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Gold in West Africa – what does the future hold?

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The West African region has long been known for its gold endowment and gold production. Apart from the last 20 to 30 years, this production was largely derived from informal artisanal workings covering large areas of West Africa. For a period of almost a thousand years until 1500 AD, West Africa was the world's most important supplier of gold, much of which formed part of the trans-Sahara trade with the Arab world, whose monetary system was based on gold. Artisanal gold mining is still widespread across West Africa and a significant number of modern gold mines in the region were founded on artisanal mining sites.

The West African Craton is composed of Archaean and Palaeoproterozoic rocks which are generally poorly exposed due to deep weathering. While gold mineralisation is known in the Archaean, most gold deposits and occurrences in the region are hosted in a wide range of rock types from volcanic to turbiditic metasedimentary sequences which form part of the Palaeoproterozoic Birimian Supergroup. The majority of the gold deposits are of orogenic-type, however gold also occurs in intrusion-related deposits, skarn deposits and as palaeoplacer deposits.

As a region, West Africa is arguably the best address for the gold mining and exploration industry in Africa with a number of new mines developed over the last ten years and numerous advanced projects in several countries throughout the region. Many of these projects are either under construction or close to implementation and are poised to deliver well over a million ounces of new gold production within the next three to five years. The region's current gold endowment in stated Mineral Resources by companies operating in the region is 125 million ounces.

At the same time, large parts of the region remain under-explored relative to similar gold provinces elsewhere. Apart from the Kibali deposit in the northeastern Democratic Republic of Congo (DRC), the West African region leads the continent in terms of recent gold exploration focus and discovery, and the region is still considered largely prospective and relatively immature from an exploration perspective.

Thick laterite cover and poor exposure across much of the region has hindered exploration in the past; however tools such as high resolution airborne geophysical datasets and RAB drilling have opened up new areas to exploration. The exploration potential of the West African Craton has also been significantly enhanced through the results of the WAXI programme. New data and improved understanding relating to gold mineralisation in the region will assist exploration companies in focussing their activities in areas of maximum prospectivity.