ISLAND OF JEWELS

Abundant gems grace the island of Madagascar, but it faces the same challenges as other mineral-rich African nations.

By Diana Jarrett

o the southeast of Africa, surrounded by the Indian Ocean, lies the world's fourth-largest island, Madagascar. Sixty million years ago, Madagascar separated from the main land mass, forming distinct species of flora and fauna. The country's wildly exotic biodiversity flourishing in this unique oasis is enough to make a paleontologist swoon.

At the moment, however, another abundant resource native to Madagascar is the focus of global interest. Gem-rich Madagascar is loaded with deposits of most colors of sapphire, aquamarine and emerald (beryl), garnet, tourmaline



and many other gem species. The frenzied gem rush may be new to this impoverished nation, but Madagascar has long been known to be mineral laden. Early French explorers called Madagascar Île de Béryls, translated as Island of Beryls, after spying massive quantities of colored gemstones throughout the island. But not until the 1990s did this productive locale become the subject of global scrutiny.

Although a newcomer to the gem trade, Madagascar is now among the industry's leading suppliers. While production from Asian sources for rubies and sapphires dwindles, the international gem market has become increasingly reliant on Madagascar to fill the void. Madagascar's mining potential is becoming more apparent, giving rise to large-scale investment opportunities conducted by groups like Rio Tinto, and SIAM (Societe d'Investissement Australien a Madagascar).

THE GEM RUSH IS ON

Millions of dollars worth of gemstones traded locally leave the country each year. At their final destination in Europe or North America, the values will have increased immensely. Historically, Madagascar has not gained from that latter profit in any way. This problem has plagued other African nations as well; although rich with resources, they lack the ability to convert those resources into finished goods.

Mining families living near the village of Nandihizina in Madagascar. All photos courtesy Charles Carmona.



Pegmatite deposits near the village of Ibity in Mozambique are relatively new workings, producing mostly particolored tourmalines.

The World Bank has stepped in with funding projects such as the Project de Gouverance sur les Resources Minerales (PGRM) to increase Madagascar's gem production. The goal of self-sustainability is of paramount importance to their plan. Part of the World Bank-sponsored \$32-million project is the newly created Institute of Gemology of Madagascar (IGM). It's designed to stimulate research, technological development, and training through gemology and lapidary schools. Because there are no other means of preparing Madagascar's citizens for economic development, the program strives to implement a sustainable solution for the deprived Malagasy. The goal is to enable the people of Madagascar to benefit from marketing their own resources more equitably than in the past.

Former gem dealer Tom Cushman traded gems in Madagascar before becoming head of IGM, which is located in the capital city of Antananarivo. Cushman watched close up the transmutation of Ilakaka as the epicenter for sapphire mining went from a meagerly populated crossroads to a gun-toting, Wild West-like settlement. Today, Ilakaka is a burgeoning township with thousands of houses and the basic infrastructure to sustain its inhabitants — schools, churches, radio stations, clinics and utilities — all built by the profits from gems.

Cushman likens Ilakaka to a mini-Manhattan — a commerce hub where the private sector supplies much of the necessities. In Ilakaka's case, the private sector supplies all of it. "Ilakaka is now the market center for a 10,000-square-kilometer region. This is real, sustainable, long-term development and it started with a gem rush," he says. According to Cushman, new towns and rushes spring up regularly.

MAKING PROGRESS

Cushman's 15-year history with Madagascar provides him with an insider's take on just how much of the gem booty was accruing outside the island nation. He and his colleagues at the Institute of Gemology are on task to turn that around.

Gemologist Charles Carmona, president of Guild Laboratories in Los Angeles, serves as World Bank consultant for the institute, which has taken him to Madagascar three times in the past year. Carmona's primary focus has been to set up the gem-testing laboratory within the Ministry of Mines as an ongoing operation to provide gem identification services. Since beginning this ambitious effort, he has witnessed the excitement generated by the knowledge and professionalism



Charles Carmona, World Bank gemology consultant, at left, working with female miners at the Ibity site.

that the lab services are providing to the country. On his most recent trip to the institute in March 2007, Carmona observed, "The seeds planted by the IGM will bear fruit for decades to come, as Madagascar develops its vast natural resources and benefits from their optimal values in the gem markets."

Carmona sees Madagascar following the same path as similar emerging markets. With no infrastructure to process this newfound wealth of gemstones, they are exported at their lowest value. "In the mineral business, there is only one harvest and they need to maximize their benefits," he points out. At IGM, "We are providing the tools to compete in a global marketplace, and we are doing it in a way that doesn't negatively impact Madagascar's spectacular resources. The benefits trickle down to the lowest rungs of the economic ladder."

To date, the institute has trained more than 350 people as lapidaries and assisted in opening three regional cutting schools. IGM has partnered with Gemological Institute of America (GIA), Belgium's Diamond High Council (HRD) and the Gemmological Association of Great Britain

(Gem-A), in offering gemological instruction to more than 250 students at their Antananarivo campus. In addition, 1,500 rural miners have attended the one-day Gemmologie Pour Tous (Gemology for Everyone) classes offered in rural villages throughout the country. Since the institute's outset, investors from Thailand and Europe have opened cutting factories in Madagascar, Cushman notes.

Reports of last year's gem exports from Madagascar are promising. Their dramatic spike up against previous years' accounts may signal a trend toward greater transparency in reporting Madagascar's gem output. Cushman maintains that they are not seeking to disenfranchise the foreign traders and cutters from their role."But we want to get our guys to compete with them and to keep more of the profits home," he says. Considering the future of this ancient terrain, which may yield another century's worth of gem production, Cushman says,"We should expect another Ilakaka every decade." With so much unprospected territory in Madagascar, together with the long-term supply and hardworking, abundant, low-cost labor, Cushman anticipates that "local and international cutting and jewelry-making companies will one day establish Madagascar as a leading trading and manufacturing center." +