

Infrastructure Sector



MAKING MANHOLE COVERS

Introduction:

A manhole cover is a removable plate forming the lid over the opening of a manhole, to prevent anyone from falling in and to keep unauthorized persons out. They usually feature “pick holes,” in which a hook handle is inserted to lift them.

Production Capacity

This project will produce 100 Manhole covers per day.

Production Process

Manhole covers are generally made using sand casting techniques.

Equipment

The Essential tools and equipments required include:

- Mortar Mixer & Moulds
- Spades & Wheel barrows
- Water tanks
- Cutters
- Finishers

NB: These tools & equipments can be purchased from “Shauriyako” shopping centre-Kampala, Uganda.

Scale of Investment, Capital Investment Requirements and Equipment

The scale of Investment is estimated at US\$ 4,458.

Market Analysis

Construction is a booming sector; therefore, Manhole covers are on high demand especially in Drainage construction, Hotel sites, Road construction- side walk ways, and Telecommunication, Tunnels, Residential and Commercial buildings.

Project Costs

The Projected costs of production both fixed and working capital is summarized in the Tables below:

Fixed Capital Requirements in US\$

Capital Item	Units	Qty	@	Amount
Truck	No	1	3,000	3,000
Mortar Mixer	No	1	910	910
Moulds	No	4	60	240
Spades	No	2	3.2	12.8
Wheel barrows	No	2	34.6	69.2
Water tank	No	1	183	183
Cutters	No	2	15	30
Finishers	No	2	3.2	6.4
Sieve tray	No	1	7	7
Total				4458.4

Production & Operating Costs in US\$

Item	Units	@	Qty/day	Prod. Cost/day	Prod. Cost/month	Prod. Cost/Year
Direct Costs						
Lake Sand	Trps	122	0.2	24.4	634.4	7,613
Swampy Sand	Trps	102	0.08	8.16	212.16	2,546
Sand Stones	Trps	122	0.04	4.88	126.88	1,523
Wire Mesh	Roll	12	0.04	0.48	12.48	150

B. Wire	Roll	32	0.04	1.28	33.28	399
Cement	Kgs	0.24	865	208	5,400	64,801
Sub total					6,419	77,032

General Costs (Over heads)

Rent	300	3,600
Labour	800	9,600
Utilities (Power & Water)	500	6,000
Repair & Maintenance	300	3,600
Fuel	1,000	12,000
Depreciation (Asset write off) Expenses	256	3,069
Sub - total	3,156	37,869
Total Operating Costs	9,575	114,901

Project Product Costs and Price Structure:

Item	Qty/day	Qty/yr	@\$	Pdn Cost/yr\$	UPx	T/rev
Manhole covers	100	31,200	4.52	141,334	6	187,200

Profitability Analysis

Profitability Item	Per day	Per Month	Per Year
Revenue	600	15,600	187,200
Less: Production & Operating Costs	332	11,778	141,334
Profit	268	3,822	45,866

Sources of Supply of Raw materials

Raw materials are locally available in Uganda especially Lake sand from lake shores and fine sand from wet lands.

Government Facilities and Incentives Available

The Government has subsidized the Building & Construction sector through tax exemptions.