

## Neglect aggregate and minor minerals to your peril!

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Largely artisanal aggregate and minor minerals mining in India is carried out as an informal activity, often without a mining license, the payment of public fees or compliance with environmental and labour regulations. Although artisanal mining persists in most of the Indian states, lack of appreciation of its contribution to the national informal economy by the institutions of all hues, lack of political resolve, crony commercial interests and a general apathy to consider it even as an industrial activity, has so far resulted in the non-formalization of such activities as rightful and competitive business, and to be included as gross domestic product. A cursory estimate can easily peg the contribution of value added aggregate mining for construction and specialty minerals and stones between 1-3% of the national GDP.

Construction sector in India is expected to grow at 8 per cent per year till 2025 as per industry estimates. Crushed and screened aggregates are needed in huge quantity with the infrastructure and construction sector on fast-track. Meanwhile, demand for manufactured sand is on the rise with ban on natural sand mining in many states. According to Mahesh Madhavan, Head (Construction & Infra Practice), Feedback Consulting, the overall construction aggregates demand in the country is estimated to be around 4,500-5,000 million tonnes per year. He explained, 'Crushed stone aggregates are estimated at 40-45 per cent of the overall construction aggregates used. Aggregates are used for multiple applications like raw materials for site mix and ready-mix concrete, sub-base for road projects, railway ballast etc, and are available in various sizes from 6 mm to 60 mm. The crushed stone aggregates used for concrete preparation vary from 1,000-1,200 million tonne, while the rest are used directly for infra, road and railway projects as aggregate.' This is only about construction sector. In another discussion we will discuss about the prospects of the specialty minerals, waste recovered minerals, additive minerals and chemical industry minerals, and the current range, electronic minerals, etc.

The large and the most definitive aspect of the industry is the informal nature of the activity and the fact that production is primarily organized by individuals or small groups of people using simple tools (chisels, crowbars, head pans, hammers and shovels) to break, carry and crush boulders into smaller stones (aggregates). What is misleading is that, while categorized as small scale mining, several hundred people may work at the same quarry site, which may have considerable territorial extension. However, there are no direct economies of scale linked to these activities, as divisions of labour and product sales take place within the organizational confines of the operations of individual plots. Upstream and downstream corruptive practices have so far dissuaded the large mining players not to have a serious look into the sector favourably, but that must have to change now for every stake holding entities - health-safety-welfare of the community, country, government, the value prospect and the ecology. Country should consider formalising these industrial activity to bring benefits and fairness for cel.

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