Case 24

SHYAM LAL AND ASSOCIATES

Shyam Lal & Associates (SLA) was organized as a partnership firm in 1992, with its main office in Delhi. Since that time, the firm diversified into various product lines, both in manufacturing and trading, and also expanded its market. Sales of SLA increased from Rs. 70 lakh in 1992 to the estimated figure of Rs. 15 crore for the accounting year ending on December 31, 2011.

At present, SLA has three works offices engaged in processing of basic industrial chemicals, production of hardware goods and leather products. All these works offices are located in Faridabad, Haryana. In addition to that, SLA also owns one cold storage-cum-warehouse located in Azadpur, Delhi. Each unit operates under the 'overall' guidance of Mr. Shyam Lal. All works offices serve as a sales and distribution point for the line of product carried on by that unit and is run by a supervisor who is responsible for hiring and supervision of personnel and for sales, credit, purchasing, inventory and cost control at the unit level. All decisions affecting SLA's overall policy, capital expenditure and the addition of product lines are reviewed by Shyam Lal.

For the last two years, SLA is experiencing shortage of funds caused by low profits and the instalment payments of term loan to Vishal Bank. The payments became necessary as per the agreement with the bank. However, the problem which bothered Mr. Shyam Lal was of low profits. He asked each unit supervisor to submit his suggestion to improve the long-run profitability of the company. While going through various suggestions, Mr. Shyam Lal found three proposals of investment which he took up for consideration. He was concerned about the profitability and payment schedule of each one of them. He estimated that the use of 12 per cent after-tax required rate of return would be appropriate in evaluating the proposals. SLA's tax rate is estimated at 35 per cent. The first one Mr. Shyam Lal selected was new investment proposal from Faridabad Chemical Processing Unit.

NEW INVESTMENT PROPOSAL

The chemicals processing works office head has suggested that SLA should invest in a plant which can produce a new chemical. He expects that the new chemical would be widely accepted and used by the manufacturers of plastic bags. The works manager of that unit submitted the following information on the basis of market survey and sales forecasts generated by him.

	(Rs. in lakh)
Estimated investment	39.60
Estimated life	10 years
Annual after-tax cash flows:	
Years 1–4	7.60
Years 5–10	8.50

He has estimated that the salvage value of the machine at the end of its expected life is likely to be 50 per cent of its book value. Further, he mentions in his proposal that SLA would be entitled for depreciation at the rate of 25 per cent using diminishing balance (written-down value) method.

COST SAVING PROPOSAL

The hardware unit of SLA used to contribute 40 per cent towards the overall profitability of the company. But recently the contribution had declined significantly because of the rising cost and labour problems. Therefore, the proposals submitted by the hardware unit supervisor emphasized the cost-reduction techniques. Among other suggestions, Mr. Shyam Lal found a proposal to invest in a machine which would help the company to reduce the costs. The following note was submitted by the manager of the unit:

"Automation Industry is a manufacturer of special machines used in the processes like ours. The installation of these machines go a long way to reduce the costs. At present, one particular machine which is being marketed by them will do the job satisfactorily, and will help the company in reducing its costs. The machine costs Rs. 46.35 lakh by paying the entire amount in cash.

However, the company also provides the facility of purchasing the machine on instalment basis. In that case, the amount has to be paid in eight equal annual instalments and the rate of interest compounded annually by the company would be 18 per cent".

Mr. Shyam Lal was interested in knowing the amount of instalment which the company would be required to pay each year. Further, he wanted to know how much of this amount was towards interest and repayment of principal each year. Since interest payments were tax deductible, Shyam Lal was wondering what was the cost of machine to him as of today?

Given that the life of this machine is 15 years, how much after-tax-cost savings should accrue to SLA each year to recover the investment made on instalment basis?

EXPANSION PROPOSAL

The cold storage manager has proposed to install refrigeration system in their newly acquired complex. A distributor of various makes of refrigeration systems is prepared to install the

system which costs Rs. 14 lakh. The distributor has informed the cold storage manager that firm can pay in four years, interest rate being 13 per cent. He submitted the following schedule giving the details of annual payments.

	(Rs. in lakh)
Principal	14.00
Four years of interest at 13 per cent	7.28
Total amount	21.28
Annual payments	5.32

In case SLA considers the distributor's proposal, what is the implicit rate of interest paid by the firm? In case Mr. Shyam Lal negotiates with the distributor and he agrees to earn 13 per cent rate of return, what will be the annual instalment amount which he will be required to pay to the distributor?

FINANCING AND ITS COST

Mr. Shyam Lal estimated that he would require about Rs. 65 lakh of funds to finance the three proposed projects in case they are accepted. Funds from internal sources were out of question. He approached Vishal Bank to explore the possibility of seven-year term loan. The bank officials informed him that the current rate of interest on such loans would be 15 per cent. The payments for both principal and interest would be required to be made either at the end of each year or at the end of the maturity of loan. In the latter case, he was interested in finding how much he should save each year by investing outside at 18.5 per cent so that he has sufficient funds to repay the loan at maturity. He was also concerned about the after-tax required rate of return which he should use in evaluating the proposals.

DISCUSSION QUESTIONS

1. What is the nature of problems being faced by Shyam Lal? What are the key characteristics of the options he is examining? How should he decide?
2. Why do you think he should consider time value of money and what do you do you mean by time value of money?
3. For this purpose what discount rate should he use?
4. Explain the concept of present value and future value. While evaluating the profitability and repayment schedule of various projects use the following concepts:
   (a) Future value factor, FVFn,r
   (b) Future value annuity factor, FVAFn,r

(c) Present value factor, PVFn,r

(d) Present value annuity factor, PVAFn,r

5. How do you interpret the results when you divide any amount by PVAFn,r? And similarly for FVAFn,r?

6. What factors should he consider while evaluating financing decision?