Packaged Preliminary Study on the Potential use of Silica Sand.

The Local Enterprise Authority (LEA) commissioned a desk study on the potential use of Silica sand for benefit of the SMMEs. This study was inspired by the vast deposits of Silica Sands that spread across the parts of Botswana. LEA saw this as an initiative to spearhead further research into exploring ways of potential gains through economic diversification programs such as this study as products spinoffs from silica mining development could be huge and indeed a potential export benefit to the country.

Objectives of the Study

To carry out a preliminary desk study on the potential use of the silica sand so as to identify potential opportunities for involvement of SMMEs to exploit and benefit from the availability of the raw material in Botswana.

Key Findings

The following key findings from the study will be used to guide the LEA on the potential activities that need to be undertaken to facilitate the involvement of SMMEs in the use and application of silica sand:

- Currently there are no glass manufacturing companies in Botswana. The Government of Botswana through BEDIA has shown intentions to set up a glass manufacturing industry in Botswana as part the country’s economic diversification strategy. Silica which is the main raw material for glass making is available in Mmamabula, Samedupi, and Tumasera areas. Limestone which is also a key ingredient for glass making is also available in abundance in Naka-la-Phala and Makoro while the third main ingredient; Soda Ash is available from the Soda Ash mine in Sowa Town.
- Need for business linkages of SMMEs through supply of process inputs and the provision of outsourced services from foreign companies that will be lured by BEDIA in the lucrative Silica mining business. These services include: transport, quarrying, technical services such as calibration and general maintenance services and supply as well as provision for packaging products and services to the silica manufacturing firms.
- Benefits of SMMEs from skills transfer. These skills could ultimately be used to set up small scale plants for value added products such as decorative glass, special glass and flat glass.
- Potential for further beneficiation of glass products either through secondary processing into other glass products or using fiber glass as input into producing sanitaryware products.
- Sources glass products from large companies for further processing.
- Use of glass products as inputs into manufacturing other products eg. Ceramic products and foundries.

Recommendations from the Study

- Set up Measurement, Monitoring and Evaluation Systems: LEA should develop a system of measurement, monitoring and evaluation to support the implementation of this strategy and therefore the means of ensuring that this strategy leads to perceivable benefits to SMMEs.
- LEA should investigate further the viability of small scale glass production business in Botswana with focus on products such as decorative items, ornaments, glass beads, giftware etc. These can be
produced directly from local available raw materials of silica sand, soda ash and limestone and production methods that require small-scale investments. The products can also be fabricated from secondary processing of primary glass products to alter the shape or properties of the glass.

- LEA should carry-out a study on the business opportunities available in the sanitaryware industry with a view to enable SMMES to tap into the future availability of locally produced fiber glass which is one of the main inputs used in the production of sanitaryware products such as bath tubs.

- LEA should engage with BEDIA to advocate for participation of SMMEs in the envisaged glass manufacturing industry with focus on potential exploitation of identified opportunities for the benefit of SMMEs in Botswana. These range from provision of services such as transportation, silica sand quarrying, to technical support services, and the supply of packaging materials etc.

- LEA should carry out a detailed study on the industry to assess the current actors in the industry be it producers, suppliers, service providers, raw materials used, technology and processes. The study should be able to identify problems/ bottlenecks /constraints /issues and suggest solutions to the problems and make recommendations on activities/interventions for implementing the project. This will enable LEA to come up with suitable interventions aimed at developing SMME competitiveness in this sector.