The gems and jewellery industry occupies an important position in the Indian Economy. The gems and jewellery industry plays a prominent role in exports of the country. It is highly labour intensive with a high employment potential on low investment and high rate of value addition and leading foreign exchange earner for the country. Since the days of ‘Kohinoor’ and the ‘Great Mughal Gems’, foreigners had a craze for gems manufactured in India. Keeping in view their taste, Indian gems and jewellery industry started functioning in the sixties. Its exports increased significantly in nineties and after that Indian gems and jewellery sector never looked back.

The present study entitled “Problems and Prospects of India’s Exports of Gems and jewellery” is related to export marketing research and has analyzed the export potentialities for India’s gems and jewellery products in international market. It also highlights the impact of globalization and domestic economic liberalization on the production and exports of gems and jewellery products and analyses its growth performance in terms of output and export as well.

To achieve the objectives of the study, the relevant data related to India’s exports of gems and jewellery products to various international markets have been collected from the various authenticated sources. Initially, the secondary data in the form of published reports and various documents were collected from various sources like Foreign Trade Statistics of India, Directorate General of Commercial Intelligence and Statistics (DGCI&S), Ministry of Commerce, Government of India, New Delhi, Gem and Jewellery Export Promotion Council (GJEPC), Ministry of Commerce and Industry, Government of India, New Delhi and Directorate General of Commercial Intelligence and Statistics (DGCI&S), Ministry of Commerce, Government of India, Kolkata.
The data show a synthesis of both cross-sectional and time series and present, India’s year-wise comprehensive exports of gems and jewellery products to various principal markets during the period 1990-91 to 2009-10. The study reveals that during the study period the exports of gems and jewellery products increased from Rs. 5,360 crores in 1990-91 to Rs. 1,39,056.40 crores in 2009-10. The trend of increasing exports of gems and jewellery products signifies a very bright future of the gems and jewellery industry in the global market. However, the exports of cut and polished diamonds group from India went upward from Rs. 4,739 crores in 1990-91 to Rs. 86,125.98 crores in 2009-10 and the trend of the exports of gold jewellery has been tremendously increased from Rs. 364 crores in 1990-91 to Rs. 45,802.12 crores in 2009-10. Further, the exports of coloured gemstones have also been revealing significant increasing trend from Rs. 208 crores in 1990-91 to Rs.1,358.12 crores in 2009-10 and the trend of the exports of pearls group went upward from Rs.8 crores in 1990-91 to Rs.16.30 crores in 2009-10. Moreover, the exports of non-gold jewellery have substantially increased from Rs. 15 crores in 1990-91 to Rs. 1,952.05 crores in 2009-10 and the exports trend of synthetic stones has increased from nil in 1990-91 and Rs. 1 crore in 1991-92 and to Rs.6.52 crores in 2009-10.

The exports of costume/fashion jewellery have also been showing an increasing trend from Rs. 2 crores in 1990-91 to Rs.72.78 crores in 2009-10 and the trend of sales to foreign tourists has increased from Rs. 24 crores in 1990-91 to Rs.197.06 crores in 2009-10. On the other hand, the exports of rough diamonds that remained nil during the period 1990-91 to 1994-95, has improved many folds from Rs.106 crores in 1995-96 to Rs.3,525.42 crores in 2009-10.

The country-wise analysis of the gems and jewellery exports for the period 1990-91 to 2009-10 shows that Indian gems and jewellery exports are overwhelmingly concentrated in the U.S.A, the U.A.E, Hong Kong, Belgium, Singapore, Israel, Japan, Thailand, the U.K and Switzerland. In the U.S.A., exports of these products was amounting to Rs.1,66,574.70 lacs in 1990-91
that had increased to Rs. 22,38,783.96 lacs in 2009-10. Similarly, in the U.A.E, exports of these products was amounting to Rs. 6,182.29 lacs in 1990-91 increased to Rs. 58,30,361.24 lacs in the year 2009-10. In case of the Hong Kong, exports of gems and jewellery products was amounting to Rs. 70,559.58 lacs in 1990-91 that increased to Rs. 29,56,448.97 lacs in 2009-10 and in Belgium exports of these products was amounting to Rs. 93,429.60 lacs in 1990-91 increased to Rs.77,855.96 lacs in 2009-10. Further, the exports of gems and jewellery products to Singapore had also been showing significant increasing trend from Rs.7,033.76 lacs in 1990-91 to Rs. 2,84,075.99 lacs in 2009-10. Other main markets for India’s gems and jewellery products are Australia, Canada, France, Germany, Italy, China P RP, South Africa, Spain, Netherland, Korea RP and Turkey.

The data have also been processed with the help of certain mathematical and statistical tools like measure of central tendency (mean, rating, value), average, Compound Annual Growth Rate (CAGR) Coefficient of Variation (CV), regression, percentage, tabulation , pai chart, bar diagrams and line diagrams.

For an examination of the concentration ratio of gems and jewellery products exports among the fifty major importing countries in the world, it is necessary to change the absolute figures of exports in terms of export coefficients. It is because sometimes the absolute figures don’t present the true picture of the position, whereas the relative measure can be understood a better instrument for comparison purpose.

To measure the market concentration of gems and jewellery products exports among various countries six different indices have been used. These indices are the Index of Maximum Proportion (D_1), Hirschman Herfindhal Index (D_2) Entropy Index (D_3), Concentration Ratio CR_4 (D_4), Concentration Ratio CR_8 (D_5) and Concentration Ratio CR_16 (D_6). These concentration measures are based on the export coefficients (Share) of the individual element. The individual elements in the present study are importing countries of gems and jewellery products. The value of concentration ratio (CR_n)
ranges from 0 to 1 where 0 indicates perfect diversification and 1 refers to perfect concentration. On the other hand, the higher value of the entropy index indicates greater information about the concentration of importing countries. An analysis of indices for the country concentration has been conducted for the total exports of gems and jewellery products as well as it six sub-groups. During the study it has been found that Herfindhal Index shows the presence of diversification (low concentration) of cut and polished diamonds exports among the fifty major importing countries of the world during the period 1996-97 to 2009-10. The indices have been revealing almost stable nature regarding the concentration of the gold jewellery during the period 2003-04 to 2009-10. Apparently, it has been observed that the country concentration indices of coloured gemstones exports have been revealing fluctuating nature during the study period. Further, Entropy Index display the higher value of entropy index, which indicates high concentration of India’s non-gold jewellery exports in the year 2009-10.

The country concentration indices of costume/fashion jewellery exports have been showing fluctuating nature (except year 2004-05). Similarly, the indices have been showing mixed nature regarding the concentration of the other gems and jewellery products. However, all these concentration measures indicate the presence of diversification for total gems and jewellery products exports during the period 1990-91 to 2009-10. To make an assessment of the overall performance of gems and jewellery products exports and to identity the new potential markets, growth rate for the exports of gems and jewellery products in various countries have been calculated. The information provided by the growth rates and regression coefficients of exports as relative measures are both in conformity with each other. Such type of information is quite beneficial for correcting the disequilibrium in the balance of trade of the country. For illustration of the growth rate of the export of gems and jewellery sector at macro as well as the micro level for the individual importing country and the individual product group have been calculated. Various tools have been applied for the six product groups of gems and jewellery exports. To calculate the growth rate, a linear relation is
fitted between exports coefficients and time, by taking time periods as a independent variable and exports coefficients as dependent variable. Further, the importing countries have been categorized into following three categories: Category-I includes countries having greater than 40 percent growth rates (high potential); Category-II includes countries having between 10 per cent and 40 per cent growth rates (middle potential) and Category-III includes countries having below 10 per cent growth rates (low potential). The classification signifies the direction of the trade of gems and jewellery products and market segmentation on the global scale over the study period.

The use of the ranks has also been made in identifying the position of a country within a category that again explicitly present the comparative picture of India’s exports of gems and jewellery products to the major countries. A close examination of the Compound Annual Growth Rates (CAGR) of the exports of gems and jewellery products on the basis of the ranks obtained for the growth rates, one may conclude that the first eleven countries China P RP (86.11 per cent), South Africa (70.63 per cent), Honduras (63.85 per cent), Lebanon (62.77 per cent), Fiji Is (61.73 per cent), Turkey (52.59 per cent), Argentina (50.32 per cent), Bahamas (49.83 per cent), Poland (45.32 per cent), Chile (45.05 per cent) and Russia (40.96 per cent) have fallen in the high potential category. Similarly, next thirty two countries come in the middle potential category which indicates only marginal demand for India’s gems and jewllery products. Moreover, the category of low potential countries comprises of Kuwait, Austria, Netherland, Qatar, Oman, Japan, Cyprus and Maxico. It is apparent that the most of the growth rates are statistically significant at one per cent (\( \alpha = 0.01 \)) level of significance. Likewise, the dynamic behaviour of the country-wise growth rates to the exports of India’s cut and polished diamond has found that the first five countries, viz., China P RP, Turkey, Honduras, the UAE and South Africa have got high potential category. However, next thirteen countries are falling in the middle potential category and thirty two countries are falling in low potential category. A careful examination of growth rates of gold jewellery exports has shown that China P RP (256.90 per cent), Poland
(212.13 per cent), Hong Kong (75.52 per cent), France (71.09 per cent) Korea RP (58.26 per cent), Saudi Arab (56.28 per cent), Australia (42.07 per cent) and South Africa (41.74 per cent) are falling in the high potential category. Thus there is a tremendous potential demand for exports of gold jewellery. Similarly, the growth rates for the exports of coloured gemstones signify that the first four countries as like the growth rate of Turkey, China P RP, Indonesia and Lebanon come in the high potential category. The growth rate of non-gold jewellery depicts that China P RP (65.61 per cent), Poland (53.32 per cent), Thailand (45.79 per cent), Bahrain Is (43.64 per cent) Mauritius (43.23 per cent), Finland (42.45 per cent) and Lebanon (40.33 per cent) are also falling in the high potential category.

Further, the growth rate of costume/fashion jewellery shows that Turkey (82.35 per cent), Fiji Is (69.49 per cent), Portugal (50.77 per cent) and Thailand (41.08 per cent) come in the high potential category which indicates that there are lucrative markets for the Indian costume/fashion jewellery.

To analyze the effect of liberalization, privatization and globalization on the exports of gems and jewellery products, period-wise growth rate of gems and jewellery exports have also been calculated. For this purpose of trend analysis, item-wise in value terms, the data are divided into two periods, i.e., 1990-91 to 1999-2000 and 2000-01 to 2009-10. The increasing growth rate of gems and jewellery products of the period 1990-91 to 1999-2000 stresses the positive effects of Liberalization, Privatization and Globalization (LPG) on exports of gems and jewellery products. Likewise, in the examination of the country-wise growth rate, it has been observed that the growth rates of the U.S.A., Hong Kong, Belgium, Israel, Japan, Thailand, the U.K., Switzerland, Canada, France, Germany, Kenya, Argentina, Austria, Bahrain Is, Chile, China P RP, Cyprus, Denmark, Kuwait, Fiji Is, Indonesia, Greece, Ireland, Lebanon, Mauritius, Netherland, Norway, Oman, Qatar, Russia, Saudi Arab, South Africa, Spain, Sri Lanka, Sweden and Turkey were higher as compared to the total period (1990-91 to 2009-10). Therefore, it can easily
be seen that the effect of WTO and LPG model to the Indian gems and jewellery sector are found positive.

In order to procure coefficient of variations, a calculation has been made regarding the descriptive statistics pertaining to fifty major importing countries. In the explanation of year-wise exports of gems and jewellery products the use of mean and standard deviation has been made to ascertain the average rise or fall in the exports and their dispersion from average value respectively. Similarly, coefficient of variations, which is considered as a relative measure of inequality in the exports of these products, has also been calculated. Likewise, the same technique has also been embedded to six constituents of the gems and jewellery products. In addition, the descriptive statistics of exports of cut and polished diamonds during the period from 1996-97 to 2009-10, it has been observed that the coefficient of variations has increased marginally which means that the exports of this product among the importing countries has developed slightly uneven distribution in such exports. However, the descriptive statistics pertaining to the exports of India’s one of the constituents of gems and jewellery products, i.e., gold jewellery the coefficient of variations was reduced, which means the reduction in the inequality of the exports of gold jewellery. Obviously, it also means an improvement in stability of the exports of gold jewellery.

In case of coloured gemstones coefficient of variations was reduced. It also reflects an improvement in the stability of the exports of coloured gemstones. Further, the coefficient of variations of non-gold jewellery during the study period has been of fluctuating nature and in the end it was also reduced which means an improvement in the stability of the exports of non-gold jewellery. And, the coefficient of variations of costume/fashion jewellery has increased during the study period, which indicates the presence of diversification of the costume/fashion jewellery exports to various importing countries of the world. The coefficient of variations of other gems and jewellery products has increased also, which signifies the increase in inequality of exports of other gems and jewellery products. Moreover, an
improvement in the stability of the exports of Gems and Jewellery Products (GJPs) and India’s exports leading towards uniform distribution among the countries which may be considered as a good sign for the Indian economic sector.

Moreover, the present study has investigated comprehensively India’s exports focusing on their nature, pattern and direction over a period of twenty years (1990-91 to 2009-10). An attempt has been made to highlight the pattern of disintegrating national exports at different descending micro levels. The detailed empirical information on their dynamic behavior is embedded in the analysis. Further, the item-wise and port-wise growth rates and trend values of these exports have been analyzed in value terms and reveal significant potential in the categories of considered terms.

The study shows that the gems and jewellery sector in our country and international trade are troubled by a variety of problems from the starting and also all through its operations to the last stage of exports. They face a lot of problems from the administrative, set up. Being highly dependent on the raw materials and lack of good quality in the acquired material is also a problem. There is lack of skilled and trained labourers. In addition, transportation, financial problems, procedural hardships, cut-throat competition, changing fashion, anti-social activities and threat of terrorism etc. are also some of the problems faced by gems and jewellery industry and exporters.

Keeping in view the special role of the gems and jewellery sector in the country’s economy through its contribution to employment generation and foreign exchange earnings, the study explains that there is growing need for awakening and planning for recognition of gems and jewellery as a potential sector of Indian economy for the optimal utilization of human force and creation and self employment and natural wealth. The strength of the Indian gems and jewellery sector lies largely in inherited creativity and skill of artisans traditional and cultural base, low capital investment and high value addition. The opportunities are focused on growing the export market, especially in developed countries having preferential age for gems and
jewellery, awareness and age of gems and jewellery in lifestyles, technological possibilities for reducing of boredom and improving quality.

On the basis of the information gathered from producers, exporters and consumers of gems and jewellery products, the study successfully attempted to look into the strength, weakness, opportunities and threats in the relation to production and exports. After examining the position and status of the gems and jewellery industry, the study proves the sector is full of possibilities for employment and export, but highly decentralized and finding difficult to survive. The approach to planning must be aimed at sustaining the strength and raising the opportunities by removing not only the weakness but also converting them into strength.

**MAIN FINDINGS OF THE STUDY**

1. The growth rate of gems and jewellery products exports during the period 1990-91 to 2009-10 is 16.59 per cent Compound Annual Growth Rate (CAGR) and related trend values are Rs. 5,659.22 crores. The total national exports registered a growth rate of 17.82 per cent and Rs. 39,974.60 crores as its annual trend values, which are quite significant. These results demonstrate that India has tremendous potential in the exports of gems and jewellery products in the global market.

2. Comparative analysis in the product groups show that the rough diamonds have scored the highest growth rate, i.e., 27.03 per cent due to high demand from major importing countries of the product like especially from Belgium followed by the USA, the UK, South Africa and Israel etc. The second highest rank goes to non-gold jewellery owing to high demand of silver jewellery. However the highest trend value has been recorded in cut and polished diamonds product as Rs. 3,529.37 crores. In the end, almost all the coefficients are statistically significant at one per cent ($\alpha = 0.01$) level of significance.
3. Port-wise comparative analysis revealed that Kolkata has marked highest growth rate of 67.27 per cent followed by Surat and Bangalore with 53.16 and 34.79 per cent CAGR respectively. However, the highest trend value has been recorded in Mumbai port as Rs. 780.755 crores. In addition, the growth rate of SEEPZ-SEZ, Mumbai during the study period is 22.75 per cent and trend value is Rs. 471.18 crores.

4. The study has trenchantly analyzed the indices of cut and polished diamonds, gold jewellery, coloured gemstones, pearls, non-gold jewellery, synthetic stones, costume/fashion jewellery, rough diamonds and their sales to foreign tourists. The total of gems and jewellery signifies the lowest Coefficient of Variations (CV) and the highest Coefficient of Variations (CV) in synthetic stones (ranges from 11.9013 to 114.7773). The highest coefficient of variations indicates the increase in inequality of the exports.

5. Further, the indices of various ports like Mumbai, Delhi, Jaipur, Chennai, Cochin, Coimbatore, Bangalore, Kolkata, Hyderabad and Surat indicates and found the lowest coefficients of variation in Mumbai and the highest CV in the Bangalore and ranges from 12.48452 to 102.8964.

6. The study has also analyzed inter-comparison of four product groups which led to the analysis of two way classification of CAGR. It has been found that in Group-A the highest growth rate of 12.07 per cent stood in the name of Spain and in Product-Group-II the highest growth of 3.59 per cent stood in the name of Spain again. Whereas, In Product-Group-III and IV the U.S.A. and Spain got the highest growth rate of 20.09 and 24.13 per cent respectively. In the same manner, countries falling in Group B, C, D, E, F and G under product Group-I, II, III and IV have been examined.

7. During the study it has been found that Hirschman Herfindhal Index (HHI) shows the presence of diversification (low concentration) of cut
and polished diamonds exports among the various importing countries. However, on the basis of the ranks obtained, the country-wise growth rates concludes that the first five countries namely China P RP (97.80 per cent), Turkey (67.86 per cent), Honduras (46.77 per cent), the UAE (45.74 per cent) and South Africa (40.46 per cent) are falling in the high potential category. Thus, there is very high scope for the exports of India’s cut and polished diamonds in these countries. Likewise, next thirteen countries are falling in the middle potential category. Further, rests of the countries come in the low potential category. Most of the growth rates are statistically significant at one per cent ($\alpha = 0.01$) level of significance. Moreover, the coefficients of variations have been found of increasing and fluctuating nature which indicates that exports of this product among the countries has developed slightly uneven distribution in such exports.

8. The country concentration indices of gold jewellery exports have been almost stable in first four years, but starts declining after the year 2007-08 and starts increasing in 2009-10. However, it has been seen that the first eight countries come in the high potential category and next twenty seven countries come in the middle potential category. Moreover, in the context of CV of gold jewellery, it can be concluded that the figure of CV reduced which means the reduction in inequality of the exports. It also means an improvement in the stability of the exports of gold jewellery.

9. In the case of coloured gemstones, it has been found that the index $D_2$ reveals the presence of diversification among the various importing countries of the world. Further, index $D_3$, which measures the information about the concentration of the group, has been of fluctuating nature over the study period. In addition, the country-wise growth rates of Turkey (68.75 per cent), China P RP (45.40 per cent), Indonesia (42.77 per cent) and Lebanon (40.25 per cent) come in the high potential category. And, next twenty one countries come in the
middle potential category. The most of the growth rates are statistically significant at one per cent ($\alpha = 0.01$) level of significance. Moreover, coefficients of variations of coloured gemstones exports have been declining, which means the reduction in the inequality of the exports.

10. The country concentration indices of non-gold jewellery exports show the presence of diversification among the various countries of the world. $D_3$ depicts the higher values of entropy index that indicates high concentration of India’s non-gold jewellery exports in the year 2009-10. The first seven countries come in the high potential category. The higher value of CV as Rs. 400.525 lacs in 2007-08 and have been reduced in 2008-09 and 2009-10.

11. The Index $D_2$ has been displaying fluctuating nature regarding concentration of the costume/fashion jewellery except the year 2004-05. Meanwhile, the country-wise growth rates of Turkey (82.35 per cent), Fiji Is (69.49 per cent), Portugal (50.77 per cent) and Thailand (41.08 per cent) are falling in the high potential category. Moreover, the CV has been found increasing marginally.

12. The country concentration indices of other gems and jewellery products show that the index $D_2$ has been showing mixed nature. Further, country-wise growth rates of Lebanon (47.01 per cent) and Brazil (44.54 per cent) are falling in high potential category. Likewise, next eighteen countries come in the middle potential category and rests of the countries are falling in the low potential category. Moreover, the value of CV has increased which indicates increase in instability of the exports.

13. All these concentration indices signify the presence of diversification for total gems and jewellery exports during the period 1990-91 to 2009-10. Further, it has been demonstrated that China P RP (86.11 per cent), South Africa (70.63 per cent), Honduras (63.85 per cent), Lebanon (62.77 per cent), Fiji Is (61.73 per cent), Turkey (52.59 per
cent), Argentina (50.32 per cent), Bhamas (49.83 per cent), Poland (45.32 per cent), Chile (45.05 per cent), and Russia (40.96 per cent) have retained the top position in the exports of gems and jewellery products. Moreover, in the context of CV of total gems and jewellery products it can be concluded that the reduction in the inequality of the exports prevails. And, the stability of the exports of gems and jewellery products has been improved, which is considered as a good sign for the Indian economic sector.

POLICY IMPLICATIONS

Based on the findings of secondary data on several aspects of gems and jewellery sector in India, some strategic policy implications have been presented here. It will be instrumental in creating a favourable environment for the development of gems and jewellery industry and will also increase the share of gems and jewellery sector in the total exports of country. The following policy implications are offered to strengthen the position of gems and jewellery industry in the Indian economy:

1. The gems and jewellery sector has been growing at 16.59 per cent compound annual growth rate. The present study logically emphasises the need of providing additional stimulus for the exports of gems and jewellery products and to address some policy issues like policy of product diversification, reforming labour laws, high transaction costs and infrastructure impediments.

2. The importance of product planning and development is being accepted by the trade concerns without criticism so that, a fall in standard of their product, fall in sale and increasing cost may not occur. But, it seems in gems and jewellery industry the necessity of product planning and development has not yet been realized for not adopting product policy in a right way. It still adds to where the trade is more concerned with the foreign market as the taste and interest of the foreign buyers is entirely different because of their religious codes and
social values. So our exporters are required to bring about changes from time to time as per trends in the global market. Therefore, it is most needed for upgrading the skills, market oriented products and participation in exhibitions in India as well as abroad.

3. There was a time when Indian manufactured goods were known in the world market for its cutting and polishing. India was leading among gem manufacturing countries. History is witness that Kohinoor and great Mughal world fame gems are known for polishing and cutting. Our labour and artisans are not what their fore fathers were. The only way out is modernization of the sector. This will improve the deficiency and will bring back historical fame.

4. There should be a provision to organise trade fairs and exhibitions. As the markets has become international, natural exchange or near orientation of techniques and scientific methods can be made. With these the knowledge of new introduction becomes quite convenient and within easy reach. So far the development and progress of gems and jewellery industry, there is much for the manufacturers and exporters to resolve their multi-faceted problems. That is why from time to time the association should encourage such international trade fair and exhibition in the country. At times exporters and manufacturers jointly turn up and participate in such types of programmes. As a result, they will be able to exhibit more quantity of goods which earn name and fame for Indian gems and jewellery products. Apart from this, they can know more from foreign exporters and manufacturers about their methods and techniques. This will be quite helpful in the development of this Industry.

5. The functioning of the agencies like Indian Trade Promotion Organisation (ITPO), IIFT, GJEPC, etc. facilitating the exports promotion, must be improved to develop long term potential of gems and jewellery products. With the passage of time these agencies have become bureaucratic in their functioning. Keeping in view certain
malpractices prevailing underneath the Indian economy, these agencies are also not devoted honestly to the noble cause of their objectives.

6. After analysing the scope of global market for gems and jewellery products, it is found that traditional jewellery sector is demanding higher manual skills to meet up the market demand and to increase comparative advantage in the exports of these products in global market. Thus manufacturers should emphasise on their ‘comparative advantage’ that is created through market structure, technology, product diversification and others.

7. It has been observed that exports of gems and jewellery sector from India are mainly concentrated in few products like diamonds and gold jewellery. This has posed a serious handicap to Indian exporters because they could not encash the benefit from the increasing demand of other gems and jewellery products. Thus, the study stresses that it is necessary to diversify the export product portfolio, and concentrate more on other products of gems and jewellery like pearls, synthetic stones, costume/fashion jewellery, non-gold jewellery, and coloured gemstones.

8. Every civilization has its own taste and interest. For instance, Indian tradition jewellery is preferred in the whole country. But foreigners like only some selected patterns of Indian traditional jewellery. They have their own catalogues of modern jewellery, because they like it more in comparison to others. Manufacturers of India have to design jewellery according to foreigner catalogues. Thus, to maintain our superiority in this field, the central government should take some consequential steps. Aim should be to encourage new talent to develop designs in keeping with international concepts and of a high standard and to accelerate growth in the industry as well as create a perspective of positive thinking and broaden the horizons of young designers. This will help to create professionalism within the industry. Designs
competition could also help in creating fusion of traditional Indian design concepts with international standards.

9. Government should establish more designing institutes of jewellery patterns especially in major cities. Such institutes should have minimum fees and should also provide facilities of free charges for poor students, who have enough talent but can’t afford the fee of institute. Diploma as well as grades should also be provided by institution this would encourage the students for doing maximum efforts and become criteria of their excellency. Institution should publish catalogues of designs by brilliant students. So that foreigners could also select designs from the catalogues of modern jewellery. Hence, it will certainly promote sales of Indian gems and jewellery products.

10. Based on the findings, the study suggests that in order to increase gems and jewellery exports and market share, there is a need to support export growth in target markets through an integrated export marketing plan consisting of several short and long-term export marketing and promotion strategies. The specific strategies with respect to distribution channels and related strategies may include direct marketing initiatives like trade promotion and brand development.

11. It has been observed that most of the manufacturers of gems and jewellery products are not aware about the government export policies. They have been equipped with half-baked information about export-import policies. Even when they export, many of them are not aware of the various incentives announced by the government for facilitation of export like transport subsidy, market development assistance and various duty drawback schemes. Hence, there is a dire need to arrange the training sessions on these issues for the benefit of new entrepreneurs and small exporters.

12. Import of raw material is the basic necessity of gems and jewellery
trade, as almost 75 per cent of the export is from imported raw material only. Thus, in the best interest of exports it is necessary that the raw material is available in ample quantity, of good quality and at reasonable prices. But in reality, manufacturers have to obtain import licence from the government, which is not so easy to obtain, for lengthy legal formalities come in the way, apart from so many other complication which come in the way of new exports. Therefore, considerable simplification of import procedures is needed.

13. Furthermore, the study also subscribes to the view that to popularize the use of gems and jewellery products among the various sections of society at the national and international level, proper publicity measures should be initiated through media network.

In spite of the fact that the gems and jewellery sector has been growing in export market, the government does recognize its potential, a concrete and synergized initiative is essential to make its presence in the world market. The gems and jewellery sector is most important to the economy due its employment generation, estimated value of production, foreign exchange earnings and a vast export potential.

Today, gems and jewellery sector is facing various problems for its survival from machine-made goods and efforts must be made for revival and survival of traditional gems and jewellery goods. It can be logically concluded that emphasis must be given to modification and development to improve tools and equipments, which are suitable and comfortable to the artisans for manufacturing of high quality products which are economically viable as well. Then, these products will compete with the machine made items and attract the customers.

The quality of the products should be of international standard. The cost of the products should be economical and competitive. The design of the products should be according to the taste of the customers. However, market intelligence, trends and preference of the customers, design verification and
market value of these products are required to maintain a place in the world market.

Therefore, it can be concluded that the production and exports of the gems and jewellery products might be financially beneficial if the production and exports from this sector would be economical, competitive and according to the value of the gems and jewellery products. In other words, if the products satisfy the essential needs of the buyers, it would be economically beneficial in the world market.