



Diamond Production and Processing: What Armenia can Learn from an Intra-Regional Exchange on the Diamond Trade

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Key Messages¹

- There is a growing gap worldwide between the rising demand and stagnating supply of diamonds, producing new opportunities for diamond processing countries such as Armenia.
- Building productive capacity through skills development and technological progress is of central importance to achieving sustainable growth in diamond manufacturing countries.
- Secondary diamond industries are successful where economic and social conditions are optimal and supportive.
- To develop or maintain a competitive edge in diamond cutting and jewelry manufacture, all countries in the diamond trade need to constantly develop their human resources.
- For diamond producers as well as processors like Armenia, investment in product branding is worthwhile, and the promotion of a diamond-based tourism may also be viable.

Armenia's Potential as a Diamond Processing Country

The effects of the diamond industry on several developing economies in Europe and Central Asia (ECA) and parts of Africa cannot be underestimated. In those countries, efforts to boost entrepreneurship, skills, and foreign direct investment (FDI) could benefit from a proactive and

focused policy approach toward diamond manufacturing and jewelry production.

This is certainly the case with Armenia. Although the country does not mine diamonds, it has a long-established tradition in diamond manufacturing and was a key diamond processor in the Soviet era. The industry initially experienced a steep decline following the 1991 breakup of the Soviet Union, but soon recovered, owing partly to networks among the Armenian diaspora. However, despite the sector's nearly 30-percent share of exports reached by the early 2000s, the industry lost its strong competitive edge after 2004, due to increases in the costs of the factors of production and the emergence of more competitive centers such as India and China.

Today, with an estimated workforce of 3000–4000 experts, Armenia is still a competitive center for cut diamonds, which, along with the traditionally strong jewelry-making sector, contributes to job creation. Expatriate Armenians, who have established successful operations abroad and especially within the Commonwealth of Independent States (CIS), are also increasingly looking at Armenia as a hub for sharing knowledge and showcasing diamond products.

Considering its obvious competitive advantages, including access to global networks and to Russian rough and internationally-mined diamonds imported for processing through established FDI, Armenia seems ready to rebuild a sustainable diamond cutting industry with new policy options and targeted regulatory interventions. In particular, it is interested in gaining knowledge about global developments and the regulatory and tax incentives needed to boost and attract new investments. The export processing zone (EPZ) experience is of particular interest to Armenia as an instrument for creating new downstream (or processing) opportunities—that is, processing diamonds and selling the resultant jewelry products—and helping it become a Eurasian hub of the diamond trade.

¹ This brief was prepared with the benefit of papers and presentations from the Intra-Regional South-South Knowledge Exchange Forum in Gaborone, Botswana, November 21–23, 2011

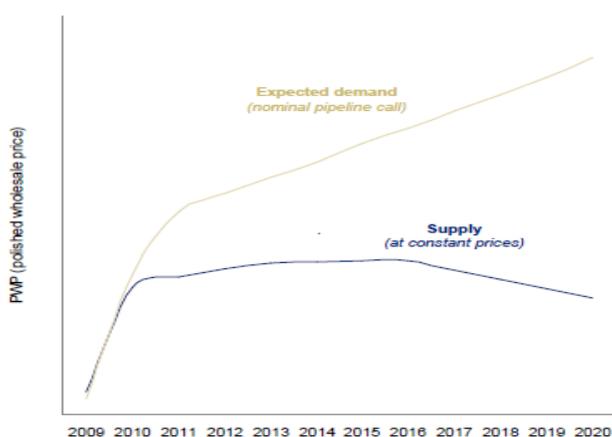
An Intra-Regional Conference on Diamond Processing

In light of its interest in refurbishing and improving its diamond processing industry, Armenia was among those countries that requested the South-South Diamond Processing Exchange that took place in Gaborone, Botswana, on November 21–23, 2011. This South-South initiative for developing countries emphasized the World Bank’s role as a “knowledge broker,” facilitating these kinds of platforms for policy makers and private sector players to learn from international best practices and the successful experiences of other countries. Over 75 global experts and participants from Armenia, Botswana, Lesotho, Liberia, Mauritius, and Namibia, representing diamond producers and processors, took part in the three-day conference, which included site visits, peer to peer meetings, and other networking opportunities. Conference activities were designed to strengthen knowledge about five crucial areas of the diamond trade: policy and legislation, fiscal regime and fees, human resource development, the role of government and communities, and the marketing of the final products.

Key Conference Outcomes

The first outcome from the exchange was that important industry players remain optimistic. This is reflected in the projection for demand, which predicts a growing gap between rising demand and a stagnant supply (figure 1). This is good news for producing countries—though it also indicates their vulnerability to external shocks should this projection be wrong.

Figure 1. The Emerging Supply-Demand Gap



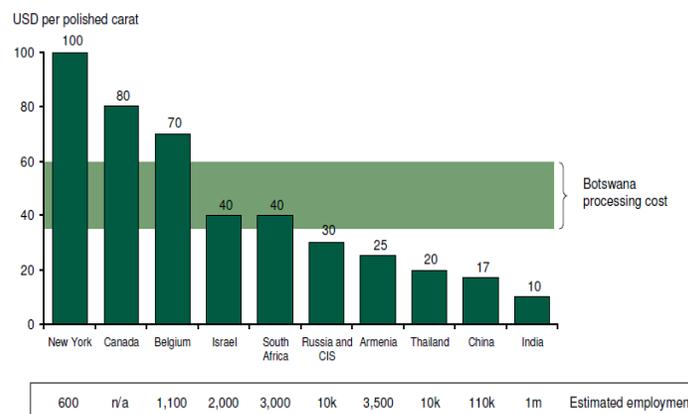
Source: Anglo American; De Beers exploration data; as estimated from company reports.

Note: Indicative supply demand view is based on current assumptions

The second outcome was that producing countries that are trying to develop downstream activities should move from leverage to competitiveness if their beneficiation (raw material treatment) strategy is to bear any productive fruit. Without the right mix of factors, little economic rationale was seen for diamonds to be cut and polished where they

are mined. For instance, data from Botswana, a diamond producer, indicated little cost advantage for its diamond cutting and polishing activities (see figure 2).

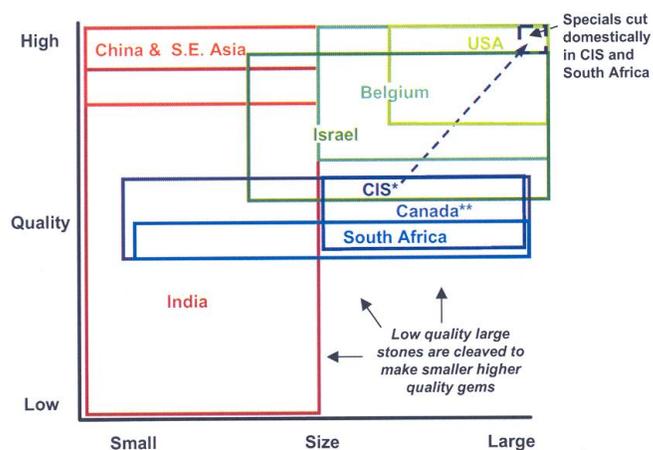
Figure 2. Revenue and Collections



Source: Diamond Processing Exchange, November 21–23, 2011, Gaborone, Botswana

Producing countries must therefore establish a competitive edge in the global diamond processing market if they are to achieve long-term success, a concern illustrated in figure 3. Those countries hoping to create a viable diamond manufacturing industry are squeezed by competition pressure from two directions: one from low-cost economies such as India and China, another from high-skills economies such as the United States, Belgium, Israel, and Canada. For any latecomer, the challenge is plain: either be cheaper (and work harder) than the former, or be more knowledge and skill intensive (and work “smarter”) than the latter.

Figure 3. Diamond Cutting Segmentation by Cutting Center



Source: Diamond Processing Exchange, November 21–23, 2011, Gaborone, Botswana

This led to the third conclusion of the conference. Countries, producers or manufacturers, that intend to promote their diamond processing industry must achieve major progress on two fronts: reducing costs and building capacity, and they should use their “leverages” to promote capacity building.

Lessons from Armenia (a processor) and Mauritius (a producer) suggest that costs can be reduced in at least three areas: business environment, infrastructure, and labor cost. For the first two, the bottlenecks are mostly known, as are the general solutions; the challenge lies in their implementation. The key difficulty, however, is how to turn a low living standard for workers into low labor costs, and further investigation should be done on why this continues to be so difficult for certain countries, Armenia among them. Clearly, the mix of low skills and labor productivity with high wage rates will not help a developing country remain competitive in the diamond processing industry.

Training a new workforce by encouraging skills transfers was also recommended. This usually involves a closer collaboration between policy regulators and private sector stakeholders. Though skills transfer in diamond cutting is typically assumed by companies, governments also need to have a dedicated approach to capacity building. Botswana is an example of a country that has managed its natural resource endowment well and harnessed the private sector in a creative way to derive a wide range of benefits, including new skills, thus providing a strong foundation for future development. In fact, to maintain their competitive edge in jewelry and diamond cutting, countries need to constantly develop their human resources.

Armenia represents a powerful lesson regarding skills. The country became a key player in the global diamond industry not because it produces any rough diamond or because it has a big market for diamonds, but because of its capacity to *process* diamonds. As was noted at the conference, Armenia is indeed exporting skills, but it still must import diamonds in order to do so.

The fourth conclusion is that diamond producing—and even diamond manufacturing—countries should invest more in branding, and explore the potential of combining diamonds with tourism. As was emphasized, the power of a brand should not be underestimated, something that is particularly challenging for latecomers, although in a growing market and time of technological progress, they do have opportunities to establish their own brands (or partner with existing ones) and catch up and even overtake the current market leaders. There also may be significant advantages to combining diamonds with tourism, for instance, promoting travel to certain countries as centers of diamond mining or diamond cutting.

Beneficiating Diamonds

Armenia, like some other countries, has effectively used its revenues from diamond production to improve the social and economic conditions of its people. Armenia has been successful in capitalizing on the secondary diamond industry (cutting and polishing), primarily through access to skilled labor and the successful procurement of rough

product. Producing countries typically want to capitalize on cutting and polishing opportunities to expand employment, take advantage of any “value-added” activities, and become more competitive. Among these diamond producers, the supply of rough diamonds is obviously not an issue, and governments are able to negotiate with producers to ensure adequate supply for local cutting and polishing. For nonproducing countries like Armenia, however, rough supply is clearly more of an issue.

Developing a Secondary Diamond Industry

Secondary diamond industries—in producers or processors—tend to be successful where economic and social conditions are optimal and supportive, rather than simply because the government wills it. Each country involved in the diamond trade has its own strengths and weaknesses, in most cases reflected in:

- Mineral endowment (i.e., diamond producers)
- Workforce productivity (the degree of skills development, knowledge transfer to local workers, commitment to the trade)
- Regulatory and fiscal policies (enabling legislation, fair taxation)

Attempts to develop a cutting and polishing industry in countries where skilled labor is not available or business costs are high have either failed or required significant subsidies. Even in a diamond producing country, imposing a cutting and polishing industry where economic conditions are not supportive will ultimately reduce the long-term benefit of the resource to that jurisdiction by

- Distorting the free market forces
- Reducing the revenue to producers, leading to a reduction in the market value of the goods, which in turn will reduce the production royalty return to the government

For any country, Armenia included, to be competitive in the cutting and polishing industry, it needs adequate access to rough diamonds and affordable labor and operating costs, including capable, skilled, and experienced workers. Also needed are responsible laws that promote policies and regulations reflecting the will of the country’s citizens and supporting its economic development, leading to positive social and economic benefits.

Lessons Learned

This South-South initiative provided a useful exchange for conceptualizing reforms or new policy frameworks aimed at maximizing the economic benefits of the diamond industry.

Armenia and the Value of EPZs

Whether Armenia should establish an EPZ for its diamond industry remains open to question. The experiences of Mauritius and Namibia in creating EPZs in the diamond and jewelry sectors illustrate the limitations. Both countries were successful in jump-starting downstream diamond-related activities, yet both experienced serious constraints caused by the high cost of production and the insecure supply chain (in Mauritius) and poor investment climate (in Namibia).

In the case of Armenia, which faces similar weaknesses, diamond EPZs may offset deficiencies in the business climate and compensate for the high cost of production. The Armenian government has recently begun experimenting with such EPZs, and although it has received a request from the international Armenian Jewelers Association to establish an EPZ for the jewelry and diamond sectors, a number of issues need to be considered. These include: type of EPZ, impact on overall industry, policy reform needs, harmonization with other EPZs, and assessment of target countries and companies.

Supply, Brand Loyalty, and Diamond Tourism

At the conference, industry representatives stressed the importance of the security of supply and the difficulty involved in retooling and retraining when suddenly dealing with different quantities and qualities of diamonds. In order to avoid these snags, Armenia, which is still competitive in specific market niches, could benefit from strengthening its existing arrangements (mainly involving importing rough from Russia) and developing stronger links with key production centers through their networks of Armenians living abroad. This is what has accounted for the success of the De Beers' Diamond Trading Company model over the years—the secure supply ensured that customers returned. The case of the Rosy Blue company in South Africa illustrates the other side of the problem. Rosy Blue closed its operations in South Africa after training 240 people and then failing to secure a steady supply of rough diamonds. The issue of the retail price of diamonds is also relevant, since cutters and polishers have to hold on to stock for some months, leaving them vulnerable to price changes. Although the long-term outlook of the diamond jewelry business currently looks very positive, with rising demand and limited supply, fluctuations in both demand and supply always threaten to undermine stability.

Moreover, the very nature of the diamond jewelry industry means that it very much depends on such less tangible factors as emotions and loyalties, which have to be

cultivated and nurtured. Companies such as Harry Winston invest a significant amount of money each year on branding and advertising (about 10 percent of turnover). Still, as the case of Mauritius demonstrates, branded diamonds may hold more potential for local tourist markets rather than for outside the country. Diamond tourists in that country are reportedly not so interested in the origin of the diamonds as the reputation of the Mauritian Cut as a top brand. Tourists should also come to a country with the knowledge that diamonds are available and, in the case of Mauritius, duty free, so that they are cheaper than they would be in the buyer's home country. In Armenia, where diamond cutting could be branded with a nod to its 70-year history, there is room for exploring this potential and emulating the Mauritian model by promoting the "Armenian Cut" and the country's jewelry tradition in the fast developing tourism market.

Synthetics: Competitor or Partner?

One topic that loomed over the conference was the issue of synthetic diamonds, i.e., those produced in a laboratory. Some participants called synthetics "the elephant in the room," while others thought they would never carry the aura of natural diamonds. Another view was that there was room for synthetics in the market for lower-priced "bling," but that this would depend upon the cost of production. In fact, synthetics have to be cut and polished in the same way as natural diamonds and already have a strong market niche. Armenia, like Mauritius and other countries with an existing trained workforce, could likely benefit from cutting synthetics, in much the same way as cutting natural diamonds.

This issue, like EPZs and other proposals, should be considered within the overall strategy of improving Armenia's diamond industry. Clearly, there is considerable potential in bolstering the traditional diamond manufacturing sector in Armenia as a means of promoting its economic development.

About the Author

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