

Sri Lanka's Gem Resources



Based on Research done by

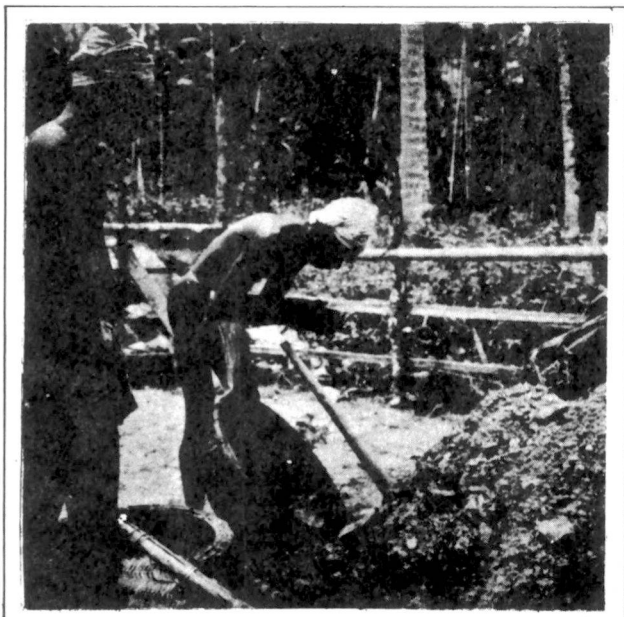
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Sri Lanka is known the world over for its wide variety of beautiful gemstones. No country in the world has such large gem-bearing terrains restricted to a narrow geological terrain. The unique feature of Sri Lanka's gem deposits is that they are located within the Highland series, a geologically narrow zone (150 x 40 sq. miles) and this makes Sri Lanka the country with the highest density of gem deposits. In a recent compilation of the map showing the distribution of gem deposits by Prof. Dissanayake was revealed that about 20% the entire landmass of Sri Lanka is gem-bearing. Based on the heavy mineral analyses carried out, the Island was classified into five major divisions depending on the abundance of gem minerals or indication minerals. The areas were grouped as: I — highly probable, II — probable, III — moderate, IV — poor V — no deposits. It was observed that relative to the total land area of Sri Lanka 5.5% is highly probable, 4.7% probable and 11.9% moderately gem-bearing, accounting to a total of 22% of the land area of Sri Lanka.

This is the highest percentage for any country in the world and the potential for gem stones is thus much higher when compared to the present areas being mined.

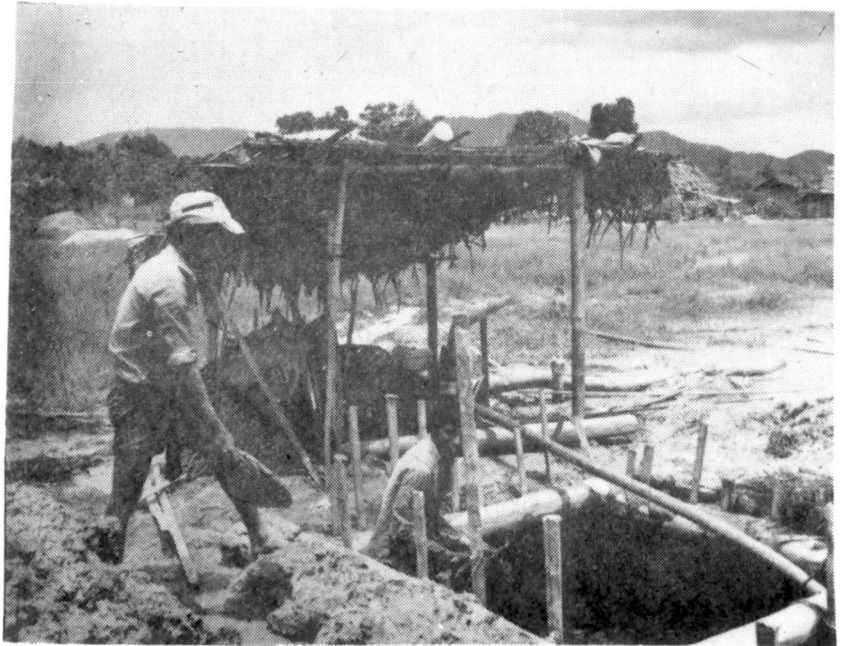
The highly probable areas include the present gem mining regions and a few newly discovered regions. However, some of these "newly" found gem fields have in fact been worked many decades ago as recorded in historical chronicals. These highly probable areas consist of the known gem deposits as exemplified by Ratnapura, Elahera, Balangoda, Rakwana, Morawaka, Hasalaka, etc. The gemological survey has shown that the actual gem potential of these regions is even higher than that presently known. The areas classified as probable generally surround the known gem deposits and the other highly probable areas. The southeasterly trending Kuda Oya — Kirindi Oya contain gem-bearing sediments stretching from Wellawaya across Tanamalwila to Tissamaharama. Other target areas are as are the hills and valleys around Maskelya, Hatton, Welimada, Boralanda and Bandarawela.

The areas classified as 'moderate' in the map are those that may yield gem deposits that could be usefully exploited in the future. Even though these areas are less than 'probable' as at present, better exploration



techniques may help in detecting further gem deposits in the areas.

Among the future gem projects in Sri Lanka are diamonds. Recent reports on the discovery of alluvial diamonds have created a great interest in the exploration for diamonds. Even though Sri Lanka is,

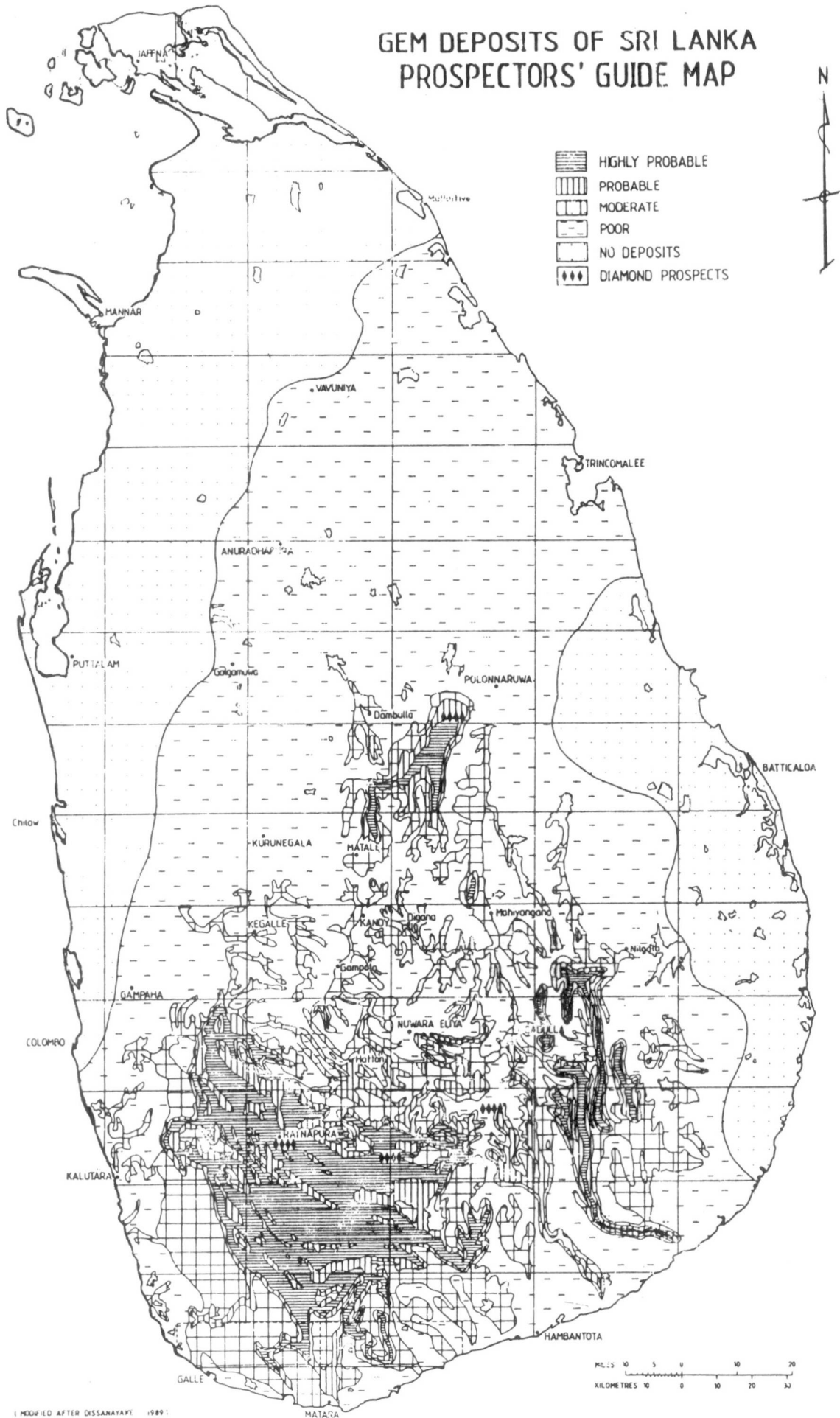


geologically, not ideally suited for the occurrence of diamonds, the recent discoveries show the potential for their occurrence.

The large number of rivers, particularly in the Southwestern parts of Sri Lanka that drain the gem fields, would have undoubtedly transported large quantities of gemstones into the sea along with the sediments. Such river mouths and the near shore region areas are excellent targets for gem exploration.

Even though gems provide a very good source of income to the country, gem mining often causes serious environmental damage. Pollution of the environment and depletion of natural resources result from different stages of mining activity and mineral processing. It is of paramount importance therefore that serious thought be given to environmental considerations before the commencement of gem mining activity.

GEM DEPOSITS OF SRI LANKA PROSPECTORS' GUIDE MAP



MODIFIED AFTER DISSANAYAKE, 1989