Resource identification and commercial evaluation of Dimension stone Granite deposits of Pudukottai district, Tamil Nadu, India

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The Precambrian terrain of Pudukottai district is a repository of dimension stone granite deposits (DSGD). The granite gneiss of PGC and younger intrusive granites are the predominant rock types that have given rise to innumerable commercial granite varieties finding its extensive use in building and monument industry (Ragavan et al). As a valuable foreign exchange earner to the country, the resource survey for DSGD becomes essential. Trends and patterns of construction industry have changed more towards value added end products. Based on the domestic economic factors each country looks forward to best utilization of granite deposits. Other countries have taken up economic evolution of granite deposits, bringing out the end products at cheaper rates for mass consumption. In pursuance to this objective, resource identification and commercial evaluation of DSGD has taken up in Pudukottai district, Tamil Nadu, India.

Charnockite has restricted in aerial distribution does contain certain massive zones with a feasibility of yielding dimension stone varieties of Olive/Sea green. Hornblende biotite gneiss is widespread rock type and concordantly emplaced Quartzo-feldspathic gneiss, grey/pink granite gneiss together constitute the DSGD. Intrusive grey, pink, and pegmatoidal granites are manifested as distinct domal bodies and discrete lensoidal bodies within the gneisses. Columbo/Tropical juparan, Viyarah, Yellow fantasy/Pudukkottai yellow and pink multi are the varieties of variegated gneisses. Imperial white, Tomato/ Chilli red from grey/pink granites and Rose wood, Rosa Verde, Indian Dakota are from the pegmatoidal granite (Jayabalans et al).

Altogether eleven varieties of DSGD have been delineated while scanning an area of 750 sq.km falls in toposheet Nos. 58J/10, 11, 14 & 15, individual rock types were characterized and their feasibility levels were tested, resource and revenue potentials have been brought out in detail and estimated around 3.6 million cubic meters. Even at a basic floor price of 400 USD/ Cbm on FOB Port, the export revenue is around 21 billion USD. However, many of the prime localities of good quality of DSGD falls under the aegis of ASI and RF areas. Though the deposits are so near and in great abundance yet they remain untouched as far as granite exploitation point of view. Dimension stone wealth is indeed immense in Pudukottai district, Tamil Nadu; require careful quarry plan and exploitation technology for sustained growth in the granite industry. The Pudukkotai district appears virtually to be a GOLD MINE.

References:
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(2) K. Jayabal and K. Rajaram, RS for DSGD in Pudukottai areas, FPR 1999-2000