

The Present Trends in the Gem Industry

by

Mr. L. HETTIARACHCHI,
General Manager, State Gem Corporation

Abstract: Gem Industry cannot be studied in isolation. It has to be studied along with the Diamond Industry in particular and Jewellery industry. With the Jewellery Industry coming into the scene, and with precious metals involved, it gets connected with the supply and demand of money. This is particularly so as diamonds, gems and gold have sometimes been considered as items comprising investment portfolios throughout the world. Supply and demand of diamonds, gems and gold therefore over the years reveal interesting areas of study. Technological development, scientific advancements and changes in consumer tastes have always played their part in the gem industry too. An attempt has been made, therefore, in this paper to show as far as possible the different interactions in these areas.

It is very appropriate to discuss at this stage, the present trends in the Gem Industry, particularly from the point of view of the trade, as the global recession is showing signs of receding and the economic outlook is somewhat bright in the future. The global recession affected the gem industry very badly and this could be gauged from the disaster that beset the diamond industry. Immediately before the recession, diamond market was so good that diamonds were even considered for investment portfolios in pension and Trust funds in the U. S. A. A D-Flawless Diamond fetched \$ 60,000 per carat before the recession but with the recession prices tumbled down drastically to \$ 15,000 per carat. The other coloured stones such as emeralds, rubies and sapphires followed the same fate though not to the extent suffered by diamonds. In this context, I do feel the time is appropriate to consider which way the wind would blow and what the future trends would be in the precious gem market.

Though my approach to the subject would be mainly from a trade point of view, trade cannot be isolated from production, nor could production be isolated from factors such as technological advances, new areas and new products and even the jewellery industry. With regard to the diamonds which covers the major part of the precious stones market, the market is almost entirely controlled by one company through a number of subsidiaries. De Beers holds the major share of the diamond market from production to marketing.

The very high prices of diamonds immediately prior to the recession drew away quite a number of consumers from the diamond market. There was an indication during this time of price increase in a variety of semi-precious coloured stones such as grossular garnet, pink tourmaline, red spinel, and even aquamarine and amethysts. With the recession, the market became very inactive particularly in the category of diamonds of higher caratage and high value though the melee was not so badly affected.

De Beers itself found its stocks rising to £ 1.25 billion in 1982. Their net profits were down almost to 1/3 by 46% in this year, sales were reduced by 42% and dividends were reduced from 50% to 25%. Now that the signs of recovery have begun to appear, the diamond market has shown a certain amount of resilience and in the first half of 1983 the demand was higher than in the latter half of 1982, and in fact, diamond prices were increased with effect from 05.04.83 by 3.5% by the De Beers Central Selling Organisation. Melee diamonds, however, did not suffer the same fate as the higher quality diamonds as evidenced by the sales in India, which has now reached a record export figure of Indian Rs. 9.13 billion in 1982/83, surpassing the export figures of Israel and Belgium. Their projected growth is 32% for the year 1983/84.

The diamond market, as it stands today is facing certain problems. Russians today produce 25% of the total world production of diamonds which is around 10½ million carats per annum. Zaire which had a marketing agreement with De Beers for about 14 years have abrogated this agreement. On the other hand, the recent discovery of diamonds at the Argyle Mines in Australia indicates high production. It is estimated that Argyle Mines will have a life span of about 50 years with 250 million carats per year. Though these mines are yet to be worked out fully due to the difficult terrain, production is expected to reach 17 million carats per year by '86 pushing up world production of diamonds by 36%.

It has been stated that diamonds have been discovered in Northern China but the extent of these deposits is not yet known.

The strength of the diamond trade lies in the monopoly De Beers has in this trade. The trade is well organised to such an extent that De Beers have been able to control both the prices and the quantity of diamonds made available to the market. This was the reason for them to enter into a marketing agreement with Russia when Russian diamonds came into production. Though this agreement has now been terminated, they took no chances when Australian mines were discovered and they entered into an agreement with them immediately. In spite of the attempts made by De Beers to maintain their hold on the diamond industry it is not certain whether they could do so in future.

It is, therefore, interesting to see what the trend would be with the recovery of the gem trade. Judging by the present economic situation the recovery would be very slow but steady. Due to the following reasons, diamonds may not regain the same glamour and importance with the recovery :

- (1) Diamond production has increased heavily and De Beers who had already been affected by the recession in having to carry large stocks may not be able to carry heavy stocks with increased production.
- (2) De Beers monopoly as indicated earlier could be badly dented with diamond sources outside their control such as production in Russia and some of the African countries which have abrogated their agreement with De Beers. No one knows the extent of diamond stocks held by Russia and if at any stage Russia releases heavy stocks to the market, the diamond trade could be badly affected, or even collapse.

- (3) On account of the very high diamond prices before the recession consumer trends underwent a change to the advantage of the coloured stones. Jewellers have contended with coloured stones, with a sprinkling of melee diamonds in their jewellery products. This trend still continues.

This augurs well for the coloured stone market and it can be observed in the increased sale of coloured stones in the recent past. In fact, the leading dealers all over the world have begun to show an interest in coloured stones. One of the deficiencies in the coloured stone market is the absence of an acceptable colour grading system. Several laboratories today are attempting to develop such systems or have developed systems of their own. It is a matter of time for a uniform colour growing system to evolve in the same manner as in diamonds where stones could be bought or sold merely by the description.

Apart from the variety of colours that could be provided by the coloured stones, there is also the scarcity value. Though emerald production has now shown depletion, most of the other well-known coloured stones such as the ruby and the sapphire have become scarce in the recent past. Moghok in Burma from where some of the best rubies came have become a dangerous area on account of Karen rebels fighting with the Government, and whatever that is found in these areas are smuggled into Thailand. Pailin in Cambodia where good rubies were found do not produce any rubies now as this country is now faced with political problems. The quantity of rubies that are found in Afghanistan, Pakistan and Tanzania is inadequate to make any important impact on the market. Sri Lanka rubies though more lustrous than the Burma ruby, is pink in colour and do not match up to rubies. As regards the blue sapphire these stones come from a number of sources, Montana in North America, Umba Valley in Africa, Thailand and Sri Lanka. Though the Neelam Valley in Kashmir used to produce best sapphires at one stage these deposits have become inaccessible due to difficult terrain. Australia which produces sapphires of a dark hue of smaller sizes cannot fetch high prices in the market. Here, again, new discoveries have not been made and sapphires have become scarce.

One other problem in the precious stone market is the production of synthetics. Kashan Rubies are extremely difficult to be detected. The latest synthetic ruby from Japan has presented problems to many of the reputed laboratories. It has been proved in the past that whenever synthetics have been developed technological advances too take place enabling such synthetics to be detected. It is also true that the consumer preference will always be for genuine stones though synthetics can be made with the same chemical components.

I would predict that there is a clear trend for more coloured stones being preferred by the customers and this will in turn encourage new discoveries of deposits. A country that has to be watched is Pakistan which has already substantial emerald deposits and also could claim deposits of rubies and a variety of semi-precious stones. Australia too could become a rich source for coloured gem deposits. Africa is a vast continent that has still to be explored for its mineral wealth. Brazilian deposits of coloured stones have not shown substantive depletion.

Though we speak of the scarcity value which pushes up prices, it is also necessary to have sufficient stocks for a market to be developed. When prices go up, there will be attempts for the discovery of new deposits and judging from the unexplored areas in the world which are being gradually opened up, more deposits would be forthcoming to meet the growing demand of the market.

Having dealt with the global trend, I would now turn to the present trends in the gem industry in our own country. As you are aware, there is historical evidence in abundance to prove the vast gem deposits Sri Lanka had and the lucrative trade that was carried on. Geologically 9/10 of our country is covered with Pre-Cambrian rocks which indicate the vast potential for gems. Extensive mining had been done on the alluvial plains showing very little signs of depletion. Newer areas have been discovered which were hitherto unknown for gems. Yet the mining techniques and the organisational structure have remained mostly primitive following the same old traditional techniques and methods.

In the field of mining I do feel that there will be a tendency for people to shift on to better and improved techniques in mining. More scientific gemmological surveys would be conducted to find newer deposits. Though evidence of primary deposits have been found, as reported by eminent Geologists and Mineralogists, such as Wadia, Coomaraswamy, Parsons and Coates, little has been done to pursue extensive exploration of these deposits. There is no doubt that with the depletion of alluvial deposits, there will be a shift to explorations of primary deposits. Sri Lanka had a taste of modern equipment used for mining when some companies came to Sri Lanka to do large scale mining in areas that were to be covered by large irrigation schemes. Some miners had been using improved equipment for processing of gem gravel. Today, even the governmental authorities are interested in employing more scientific and improved methods of mining and conducting gemmological surveys. Already, under World Bank assistance, terms of reference are being prepared to obtain foreign assistance for a gemmological survey. The Director/External Resources has been requested to sound the various agencies to obtain assistance for such a survey.

A comprehensive Gemmological Survey, discoveries of primary deposits improved techniques and equipment will blaze an entirely new trend in mining. Even as it is, the smaller miners find it difficult to carry on mining under the existing cooperative system due to the escalation in mining costs. Mining for primary deposits require different techniques and equipment which would be more expensive than the implements or equipment required for alluvial mining. The trend that could emerge would be the emergence of a class of miners who will commence mining on a fairly large scale, dumping substantial capital into such mining.

New methods of mining and discovery of new areas for mining can increase the production. With the increased production, the processing of gem stones could become a widely spread industry in Sri Lanka. This brings us to another aspect of the gem industry, viz. gem cutting and polishing. This industry, 10 years ago was carried on by a small band of cutters mostly Muslims with

primitive equipment. The cutting was far from what the sophisticated market requires and invariably the stones processed in Sri Lanka had to be re-cut abroad. The improvement in gem cutting during the last few years has been remarkable. Modern machines have taken the place of old primitive equipment. Cutting has become more scientific and large numbers are being trained in modern gem cutting. This is a new trend which augurs well for the future. Though there has been satisfactory improvement in this field of activity there is still much to be done. Every country which has developed cutting and polishing of stones as a large industry, has allowed free import of rough stones into the country. Thailand, India and Israel are the best examples where cutting industry has developed, and where restrictions have not been placed on the import of rough stones. It is likely that Sri Lanka is presently undergoing a transitional period and would soon blossom out as a cutting centre. We have already got used to modern methods of cutting. Production of calibrated stones have commenced. There are also plans to set up further training centres with foreign assistance and also to develop this industry as a cottage industry. Proposals have been made to the Government to permit free import of rough stones into this country. With all these measures, I see a trend towards our development as one of the best cutting centres in the East. This I say with confidence because our labour is exceptionally brilliant, literacy rate is high, there is a heavy concentration of youth in our population and the labour costs are comparatively low. All these are advantages in our favour.

We also may discover new types of stones, rarer varieties which might later become marketable stones in demand. Recently we discovered Taffite and at the time we discovered it there were only few pieces in the whole world but now the number has increased. I may also mention a small factor on which I cannot make any definite prediction. In historical records, it has been revealed that a dealer by the name of Kazwini in the 13th century have stated that diamonds were found on the foothills of Adam's Peak. There was a discovery sometime back of a diamond among ferruginous pebbles at a place called Bambarabotuwa, off Ratnapura, and this place is at the foothills of Adam's Peak. The historical evidence plus the discovery made cannot only be a coincidence. There is a possibility that we may discover diamond deposits in Sri Lanka in the near future. Let us leave the task to our geologists.

I now come to the trends in our trade. At present, one of the problems that we have been facing during the last few years is the large scale smuggling of geuda stones. This has affected our sapphire trade. In fact, the sapphire trade has shifted from Colombo to Bangkok and many buyers now directly go to Bangkok. Japan which is one of the biggest buyers, now buys more from Thailand than from Sri Lanka. There was an increase in imports from Thailand by Japan by 89% in '80 when compared with '79. Thailand's share of the Japanese market has increased from 13% in '76 to 28% in '80, while Sri Lanka's share has fallen from 13% to 12%. This trend has continued in 1981, 1982 and 1983. The main reasons for the smuggling out of geuda stones is the lack of technical expertise in Sri Lanka to heat treat these

stones. Thais have over the years mastered these techniques and keep them as a well guarded secret. A valueless stone on heat treatment becomes a very valuable stone enhancing the value sometimes even 1000 fold. Sri Lankans have not attempted to do heat treatment on a large scale due to the risks involved. However, after the recent raids conducted by the State Gem Corporation, to flush out Thais who resort to illegal trade in smuggling out geuda stones, there appears to be an interest created among the Sri Lankan dealers to conduct experiments in heat treatment. In fact, recently, the State Gem Corporation conducted heat treatment process with some stocks of geuda stones confiscated by the Customs, with the assistance of a Sri Lankan who had mastered the techniques of heat treatment. The results have been not only encouraging but has conclusively proved that this technique is no more a secret. Accordingly, it is my view, that there will be a trend for Sri Lankans themselves to heat treat geuda stones in Sri Lanka, thus, preventing large scale smuggling of these stones. Sri Lanka is the only country which has geuda stones in large quantities and if these stones could be heat treated in Sri Lanka, and processed, it will also be helpful in developing the lapidary industry. The authorities have also realised the danger of large scale smuggling and have in the recent past taken stringent measures to bring to book the offenders. The Government also has recently set up a public limited liability company with Govt. participating in equity capital mainly for the purchase of geuda stones to substitute Thai buyers. While using the whip on the one hand and providing alternative sources for the sale of geuda stones to the miners, it is expected that only a very little percentage of geuda stones will escape out with the smugglers.

The next trend that could be observed is the increase in the production of calibrated semi-precious stones. Though there is a vast market for calibrated stones, particularly in semi-precious varieties, this market has not been fully explored. With the development of the jewellery industry, there will be an increased local demand for calibrated stones. The global trend in the increased use of coloured stones also will push up the international demand for such stones. Another consequent development would be the development of sorting & grading of stones and profitable use of smaller sizes of stones which are discarded today. It can, therefore, be safely predicted that smaller stones of calibrated sizes would create a good market in future. The Government itself has realised the importance of the gem and jewellery trade. A number of projects has been undertaken with World Bank assistance through the EDB to develop this trade. It has been proposed to establish a Gem Certifying Centre with a well-equipped library. The Gem Certifying Centre is to be of international standard, equipped with upto date instruments, so that both foreign buyers and Sri Lankans could get their gems tested and obtain certificates acceptable all over the world. An officer has been sent to meet leading gemmologists and visit reputed laboratories and obtain their advice and guidance in setting up this centre.

It has been proposed to set up a Lapidary Training Centre, which will run a comprehensive course in gem cutting and polishing leading to the award of a National Diploma recognised by the Ministry of Higher Education. It will also conduct weekend classes for the benefit of those who cannot spend the time for the compre-

hensive course of longer durations. The course contents will include a theoretical knowledge in gems, testing methods, techniques of gem cutting and polishing, heat treatment, and sorting and grading of stones. It is expected that this centre will come into operation in the course of the year.

Plans are also afoot to expand the Assay Office to enable hallmarking of jewellery. If our jewellery is to be made acceptable in the world market, it should have the sanctity of an acceptable hallmark. Our dealers will have to be made known the necessity of hallmarking their jewellery and even legislation introduced to make hallmarking compulsory. Measures are now being taken towards this end and very soon jewellers and even the public will have the facility of getting their gold tested at the Gem Corporation Assay Office. Hallmarking facilities are available at this office even at present. Once legislation is introduced there will be more discipline in the jewellery trade which would bring about the confidence of foreign buyers.

One of the most ambitious projects that has been thought of is the establishment of an International Gem Exchange. Already much spade work has been done in planning this exchange. This Exchange when it is established will have under its roof all the facilities that a foreign gem/jewellery importer will require. A foreign buyer could walk into this centre, obtain necessary information, make contacts, go through his transactions and despatch the goods to his country within a matter of hours.

In summing up, the trends as I see are :—

- (1) More scientific gemmological surveys leading to the discovery of newer and bigger deposits.
- (2) Development of a healthy gem cutting and polishing industry and the shifting of the sapphire trade back to this country.
- (3) More employment opportunities and a growth in the trade.

I hope I have not given a rosy picture but I am judging the future from the plans that have been drawn up at present and the work already done. To my mind, there will be a very bright future for the gem industry.