Extraction of sand and gravel in Peninsular Malaysia

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Extraction of sand and gravel is discussed in relation to the source area, physical and chemical characteristics, production statistics, price and uses. Despite the easy availability of sand/gravel in most places and the comparatively low price, sand/gravel is an under-utilized construction material in Malaysia.

Main source areas are the rivers and the tin mining areas. Extraction of sand/gravel from the rivers is done either by manually or mechanically scooping or pumping it from the river banks or beds. Environmentally, as well as materially, extracting sand/gravel from the rivers is recommended. Environmental impact is low. The resource is not only continually being replenished by water current, removal of sand/gravel also helps to prevent silting and flooding to some extent.

Generally the physical, chemical and mineralogical characteristics of river sand/gravel meet the specifications for most construction purposes. On the other hand, sand/gravel from mining areas and beaches, commonly contain fines and soluble salt respectively, which require washing before it can be used as concrete aggregate.

Production statistics for sand/gravel in 1981 was about 2.8 million tonnes compared to 18.7 million tonnes of crushed stones. Comparing the utilization of crushed stones to sand/gravel which is about 1:1 in the developed countries, the utilization of sand/gravel is very low in Malaysia.

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