

**THE IMPORTANCE OF THE CRUSHED STONE****AND SAND WINNING INDUSTRY**

The building and construction industry is one of the most important sectors of the economy of any nation. In developing countries it is second in importance only in agriculture, whereas in developed countries only manufacturing is of greater importance.

The complex pattern of dependence and interdependence within the building industry is influenced to a large extent by the current level of building technology and the availability of building materials and products. As a major economic activity the building and construction industry depends heavily on a significant proportion of the output of manufacturers producing plumbing and electrical equipment, bricks, fittings, metal products, paints and chemicals, etc.

Vast quantities of construction materials are consumed annually by the building industry. Many tons of Portland Cement and granulated blast furnace slag are sold annually in times of an upward swing in the economy or in "boom" times. Again based on the figures of cement millions of cubic metres of crushed stone and sand are also consumed in these times. Also large quantities of stone are also used in rail and road building activities. Likewise the production of structural clay products and the output of millions of bricks are also a consideration.

Most basic construction materials are characterised by a low unit value but high place value, and are therefore produced and consumed locally. The problems regarding the availability of adequate resources are therefore regional rather than national.

The basic construction materials industries (brickfields, quarries and sand-winning operations) used to be situated on the outskirts of cities or towns in order to keep transport costs down. The rapid growth of urban areas, caused not only by the population increase but also by increased urbanisation, has resulted in encroachment on these operations by township development.

Restricted zoning regulations, rising land prices, changing market geography and greater concern about environmental conservation will not only force many existing concerns to move further away from the urban areas but will render unavailable deposits which are essential for future development. The cost of these basic construction materials could therefore increase sharply in certain regions owing to the greater distances over which they may have to be transported.

This situation has already led to serious conflicts of interest between township developers and the extractive industries and caused concern in both the private and public sectors.

NOTE: This was part of a report prepared by the Department of Planning and the Environment who undertook this study and the co-operation of the Department of Mines and of Industries, the Council for Scientific and Industrial Research, the South African Bureau of Standards and other organisations became involved.