Impact of Sand Harvesting on Environment and Landuse in Masinga Division, Machakos District, Kenya.

By

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This study sets up to examine the impact of sand harvesting on environment and land uses in Masinga Division of Machakos District, Kenya. Sand mining regarded as a mining activity has an effect on environments where it is carried out. It is against this background that the study was prompted to look at the environmental impacts of sand harvesting. The study also examines the benefits accruing from the activity.

Various environmental components were identified and matched against impact sources. It was observed that sand harvesting produced both negative and positive impacts. The activity (sand harvesting) leads to adverse impact on various environmental components. The activity affects water resources used by the community for domestic and livestock purposes. The sand is able to store water in underground aquifers. The potential is affected after the removal of sand. The activity affects existing land uses. It also affects agricultural and grazing land where storage piles existed. Haulage trucks affect transport land use (roads and bridges) which have not been constructed to accommodate them.

Various actors were identified as taking place in the sand harvesting activity. These included the local community, Central and local Government authorities like the Masaku County Council, and finally the lorry operators. These actors were observed to earn incomes from sand sales. The study observes that the local County Council and lorry operators earn significant incomes from sand sales.

The study concludes by recommending the active involvement of the local community in decision making process. The community's overall perception the activity was positive. However, it stood to suffer most if the degradation of the river systems continued, and thus gain less from the activity. The existing legal framework governing mining operations should be observed by both decision makers and the other actors.