

**EXERCISES IN INVESTMENT DECISIONS AND REAL SEED COMPANY
FINANCIALS**

SEMIS

10TH MARCH 2017

EXERCISE ONE

Kabete limited is a one of the seed companies operating in Kenya. The company develops, produces, and distributes high quality seeds that guarantee high performance for the farmers located in dry lands and highlands part of the country. Last month, the company had a major breakthrough in the development of a resistant and high quality seed of sorghum suitable for growing conditions of Kerio Valley where Kenya Development Authority (KVDA) has commissioned irrigation schemes on thousands of hectares of arable land. In order to process and deliver the seed, Kabete limited has the option either hiring a processing plant from Smart Seed limited or acquiring it in order to meet the demand of the already identified market. The following information for the two options has been availed by the capital budgeting team.

OPTION ONE: HIRING PROCESSING PLANT

- (i) Smart Seed limited will charge \$ 250 per hour for a maximum of ten hours a day
- (ii) The charges per hour beyond ten hour processing time is \$280
- (iii) Smart Limited estimates that inflation will go up each year by five per cent. As a result, annual charges will be adjusted upwards to accommodate for inflation.
- (iv) Kabete limited estimates that it requires 2,000 hours of the hired plant at most for 80 days a year.

OPTION TWO: SET UP THE PLANT

- (i) Acquisition cost is estimated to be \$1.5 Million
- (ii) Preliminary expenses is estimated to be \$ 0.2 Million
- (iii) Excess capacity is anticipated which the company plans to rent out for eight hours a day for \$ 280 per hour, 250 days in a year
- (iv) Installation Costs estimated to be \$ 75,000
- (v) Initial amount of required of working capital estimated at \$ 40,000
- (vi) Maintenance cost per year is estimated at \$ 30,000
- (vii) Energy Consumption cost per year is estimated at \$ 50,000
- (viii) Incremental overheads cost per year is estimated at \$ 140,000
- (ix) Financing costs per year estimated at \$ 20,000
- (x) Useful Life of the machine = five years

- (xi) Estimated salvage value at the end year five is \$ 20,000
- (xii) No Depreciation charge in Year five
- (xiii) Corporate tax rate = 30 %
- (xiv) Risk adjusted cost of capital is estimated at 12 %
- (xv) Depreciation rate is given 25 % on a reducing balance basis
- (xvi) The plant can be rented out

QUESTIONS:

- (a) Who do think in the seed company should come up with these figures (operational managers or finance specialists)
- (b) How should we treat preliminary expenses
- (c) How should we treat Depreciation
- (d) How should we treat working capital and salvage value
- (e) How should we treat financing Costs
- (f) What is the intuitive explanation of the hurdle rate of 12 %
- (g) Compute total savings in hiring charges if the company sets up the plant
- (h) Compute rental revenue from renting out the processing plant
- (i) Using Discounted cash flow techniques of NPV and BC-R , compute the figure of merit and decision criterion

EXERCISE TWO

- 1) How does a company generate Cash?
- 2) How does a company use Cash?
- 3) Which Method do you apply in the identification of sources and usages (in practice)
- 4) Source of information for computing figure in question (3)
- 5) Using the hypothetical balance sheet of XYZ limited, computed total source and usage of funds
- 6) Using the Balance sheet to make financial decisions (for example investment decisions)
- 7) To what extent do accounting numbers reflect economic reality
- 8) Is the book value of equity the same as market value of equity?

- 9) How do you incorporate in your financial analysis many 'assets' not reported in the financial statements that generate more income in the future (capacity of assets in place to generate future income, role of better management/executives, loyal customers etc)
- 10) Are positive accounting earnings a sign of superior performance (can support increase in wages, taxes, and bonuses?). How do you factor cost of equity

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