

Other Business opportunities

- Plastic Recycling
- Waste Paper Recycling
- Manufacture of Tomato Paste & Powder
- Leather processing
- Sugar production
- Sheet Glass production

Interested? Please contact

The Director

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National Technology Business Centre

Business opportunity profile on cement production

Growth through technology and innovation

About Us

The National Technology Business Centre (NTBC) is a corporate body that was created by the Science and Technology Act No. 26 of 1997 and Statutory Instrument No. 136 of 1999. NTBC became operational from 1st April 2002.

NTBC was established with the main objective of linking developed and proven technologies from various local and international sources with the local technology seekers i.e. business community and entrepreneurs, for creation of wealth and employment

Our Mission

To effectively promote, market and transfer suitable technologies in order to maximise their utilisation in the country through technology transfer, adoption and commercialisation of innovative products.

Services:

- Technology transfer
- Business development
- Technology Audit and validation
- Commercialisation of innovative products
- Technology Information Resource Centre

Industry outlook

In Zambia, like in most developing countries, cement is counted amongst the basic commodities on which they rely and consequently self sufficiency is always given higher priority in development planning.

Currently, there are only three cement producing companies in the country and these can not satisfy the local demand let alone export to other countries.

Cement is an essential ingredient in virtually every type of construction world wide and hence the continuing and expanding supply of cement is essential to provide the infrastructure for development especially for developing countries like Zambia

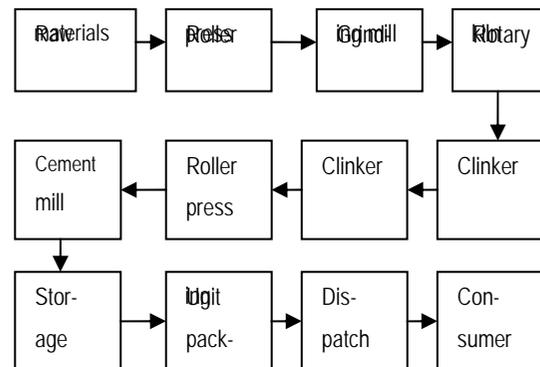
Cement production

There are four essential elements needed to make cement, namely Calcium, Silicon, Alumina and Iron. These materials are currently being mined in Zambia. There has been a realisation by most Zambians that land is a non-depreciating asset and to that effect, a majority of the population are acquiring pieces of land, this has in turn increased the number of construction projects going on in country. Without doubt there is a high demand for cement and it continues to rise.

The three companies in the country are not meeting the demand and this has been pushing the price of cement upwards. Investing in this industry would be beneficial to the new entrant as well as the country as a whole.

Process technology

Cement is made by grinding a mixture of limestone, clay and other corrective materials. The process of manufacturing consists of grinding of raw materials into fine powder, mixing them thoroughly and burning in a kiln at about 1400°C . The resultant product is called Clinker. The Clinker is cooled, ground to fine powder with gypsum and the end



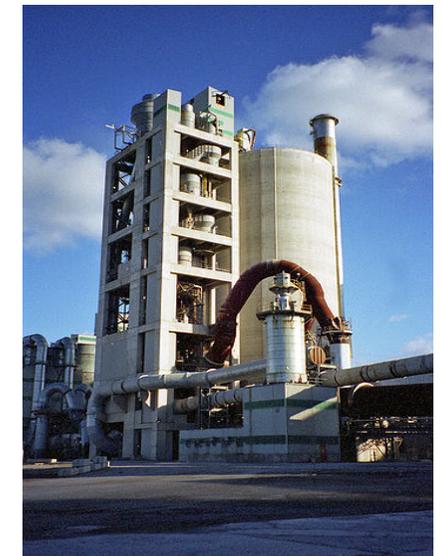
Business Results

Plant capacity	: 300 tons/day
Plant machinery cost	: \$ 7,520,000
Working capital	: \$ 35,000
Pre-production	: \$ 50,000
Total investment costs	: \$ 9,457,820
Net Present Value	: \$19,510,910 @ 14%
Internal rate of return	: 64.69%
Break- even point	: 11.29%

The above results show that the business is financially viable therefore investing in this business, holding all other things constant, can yield returns to the investor.

The IRR is the average annual rate of return, which can be earned on the invested capital, i.e. the yield on the investment shows that the investment is viable.

The business is not very sensitive to changes in operating costs but relatively sensitive to changes in sales or revenue.



Picture of a Cement plant