong Kong which in turn find their way to West Asia.\textsuperscript{17}

\textsuperscript{16} Ibid.
\textsuperscript{17} Ibid.
India can become a leading diamond, precious stone and jewellery manufacturing centre and compete with world centres like Antwerp, New York, Tel Aviv, Hong Kong and Bangkok. But what does India need to convert the scope into reality and potential into realisation? This could come about if there was more interest and support from government and greater cooperation from the jewellery and gem industry associations. The following measures to help India become a major world exporter for jewellery and precious stones.

Legislation to protect the buyer against getting substandard jewellery. This can be made possible by having either government assaying laboratories in important export centres or inviting recognised international assaying laboratories to set up branches in export centres in India for certifying the gold content.

More participation by Indian jewellers in international fairs to boost exports and ensuring quality. A general concerted effort by all concerned to protect the best possible image for Indian workmanship is thus required. The quality of Indian jewellery craftsmanship is second to none other jewellery manufacturing centres in the world.

The government and industry leaders would find it extremely rewarding to set up a very high profile public relations campaign promoting Indian jewellery in the world's major jewellery
consumer markets such as the USA and Japan. In addition to the various efforts of the industry for gold jewellery in the middle eastern markets.  

The fine items of Indian jewellery, needs to be much more publicised in our export markets to attract the attention of international buyers and launch India firmly in the direction of a major jewellery exporting country. To stay ahead of the competition from other countries, especially the challenge of Thailand and China in the export of jewellery as well as cutting and polishing of diamonds. Thailand and China, like India have abundant low-cost, skilled labour forces and also offer holidays for export oriented units.

However, both these countries have minimum of formalities for import of gold or precious stones for manufacturing re-export. If India has to forge ahead in exports of jewellery then she must stay a step ahead of its competitors not only in design and craftsmanship but even in the basic infrastructure of various import export tax formalities. The government must take bold steps such as allowing jewellery to take gold jewellery abroad for sale or return without bank guarantee.

The government should also do away with primitive rules and regulations. The whole trade should not be penalised just because of a few unscrupulous black sheeps.

Drawing Lessons from Hong Kong

Few countries are as fortuitously placed as India in terms of the reservoir of skills available to work on precious metals, supplemented by a limitless source of raw materials in the form of diamonds and other precious as well as semi-precious gem stones and even pearls and yet there is something that prevents the country's gold jewellery exports from rising, from getting broad-based and from getting out of the shackles which they have unwittingly formed around themselves.

What better example could there be than Hong Kong to compare and contrast and arrive at a point where we can decide what is really missing in the entire scheme of things. The jewellery industry of Hong Kong has recorded a tremendous upsurge in exports in the last one decade and they have jumped from Rs. 115 crores in 1976 to Rs. 2805 crores in 1994 with an annual increase of 25 per cent. This does not include an unbelievably vast retail trade going on within the island resulting in rising local consumption. The major factors which have led to the growth of the Hong Kong jewellery industry in last one decade are not far to seek. Free port status of Hong Kong, no import duty or sales tax levied on diamonds, gem stones and precious metals, the centrally-located position of the island, an extra-ordinarily

efficient telecommunication network, its status as an international financial centre and the availability of highly skilled productive labour at a relatively cheap cost.

**Competitiveness**

It does not take much analysis to understand as to where we differ from Hong Kong and what points we share in common. But for the freedom in which the Hong Kong jewellery industry can breath and grow we have practically everything in common. Problems like removal of import duty or sales tax are of course very minor points which can be achieved with one stroke of the pen by the government authorities concerned and thus put our jewellery industry at par with that of Hong Kong.

Jewellery exports are attractive mainly because of their value intensive character. Many countries which have no infrastructure facilities for the manufacture of precious metal jewellery or stone studded jewellery are also eager to develop this industry in their countries like Hong Kong and Italy have been clever enough to exploit the potential of jewellery as the most potent medium of export by concentrating on fine jewellery in the medium range.

Hong Kong has gone a step ahead vis-a-vis Italy in the manufacture and export of gold jewellery by matching the quality of the high-priced Italian-made jewellery through price competitiveness. One more factor which of course has been a
creature of circumstances is the weaker position of Hong Kong dollar which has helped the jewellery industry of that country, by keeping its prices more competitive in comparison to many other European jewellery making countries.

The much-lauded Hong Kong jewellery industry does not thrive because of a very large work force of skilled artisans or a very large number of factories involved in the gigantic task of keeping its jewellery exports at such a high level. In fact the total number of skilled workers employed by the jewellery industry in Hong Kong does not exceed 11,000 and the total number of units engaged in the manufacture of jewellery is a mere 769 jewellery manufacturing establishments. Nor is the myth that there are many large factories in Hong Kong which produce jewellery very true. In fact there are only 14 large establishments in the whole of Hong Kong which employ more than 100 workers in manufacturing of jewellery and out of these 14 units also there are only five units which employ 200 or more workers.

Technology Mix: The Hong Kong jewellery industry very much like that in India derives its major production by subcontracting which includes activities like casting, gem setting, polishing and electro-plating. It is generally believed that very sophisticated machines are being used by the jewellery industry in Hong Kong and other countries like Italy and Singapore. The fact is that Hong Kong
factories have evolved a unique method of combining machine production with handcrafted techniques which is an idea technology mix in the Indian context as well. One area where Hong Kong jewellery manufactures excell India is in designing of their jewellery tremendous emphasis is being laid by the Hong Kong Jewellery manufacturers on designs, which unfortunately is lacking in India to this date.

In fact several jewellery design competitions are held to encourage the creative talent of Hong Kong jewellery designers with the result that these jewellery designs have now gained international recognition. Hong Kong jewellery designers have won international awards in Europe and Japan for many of their superb creations. Even in the diamond international awards sponsored by De Beers, many Hong Kong jewellery designs have won prizes and recognition. Thus Hong Kong jewellery designers are no longer bound by traditions and they are experimenting with new ideas like three dimensional voluminous forms in gold and silver, setting diamonds in clusters, channels and pave, and, toying with concepts like earrings with detachable drops, convertible necklaces and bracelets with interchangeable stones.

Freedom to Import

Another important factor which has given a boost to the Hong Kong jewellery industry is the freedom to import all raw
materials for making jewellery from overseas including precious metals, diamonds and other precious and semi-precious gem stones. As a result of this free importation there has been no strain on Hong Kong's economy, on the contrary, it has added to the general income and employment in that country.

There are various points where the similarity between India and Hong Kong need not be stretched too far but since there are great expectations from jewellery exports in India we must also bear in mind that we have to emulate certain examples of successful jewellery manufacturing and exporting countries if we wish to be one of the foreranking jewellery exporting country in the world. By limiting ourselves to a set of inhibitive rules and regulations which interfere with every aspect of jewellery manufacturing and exporting we can never hope to achieve those targets, the potential for which already exists.

Indian gold jewellery exporters should improve the quality of their jewellery products and bring it at par with other leading jewellery centres such as Italy in gold jewellery and Hong Kong, Singapore and Thailand in diamond studded jewellery (ironically the later three countries are manufacturing their high class diamond jewellery using Indian diamonds only as their raw material) both in terms of designing as well as mirror like finish. Equally important is the need to break into the new markets because traditional Gulf markets have become too saturated
to be relied upon for too long. In fact the trend towards this
diversification is already evident, dictated by the inexorable and
axiomatic laws of demand and supply, as seen in the sizeable
growth of gold jewellery exports both to the U.K. and the U.S.
For the first time Indian gold jewellery exports going to the
developed countries of the West have outdone exports to the
traditional Gulf markets.  

It is true that experienced and innovation are the key
words for the growth of jewellery exports from India because fore-
ranking jewellery exporting countries of our times have put in
considerable amount of time and effort to reach the pinnacles they
occupy today. Two particularly demanding but at the same time
ultimate and exceptionally promising markets for Indian made
jewellery are U.S.A. and Japan in that order of priority and
potential. On the manufacturing side the great potential of the
gold centrifugal casting technique as used in U.S.A. has to be
fully recognised by the neonate Indian jewellery manufacturers.
The reason behind the roaring success of German and Italian gold
jewellery manufacturers lies in their employing these sophisticated
production methods to manufacture complex hollow gold jewellery
in shapes which were hitherto unattainable.

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20. Mandawat, S.L., Indian Diamond Industry Enters 21st Century,
It is only with the help of new technologies that new products can be introduced and requisite price competitiveness in relation to quality can be achieved. Leading European jewellery requires a correspondingly wide market base.

The U.S. is the principal market for Indian gold and diamond set jewellery with an innate advantage of 8.25 per cent duty free import over Italy and Hong Kong and even Thailand which are India's prospective rivals should Indian jewellery start invading the $17 billion strong American market. Quite a few Indian jewellery exporters have knocked at the U.S. door but their jewellery in terms of quality and design has not been strong enough to beat the aggressive competition in that country in lower and medium price brackets. A continuous and established presence in this market of markets is vital and things cannot be taken for granted as they can back home. The American jewellers want considerable flexibility in the jewellery collections offered to them. Even calculation of prices and deciding payment dates and terms also requires great flexibility. Sales representatives of the aspiring Indian jewellery exporting firms have to be on the road throughout the year in a predominantly 14 karat gold purity market. Long delivery dates and complicated terms of payment (not to speak of payment in any currency other than the ubiquitous dollar) are quite unacceptable to most of the American jewellery importers. They have a very straightforward approach of 'look-buy-sell.'
Image building through effective advertising is no less significant for any Indian firm aspiring to attain any reasonable share in the U.S. as well as the Japanese market. The days of unannounced entries are past and advertisements which expound great, rather matchless Indian jewellery heritage, in proper perspective, can promote Indian jewellery exports faster than any other factor. Jewellery is a product with very real emotional overtones. Effective advertising can exploit it beautifully. Combined with technical and organisational innovations and artistic creative appeal such advertising can have the field day in both these most affluent markets of the world.

Strategies for Japan

Japan is today the second largest market for gems and jewellery in the world. What is more, this jewellery market is growing rapidly and holds great potential for the future. Much of these imports consists of cheap jewellery products, requiring only simple techniques and come from Hong Kong and Thailand. High quality, upper market products are usually manufactured within Japan. Japan does buy some items in this range from France, Italy and Switzerland, as the Japanese believe that European quality, designs and craftsmanship are superior.

It is estimated that there are as many as 1,000 such manufacturing units in Japan today making jewellery. Of them 70 per cent are medium or small scale in size, employing less than nine workers. Other sections of the jewellery related industry
in Japan, consisting of importers, wholesalers and retailers have expanded in size and total about 50,000 firms. With the market growing rapidly, this is indeed the opportune moment to enter it.

Changing Trends

It is not just the size of the Japanese jewellery market which has expanded, even its traditional character has undergone a radical change. Platinum jewellery, with its high class image, which had always dominated this market has been taken over by gold jewellery. There is a definite decline in interest in traditional designs are preferred now. Of late even the number of men wearing jewellery has been increasing steadily. Japan is one of the few countries where men's jewellery is becoming popular.

There are several factors responsible for this dramatic change. First, with the appreciation in the yen, imported jewellery is cheapest now in Japan, which has triggered an increase in demand. Alongside, a new class has emerged in Japanese society consisting of the single working woman with more disposable income which has led to further expansion of the jewellery market. There has also been a sharp increase in the number of DINC couples (i.e. with double income and no children) which has again triggered higher demand for jewellery. The sharp increase in land prices in the Japanese economy had a two pronged effect on the jewellery market. On the one hand it led to
the emergence of a noveau which purchased jewellery indiscriminately. On the other hand, with the rise in land, people diverted the investments from real estate to jewellery.

There was a qualitative shift in the market as people's demand, spurred by an increased desire for individualism, expressed through clothes and jewellery, shifted towards fashion-oriented items. This fashion trend was more conducive to the growth of the gold jewellery market rather than the high priced platinum jewellery. Of course Japan's platinum jewellery market is still the largest in the world, but within Japan it has fallen behind gold. Gold jewellery now occupies 60 per cent of the Japanese jewellery market and combination of gold and platinum jewellery, 14 per cent.  

Countries which studied these changing trends in the Japanese market and the promise it held for the future, lost no time in capitalising on it. Foremost among them was Hong Kong which successfully captured a significant portion of not only the jewellery market in Japan but even the market for coloured stones. In the latter case Hong Kong merely acts as a transit country where gem stones imported from the source countries are polished and then re-exported to Japan.

Thai Exports

Thailand too as a result of great effort and determination succeeded in exporting both gems and jewellery to Japan. Other major suppliers to Japan are Columbia, which provides 100 per cent of Japan's requirements of emeralds and is the second largest supplier of coloured stones. Sri Lanka too supplies rubies and sapphires along with Thailand whereas a large variety of semi-precious stones are imported by Japan from Brazil. Despite the spectacular growth of the Japanese jewellery market, India has not been able to make a significant dent in this market. In fact our exports of jewellery to Japan have been negligible in the last five years. It is regrettable when viewed against the vast potential that exists in this country to supply excellent quality jewellery with modern designs at competitive prices.

In diamonds, however, India presents a different picture altogether. India is the largest exporter of diamonds to Japan in terms of volume, accounting for 50.4 per cent of Japan's total imports. In terms of value, however, India occupies only third place, after Belgium and Israel, accounting for just 23.4 per cent of Japan's imports. This is because India specialises in and exports only small diamonds which have a low unit price. Belgium and Israel supply medium grade diamonds to Japan whereas the US which occupies fourth place in Japan's imports of diamonds, supplies large high grade diamonds.

22.Ibid.
What is the secret behind Hong Kong and Thailand's success story in gold jewellery, when India has failed to make a mark in this market. The popularity of Hong Kong made jewellery and Thai jewellery is the result of many years of trial and error, whereby the manufacturers in these countries learnt to comply with the Japanese market system and the needs and tastes of the Japanese consumers. The small orders that came from Japanese importers were not always fruitful for its exporters but they did not turn them down. It was often the best way to satisfy Japanese consumer demands. Both these countries have successfully undertaken promotional campaigns to develop their exports to Japan. Along with placing great emphasis on the improvement of designs and quality, they organised special promotional campaigns in Japan to introduce the Japanese consumers and importers to their jewellery and to educate them about its superior quality. Their efforts and determination has no doubt paid in the long run.

**Strategy Lacking**

In contrast, India did not adopt any long-term strategy, which is so indispensable for gaining a firm foothold in this market. India also neglected the publicity factor in marketing, by which the Japanese consumer could have been enlightened about Indian jewellery.

23. Ibid.
To formulate an effective longterm marketing strategy it is necessary to first understand the characteristics of the Japanese jewellery market. Perhaps the most distinctive feature of this market is that rings alone account for 50 per cent of the market. Rings are mostly engagement or wedding rings and most of them are readymade and not made to order. Rings with diamonds are preferred by both men and women. Among coloured stones men prefer sapphires and women rubies. Six prongs are normally used to hold the stones in position, rather than four prongs. Channel setting is preferred for diamonds.

In Japan, the demand for earnings, surprisingly, is very small and is restricted to the older age group. There is hardly any demand for pierced earring. This is in direct contrast to the European market where earrings are very popular and form an essential part of women's accessories. In the German market for instance earrings account for 30 per cent of the market. The Western woman, it is said, buys at least six pairs of earrings to one necklace.

In Japan, after rings, necklaces including pendants and chains rank next in popularity and have a 30 per cent share of the market. The remaining 20 per cent is accounted for by brooches, bracelets and earrings. Coinpatterned pendants sell well but the frames for the coins should be well made. For gold chains, hook type clasps are disliked as they give a cheap image.
It is advisable to use ring clasps or spring hooks. In bracelets, the Japanese prefer narrow ones in plain gold, to those set in diamonds and coloured stones. The maximum weight of a bracelet should not exceed 30 gm. though the ideal weight would be 15 gm. Bangles do not sell well in Japan. Men's jewelry like tie-pins, cufflinks and even chains and bracelets for men is turning out to be a promising field. Earlier men only wore rings.

Another peculiar characteristic of Japan is that as much as 60 per cent of this jewelry market is accounted for by items which are retailed under yen 37,500 (Rs. 3,750). This cheap market is popular as it is exempt from sales tax which is currently 15 per cent. The demand for jewelry shows a downward trend as we move into the higher price range.

Initial entry into this market should, therefore, be with jewelry items in the price range under yen 37,500 (Rs. 3,750). Later, when trust is established, higher priced items can be offered. It is very important to build a relationship of trust with Japanese buyers. A Japanese consumer is conservative and should be cultivated with care.

The Price Factor

Again, since the price factor is so important, it should be kept in mind when developing designs. For instance, in rings, emphasis should be said on using smaller diamonds, less numbers
and lower quality, in order to be able to market the product to the general public. One large central stone pushes up the price of the ring and sale becomes difficult. Efforts should be made to hollow the inner surface of the rings to reduce its weight and lower the price. Light weight rings are preferred in Japan.

The average Japanese consumer prefers 18 karat gold. Even here the composition of the alloy part which constitutes 25 per cent of the metal content of the product is required to be 50 per cent copper and 50 per cent silver. There is, however, a trend a favour of 60 per cent silver and 40 per cent copper. The alloy mix commonly used in India where copper pre dominates is not acceptable in the Japanese market. It is imperative to use the correct alloy mix as without the correct alloy mix as without the correct share of gold any jewellery is likely to get rejected immediately. The Japanese have introduced various new techniques in their jewellery such as changing the colour of gold, frosting, glazing, mat finishing etc.

An important point to bear in mind is that the Japanese never combine a cheap metal with an expensive stone or vise versa. For instance in India it is quite common to set diamonds in silver or zirconia (American diamonds) in 21 karat gold. Caution should be taken to avoid this practice when exporting jewellery to Japan.
The distribution system in Japan is very complicated. Jewellery imported into Japan passes through many middlemen before it reaches the retail outlet. The main channels of this system are (1) importer (2) manufacturer wholesaler (3) general wholesaler (4) processor and (5) retailer. Retail again is divided into (a) individual jewellery shops account for 50 per cent of the jewellery market (b) department stores which have a 20 per cent share (c) chain stores which have a 20 per cent share (c) chain stores which have another 10 per cent and (d) other retail channel including mail order houses accounting for the remaining 20 per cent.

The mark-up between import price and retail price is four times. Different channels exist for each kind of jewellery. For example there are wholesalers dealing only in rings or only in chains. The system is very rigid. A retailer will buy only from a wholesaler and not directly from an importer* or manufacturer. This system must be understood and fully adhered to as any attempts to circumvent it will cause resentment and will only result in an exporter losing business in Japan in the long run.

The import duty in Japan on jewellery is at present 6.6 per cent. The duty is exempted for countries covered by the GSP. The application for this must be made on April 1 each year. Experience has shown that the quota gets exhausted
immediately. It is, therefore, necessary to ship jewellery to Japan much before this date so that all formalities relating to import and GSP application are completed before April 1.

Quality Control

To win the confidence of the Japanese consumer, immediate delivery is very important as well as offering after sales service. The Japanese consumer also gives great importance to packaging. Quality is the catchword of the Japanese industry and quality control must be thoroughly conducted at every stage of jewellery making. The Japanese consumer attaches a lot of importance to a brand name. The development and promotion of brand name should be kept in mind when planning a marketing strategy.

Keeping in view the initial success achieved in penetrating the Japanese market, it is now necessary to keep up the momentum and aim at making a major dent in this market. A well articulated action plan incorporating promotional measures to tap the market is necessary. The promotional package may include obtaining the services of a designer-cum-product specialist from Japan to train Indian jewellery manufacturers in improved technology. In fact partial mechanisation of production was one of the suggestions made by the Seibu Department Store after the exclusive shows held by them in April and June this year, in which three Indian firms participated.
For instance, the mountings on which the stones are set could be machine-made. This would not only bring down the prices but would also improve the finish of the product and ensure supplies on a large scale. Imports of certain tools and machinery considered essential for moderning the manufacturing set-up would be necessary. Actual paper sketches and patterns may also be provided by the designer to develop new designs. The advantage of using the services of a reputed designer is that the marketing would be taken care of in Japan, since the designer would have his own well established network of contacts.

Other promotional measures would include holding exclusive Indian jewellery shows on a regular basis. Only through such repeated shows can India consolidate her position in the Japanese market. Participation in international jewellery fairs and in special shows like the one held by the Seibu Department Store will help in popularising Indian jewellery in Japan. These special functions to sell medium and high grade jewellery products have proved fairly successful in the past. India may also sponsor sales missions to Japan and invite buyers missions from there.

Sales Promotion

India should undertake a publicity campaign in Japan on an intensive scale to open up potential demand. Sales promotion can be carried out through advertisements in jewellery magazines
and journals, screening of films on T.V. and through direct mailing of jewellery catalogues, specially prepared for this purpose. The Indian jewellery industry should set up joint ventures in distribution along with Japanese jewellery importers. As brand promotion is an important marketing tool Indian companies should promote their brand names in Japan.

Another important area which requires urgent attention is simplification of procedures relating to export of jewellery. Under the existing rules only jewellery in which the gold content is less than 10 per cent of the value of the item is allowed to be exported on consignment basis, for approval. In today's highly competitive marketing environment all categories of jewellery should be allowed to be exported on consignment basis, so that customers can select their items and place orders. Such a policy will encourage department stores to hold special shows for Indian jewellery.

Organisers of jewellery shows in Japan are put to undue disadvantage as India has not adopted the carnet system. In its absence jewellery is allowed into Japan only under the temporary importation bond which has its own limitations.

Other Suggestions

Holding international jewellery exhibitions, setting up marketing offices abroad, visits of delegation to major markets,
greater thrust on advertisement abroad, publication of an international monthly magazine on gem and jewellery, greater outlay on brochures and catalogues and market surveys in major thrust countries are some of the suggestions for stepping up exports from gems and jewellery sector.

As gems and jewellery constitutes an important segment of Indian non-traditional exports, there is need for continuing procedural delays and other hurdles. There is shortage of trained manpower in the industry and, therefore, systematic attempts should be made to assess the manpower requirements for the future. The industry may depend for industrial training institutions for training employees both at the supervisory and the shop-floor levels. There is need to evolve a system for hedging against gold price fluctuations due to its impact on export. Fluctuations in international gold prices being as erratic as changes in foreign exchange, banks may be allowed to buy gold for their customers and the facility should be made available for longer periods.

The gems and jewellery trade all over the world is a personalised business, and is conducted on mutual faith and thrust. Business Transactions takes place only between parties quite well known to each other. Indian exporters send shipments direct to the address of the overseas buyer, only when they know the party well and have full faith and thrust in them. In other cases the shipments are sent through banking channels to mutually agreed terms. When they export shipments direct to the address
of overseas buyer, they know that the payment for the goods will be received in good time as per the terms agreed to. Therefore, what is the need and purpose of insisting that even in such cases bank documents should be negotiated, when we know that this does not serve any real purpose, and results only in wasteful expenditure for the exporter, and considerable drain of foreign exchange for the country? The RBI Exchange Control Manual states that the Indian bank should send the documents/instructions only to their own overseas branch or their correspondent bank. It is well known that businessmen all over the world, including India, have the liberty of dealing with any bank branch of their choice. In addition to these delays there is the issue of credit limits to the foreign buyers. Exporters of many countries offer attractive credit facilities to buyers in many important markets, ranging to six months and more. Therefore, the buyers expect such liberal credit facilities from Indian exporters too. A minimum time of 120 days has to be followed to the foreign buyers, if one has to succeed in the highly competitive international markets.

1. Quantity of gold available to manufacturing exporters should be as per the export targets and requirements of the precious metal.

2. They should be allowed to melt the scrap arising for reuse.

3. They should be allowed to get the metal refined outside and get the fold of required cartage for export production.
The origin of the gems_jewellery industry in India was basically a cottage industry comprising mostly of a majority of small individual family concerns. Financial institutions thus have a positive role in helping boost the exports of jewellery. Financial institutions now need to understand the requirements of the trade so as to devise helpful finance packages for the numerous small exporters, who, when put together are the backbone of the industry.

The banks are only willing to lend to the bigger exporters, neglecting the hundreds or thousands of small to medium entrepreneurs, whose combined efforts could increase the export figures of the country dramatically and therefore increase foreign exchange earnings. In this respect the Indian government with the cooperation of Export Credit and Guarantee Corporation could look into the possibility of devising suitable credit-risk insurance policies to protect the financial institutions against any losses.

Though the RBI has directed the banks to meet the genuine financial needs of the diamond trade, bank finance to this sector continues to be inadequate. Bankers say that the industry is not in the priority sector, and therefore, no special assistance can be made available to this industry.

To overcome the industrial relations problem in the industry, resulting not only in low levels of productivity but also in failure to meet delivery scheduled, it has been suggested that all
export units should be brought under the Essential Services Maintenance Act so that industrial unrests are regulated.

CONCLUSIONS

It can be understood from the foregone analysis that the Gems and Jewellery exports have accounted for a very large percentage in the total exports of our country while the potential of minerals and skills possessed by India in the field of this industry is no doubt a boon, a further strengthening of infrastructural base and easing of certain norms for import of raw material will go a long way in boosting the exports of gems and jewellery from India.
### TABLE 4.1
**SHARE OF GEMS AND JEWELLERY IN INDIA'S EXPORTS**

(Value in Rs. Crores)

<table>
<thead>
<tr>
<th>Year</th>
<th>India's Total exports</th>
<th>Exports of Gems and Jewellery</th>
<th>Percentage Share</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980-81</td>
<td>6,710.7</td>
<td>642.1</td>
<td>9.6</td>
</tr>
<tr>
<td>1981-82</td>
<td>7,805.9</td>
<td>820.8</td>
<td>10.5</td>
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<tr>
<td>1982-83</td>
<td>8,803.4</td>
<td>1,028.6</td>
<td>11.7</td>
</tr>
<tr>
<td>1983-84</td>
<td>9,770.7</td>
<td>1,324.5</td>
<td>13.6</td>
</tr>
<tr>
<td>1984-85</td>
<td>11,743.7</td>
<td>1,307.0</td>
<td>11.1</td>
</tr>
<tr>
<td>1985-86</td>
<td>20,894.6</td>
<td>1,508.0</td>
<td>13.8</td>
</tr>
<tr>
<td>1986-87</td>
<td>12,566.6</td>
<td>2,133.1</td>
<td>17.0</td>
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<tr>
<td>1987-88</td>
<td>15,719.4</td>
<td>2,637.4</td>
<td>16.8</td>
</tr>
<tr>
<td>1988-89</td>
<td>20,283.0</td>
<td>4,533.3</td>
<td>22.4</td>
</tr>
<tr>
<td>1989-90</td>
<td>27,681.4</td>
<td>5,295.5</td>
<td>19.3</td>
</tr>
<tr>
<td>1990-91</td>
<td>32,527.3</td>
<td>5,210.0</td>
<td>16.1</td>
</tr>
<tr>
<td>1991-92</td>
<td>44,041.81</td>
<td>6,749.87</td>
<td>15.3</td>
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<tr>
<td>1992-93</td>
<td>53,688.26</td>
<td>9,503.51</td>
<td>17.7</td>
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<tr>
<td>1993-94</td>
<td>45,074.0</td>
<td>12,942.90</td>
<td>28.7</td>
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<tr>
<td>1994-95</td>
<td>--</td>
<td>14,542.00*</td>
<td>28.7</td>
</tr>
</tbody>
</table>

Source: (1) Ministry of Commerce, Government of India, New Delhi.
(2) Gems & Jewellery Export Promotion Council, Bombay.
(3) *Gems and Jewellery PRISM, Vol. VIII, No. 1, April/May 1995.*
### TABLE - 4.2

**NET FOREIGN EXCHANGE EARNINGS FROM INDIA'S GEMS AND JEWELLERY EXPORTS**  
(Value : Rs. Crores)

<table>
<thead>
<tr>
<th>Year</th>
<th>Export</th>
<th>Imports</th>
<th>Net Export earnings</th>
<th>Import as % of Export</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980-81</td>
<td>642.1</td>
<td>402.9</td>
<td>239.2</td>
<td>62.74</td>
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<tr>
<td>1981-82</td>
<td>820.3</td>
<td>619.0</td>
<td>201.3</td>
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<td>1982-83</td>
<td>1,028.5</td>
<td>722.7</td>
<td>305.8</td>
<td>70.26</td>
</tr>
<tr>
<td>1983-84</td>
<td>1,324.4</td>
<td>994.4</td>
<td>330.0</td>
<td>75.08</td>
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<tr>
<td>1984-85</td>
<td>1,307.0</td>
<td>952.1</td>
<td>354.9</td>
<td>72.84</td>
</tr>
<tr>
<td>1985-86</td>
<td>1,507.9</td>
<td>1,137.9</td>
<td>370.0</td>
<td>75.46</td>
</tr>
<tr>
<td>1986-87</td>
<td>2,133.1</td>
<td>1,524.9</td>
<td>608.2</td>
<td>71.48</td>
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<tr>
<td>1987-88</td>
<td>2,637.4</td>
<td>2,060.3</td>
<td>577.1</td>
<td>78.11</td>
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<tr>
<td>1988-89</td>
<td>4,553.3</td>
<td>3,286.5</td>
<td>1,266.8</td>
<td>72.11</td>
</tr>
<tr>
<td>1990-91</td>
<td>5,295.5</td>
<td>4,241.5</td>
<td>1,054.0</td>
<td>80.09</td>
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<tr>
<td>1991-92</td>
<td>5,210.0</td>
<td>3,732.3</td>
<td>1,477.7</td>
<td>71.63</td>
</tr>
<tr>
<td>1992-93</td>
<td>9,503.5</td>
<td>--</td>
<td>--</td>
<td>----</td>
</tr>
<tr>
<td>1993-94</td>
<td>12,942.9</td>
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<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

Source:  
(2) Data Sheets of Gem and Jewellery Export Promotion Council, Bombay.
### TABLE - 4.3

**INDIA'S EXPORTS OF GEMS AND JEWELLERY**

(Value Rs. in Millions)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Diamonds</strong></td>
<td>117208</td>
<td>134425</td>
<td>195973</td>
<td>243974</td>
<td>423818</td>
<td>497193</td>
<td>473871</td>
<td>616264</td>
<td>831615</td>
<td>1140989</td>
</tr>
<tr>
<td>Coloured Gem stones</td>
<td>3511</td>
<td>4565</td>
<td>6114</td>
<td>9850</td>
<td>14674</td>
<td>19483</td>
<td>20770</td>
<td>25702</td>
<td>26998</td>
<td>31153</td>
</tr>
<tr>
<td>Gold Jewellery</td>
<td>8814</td>
<td>10167</td>
<td>8920</td>
<td>8620</td>
<td>17142</td>
<td>28290</td>
<td>36425</td>
<td>75094</td>
<td>84404</td>
<td>114869</td>
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<tr>
<td>Pearls</td>
<td>718</td>
<td>841</td>
<td>1085</td>
<td>890</td>
<td>772</td>
<td>862</td>
<td>815</td>
<td>991</td>
<td>1009</td>
<td>1438</td>
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<tr>
<td>Non-Gold Jewellery</td>
<td>149</td>
<td>240</td>
<td>361</td>
<td>409</td>
<td>566</td>
<td>1179</td>
<td>1472</td>
<td>2475</td>
<td>2925</td>
<td>2329</td>
</tr>
<tr>
<td>Synthetic Stones</td>
<td>66</td>
<td>62</td>
<td>59</td>
<td>82</td>
<td>39</td>
<td>54</td>
<td>44</td>
<td>102</td>
<td>149</td>
<td>137</td>
</tr>
<tr>
<td>Costumes/Fashions Jewellery</td>
<td>49</td>
<td>95</td>
<td>112</td>
<td>160</td>
<td>121</td>
<td>121</td>
<td>202</td>
<td>385</td>
<td>1231</td>
<td>1817</td>
</tr>
<tr>
<td><strong>Total Exports</strong></td>
<td>130515</td>
<td>150305</td>
<td>212624</td>
<td>263965</td>
<td>457132</td>
<td>547182</td>
<td>533599</td>
<td>720873</td>
<td>948391</td>
<td>1292732</td>
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<tr>
<td><strong>Sales to Foreign Tourists</strong></td>
<td>181</td>
<td>399</td>
<td>603</td>
<td>1291</td>
<td>964</td>
<td>756</td>
<td>2425</td>
<td>2500</td>
<td>2019</td>
<td>1558</td>
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<tr>
<td><strong>Grand Total</strong></td>
<td>130696</td>
<td>150794</td>
<td>213227</td>
<td>265256</td>
<td>458096</td>
<td>547938</td>
<td>536024</td>
<td>723373</td>
<td>950360</td>
<td>1294290</td>
</tr>
</tbody>
</table>

### TABLE 4.4
NET IMPORTS OF UNFINISHED GEMS & JEWELLERY FOR LAST FIVE YEARS

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
<th></th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rough diamonds</td>
<td>407721</td>
<td>354405</td>
<td>467753</td>
<td>676832</td>
<td>808058</td>
<td>2448.89</td>
<td>1975.19</td>
<td>1882.32</td>
<td>2185.47</td>
<td>2561.75</td>
<td></td>
</tr>
<tr>
<td>Rough coloured Gemstones</td>
<td>11639</td>
<td>12492</td>
<td>11549</td>
<td>14796</td>
<td>12617</td>
<td>69.91</td>
<td>69.92</td>
<td>46.39</td>
<td>47.95</td>
<td>40.00</td>
<td></td>
</tr>
<tr>
<td>Raw Pearls</td>
<td>1461</td>
<td>1417</td>
<td>1442</td>
<td>2082</td>
<td>1948</td>
<td>8.77</td>
<td>7.90</td>
<td>5.80</td>
<td>6.72</td>
<td>5.19</td>
<td></td>
</tr>
<tr>
<td>Rough Synthes. Stones</td>
<td>27</td>
<td>109</td>
<td>85</td>
<td>102</td>
<td>154</td>
<td>0.17</td>
<td>0.61</td>
<td>0.33</td>
<td>0.33</td>
<td>0.48</td>
<td></td>
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<tr>
<td>Gold bars</td>
<td>18891</td>
<td>24935</td>
<td>57386</td>
<td>50294</td>
<td>559976</td>
<td>113.46</td>
<td>138.97</td>
<td>231.57</td>
<td>162.87</td>
<td>177.40</td>
<td></td>
</tr>
<tr>
<td>Silver bars</td>
<td>311</td>
<td>599</td>
<td>11260</td>
<td>1620</td>
<td>2401</td>
<td>1.87</td>
<td>3.34</td>
<td>5.07</td>
<td>5.24</td>
<td>7.62</td>
<td></td>
</tr>
<tr>
<td>Platinum bars</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>40</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>0.13</td>
<td>0.08</td>
<td></td>
</tr>
</tbody>
</table>

Source: The Economic Times, Data Bank.
<table>
<thead>
<tr>
<th></th>
<th>Unfinished Gems &amp; Jewellery (Value in Rs. lakhs)</th>
<th>Gems &amp; Jewellery (Value in US dollars)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diamonds Coloured</td>
<td>497193 473871 616264 831615 1140989</td>
<td>2966.29 2641.01 2499.86 2867.56 3649.03</td>
</tr>
<tr>
<td>Gemstones</td>
<td>19483  20770  25702  26998  31153</td>
<td>117.02  115.75  104.26  93.50  99.61</td>
</tr>
<tr>
<td>Gold jewellery</td>
<td>28290  36425  75004  84404  114869</td>
<td>169.92  203.01  304.25  285.98  367.35</td>
</tr>
<tr>
<td>Pearls</td>
<td>872    815    991    1009    1438</td>
<td>5.18    4.54    4.02    3.49    4.60</td>
</tr>
<tr>
<td>Non-gold jewellery</td>
<td>1179   1472   2475   2925    2329</td>
<td>7.08    8.20    10.04   10.05    7.43</td>
</tr>
<tr>
<td>Synth. Stones</td>
<td>54     44     102    149     137</td>
<td>0.32    0.25    0.41    0.53    0.45</td>
</tr>
<tr>
<td>Costume Fashion Jewellery</td>
<td>121   202   335   1231    1817</td>
<td>0.73    1.13    1.36    4.28    5.81</td>
</tr>
<tr>
<td>Total exports</td>
<td>547182 533599 720873 948331 1292732</td>
<td>3286.54 2973.89 2924.20 3265.39 4134.28</td>
</tr>
<tr>
<td>Sales to foreign tourist</td>
<td>756   2425  2500  2019    1558</td>
<td>4.54    13.52   10.14   6.97    4.98</td>
</tr>
<tr>
<td>Total</td>
<td>547938 536024 723373 950350 1294290</td>
<td>2987.41 2934.34 3272.36 4139.26</td>
</tr>
</tbody>
</table>

Source: The Economic Times, Data Bank.
TABLE - 4.6
DESTINATIONWISE EXPORTS OF GEMS AND JEWELLERY

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rs. in</td>
<td>%</td>
<td>Rs. in</td>
<td>%</td>
<td>Rs. in</td>
</tr>
<tr>
<td></td>
<td>crores</td>
<td></td>
<td>crores</td>
<td></td>
<td>crores</td>
</tr>
<tr>
<td>U.S.A.</td>
<td>691.7</td>
<td>45.8</td>
<td>888.0</td>
<td>41.6</td>
<td>992.1</td>
</tr>
<tr>
<td>Hong Kond</td>
<td>168.8</td>
<td>11.2</td>
<td>305.5</td>
<td>14.3</td>
<td>299.9</td>
</tr>
<tr>
<td>Belgium</td>
<td>170.90</td>
<td>11.3</td>
<td>264.4</td>
<td>12.3</td>
<td>341.4</td>
</tr>
<tr>
<td>Japan</td>
<td>172.3</td>
<td>11.5</td>
<td>300.6</td>
<td>14.0</td>
<td>489.3</td>
</tr>
<tr>
<td>Thailand</td>
<td>15.6</td>
<td>0.0</td>
<td>41.3</td>
<td>2.0</td>
<td>43.8</td>
</tr>
<tr>
<td>U.A.E.</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>Israel</td>
<td>13.2</td>
<td>0.8</td>
<td>26.0</td>
<td>1.3</td>
<td>51.5</td>
</tr>
<tr>
<td>Singapore</td>
<td>26.7</td>
<td>1.8</td>
<td>29.0</td>
<td>1.4</td>
<td>25.7</td>
</tr>
<tr>
<td>U.K.</td>
<td>27.3</td>
<td>1.9</td>
<td>31.4</td>
<td>1.5</td>
<td>27.2</td>
</tr>
<tr>
<td>Switzerland</td>
<td>57.4</td>
<td>3.8</td>
<td>68.4</td>
<td>3.2</td>
<td>56.9</td>
</tr>
<tr>
<td>Germany</td>
<td>29.6</td>
<td>2.0</td>
<td>41.0</td>
<td>1.9</td>
<td>42.7</td>
</tr>
<tr>
<td>Others</td>
<td>134.1</td>
<td>8.9</td>
<td>135.5</td>
<td>6.3</td>
<td>266.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1507.6</td>
<td>100.0</td>
<td>2133.1</td>
<td>100.0</td>
<td>2637.4</td>
</tr>
</tbody>
</table>

Note: (1) UAE also includes data from Abudhabi, Dubai and Sharjah.
(2) Exports from SEEPZ are taken under others as comparative countries breakup is not available.
(3) Above all markets are 1993-94 together accounted for about 93.52 per cent of gems and jewellery exported by India to the world market. The USA maintained its position as the single largest importer of gems and jewellery from India during 1993-94 with imports worth Rs. 3903.16 crores (1992-93 Rs. 3271.61 crores) accounting for 30.16 per cent of the total exports of gems and jewellery, Hong Kong, Belgium and Japan come as second, third and fourth among the eleven major importing countries.

Source: The Gem and Jewellery Export Promotion Council, Bombay.
### TABLE - 4.6 a
**EXPORTS OF DIAMONDS TO MAJOR MARKETS**
*(Value Rs. in Crores)*

<table>
<thead>
<tr>
<th></th>
<th>1993-94</th>
<th>% to total</th>
<th>1992-93</th>
<th>% to total</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>3586.17</td>
<td>31.83</td>
<td>3031.71</td>
<td>37.10</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>2805.51</td>
<td>24.90</td>
<td>1527.14</td>
<td>18.69</td>
</tr>
<tr>
<td>Belgium</td>
<td>1811.98</td>
<td>16.08</td>
<td>1357.53</td>
<td>16.61</td>
</tr>
<tr>
<td>Japan</td>
<td>1676.27</td>
<td>14.88</td>
<td>1271.39</td>
<td>15.56</td>
</tr>
<tr>
<td>Thailand</td>
<td>371.04</td>
<td>3.29</td>
<td>233.73</td>
<td>2.86</td>
</tr>
<tr>
<td>Israel</td>
<td>304.35</td>
<td>2.70</td>
<td>210.85</td>
<td>2.58</td>
</tr>
<tr>
<td>Singapore</td>
<td>231.05</td>
<td>2.05</td>
<td>145.00</td>
<td>1.78</td>
</tr>
<tr>
<td>Switzerland</td>
<td>120.38</td>
<td>1.06</td>
<td>116.84</td>
<td>1.43</td>
</tr>
<tr>
<td>Germany</td>
<td>104.38</td>
<td>0.93</td>
<td>90.67</td>
<td>1.11</td>
</tr>
<tr>
<td>UK</td>
<td>61.31</td>
<td>0.54</td>
<td>51.95</td>
<td>0.64</td>
</tr>
<tr>
<td>Others</td>
<td>195.77</td>
<td>1.74</td>
<td>133.94</td>
<td>1.64</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>11268.21</td>
<td>100.00</td>
<td>8170.75</td>
<td>100.00</td>
</tr>
</tbody>
</table>

*Source: The Gem and Jewellery Export Promotion Council, Bombay.*
Fig. 6

INDIA's EXPORTS OF GEMS AND JEWELLERY (Rs. Crores)
Above figures do not include exports from SEEPZ as countrywise exports from the said zone are not available. Exports of diamonds through SEEPZ amounted to Rs. 145.40 crores during 1992-93 and Rs. 141.65 crores in 1993-94.
Fig. 8
COUNCIL'S MEMBERS AND REGISTERED EXPORTERS DURING LAST FIVE YEARS

NUMBER OF MEMBERS
NUMBER OF REGD. EXPORTERS

<table>
<thead>
<tr>
<th>Year</th>
<th>Members</th>
<th>Exporters</th>
</tr>
</thead>
<tbody>
<tr>
<td>89-90</td>
<td>4059</td>
<td>4385</td>
</tr>
<tr>
<td>90-91</td>
<td>4579</td>
<td>4215</td>
</tr>
<tr>
<td>91-92</td>
<td>5398</td>
<td>4859</td>
</tr>
<tr>
<td>92-93</td>
<td>5579</td>
<td>5261</td>
</tr>
<tr>
<td>93-94</td>
<td>5895</td>
<td>5590</td>
</tr>
</tbody>
</table>