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AGRO-PROCESSING / LIVESTOCK INPUTS



Animal Feed Production

Feasibility Study

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Market study · Technology and engineering · Financial analysis

Addis Ababa, Ethiopia

2026 EDITION

Project feasibility study · Ethiopia · Gebeya251.com

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Executive Summary

This study examines the establishment of a plant for the production of animal feed in Addis Ababa with an installed capacity of 15,000 tonnes per annum, operating one shift of 8 hours per day, 300 working days per annum.

The total investment requirement is estimated at ETB 237.41 million. Fixed investment accounts for ETB 140.79 million, or 59.3 per cent of the total; pre-operating cost including interest during construction accounts for ETB 23.54 million; and initial working capital accounts for ETB 73.08 million. Of the total, ETB 89.38 million is required in foreign currency for imported machinery and equipment, equivalent to USD 554 thousand at the ruling rate of ETB 161.45 to the United States dollar.

At full capacity the plant produces 15,000 tonnes per annum with a sales value of ETB 518.23 million at an ex-factory price of ETB 34,548.60 per t. Annual production cost at full capacity is ETB 441.10 million, of which raw and auxiliary materials account for 90.9 per cent.

Discounted at 18 per cent, the project returns a net present value of ETB 107.78 million and an internal rate of return of 29.1 per cent. The initial investment is recovered in 3.3 years. The break-even point is reached at 28.1 per cent of installed capacity. On these assumptions the project is financially viable, with returns comfortably above the 18 per cent required return.

The project creates employment for 31 people. It establishes backward linkages with the agriculture and agro-processing sectors, drawing on oilseed crushing, flour milling, sugar production and grain supply and generates government revenue through corporate income tax, payroll tax and value added tax.

Summary of results

Table 1.1 Summary of project results

Indicator	Unit	Value
Installed capacity	tonnes per annum	15,000
Ex-factory price	ETB per t	34,548.60
Sales revenue at full capacity	million ETB	518.23
Total initial investment	million ETB	237.41
of which foreign currency	million ETB	89.38
Production cost at full capacity	million ETB	441.10
Net profit after tax, final year	million ETB	53.99
Net present value at 18 per cent	**million ETB**	**107.78**
Internal rate of return	**per cent**	**29.1**
Payback period	years	3.3
Break-even capacity utilisation	per cent	28.1
Employment	persons	31

Source: study computation, 2026.

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Year	Projected national demand	Unsatisfied demand	Share available to Addis Ababa and surrounding corridor
2027	7,692,034	7,672,642	767,264
2028	8,076,636	8,057,244	805,724
2029	8,480,468	8,461,076	846,108
2030	8,904,491	8,885,099	888,510
2031	9,349,716	9,330,324	933,032
2032	9,817,202	9,797,810	979,781
2033	10,308,062	10,288,670	1,028,867
2034	10,823,465	10,804,073	1,080,407
2035	11,364,638	11,345,246	1,134,525
2036	11,932,870	11,913,478	1,191,348

Projection at 5 per cent per annum from the 2012 effective demand base. Planning projection — to be re-anchored on current survey and customs data.

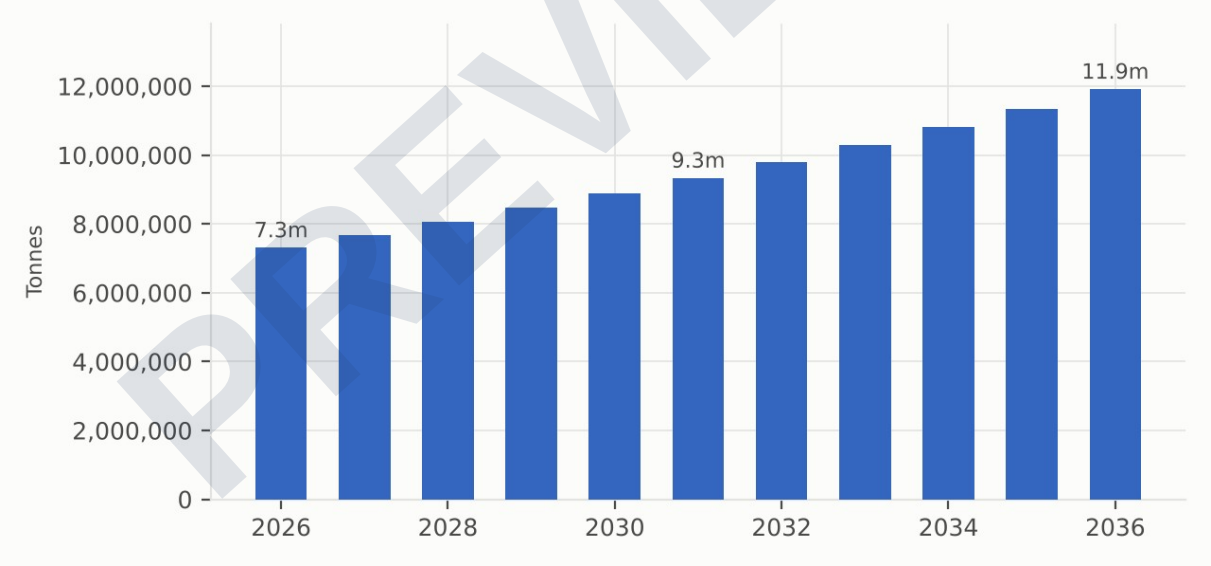

Figure 3.1 Unsatisfied demand for animal feed, 2026 to 2036

3.2 Pricing and distribution

Feed prices follow the composition of the mix and its nutrient density. The ex-factory price adopted for this study is ETB 34,549 per tonne, equivalent to ETB 3,455 per quintal. It is the 2012 price basis for this product restated to the current price level, and it sits within the range reported for formulated cattle feed in the Addis Ababa market. Because the spread between ingredient cost and product price is the single most important variable in this project, the price must be confirmed against current mill quotations before commitment.

Feed is sold at the factory gate and through sales stores opened in the major towns. The plant should use both channels, with factory-gate sales to commercial dairy and fattening operations and a small store network serving smallholder clusters.

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No.	Cost item	Local cost	Foreign cost	Total cost	Share (%)
2.2	Interest during construction	16,618.7		16,618.7	7.00
	Sub-total	**23,540.8**		**23,540.8**	**9.92**
3	Initial working capital	73,076.0		73,076.0	30.78
	Grand total	**148,034.3**	**89,376.0**	**237,410.3**	**100.00**

Pre-operating cost is taken at 5 per cent of machinery and equipment plus the cost of training, and covers installation, start-up, commissioning, project engineering and project management. Interest during construction is charged on the average loan drawdown over the one-year construction period.

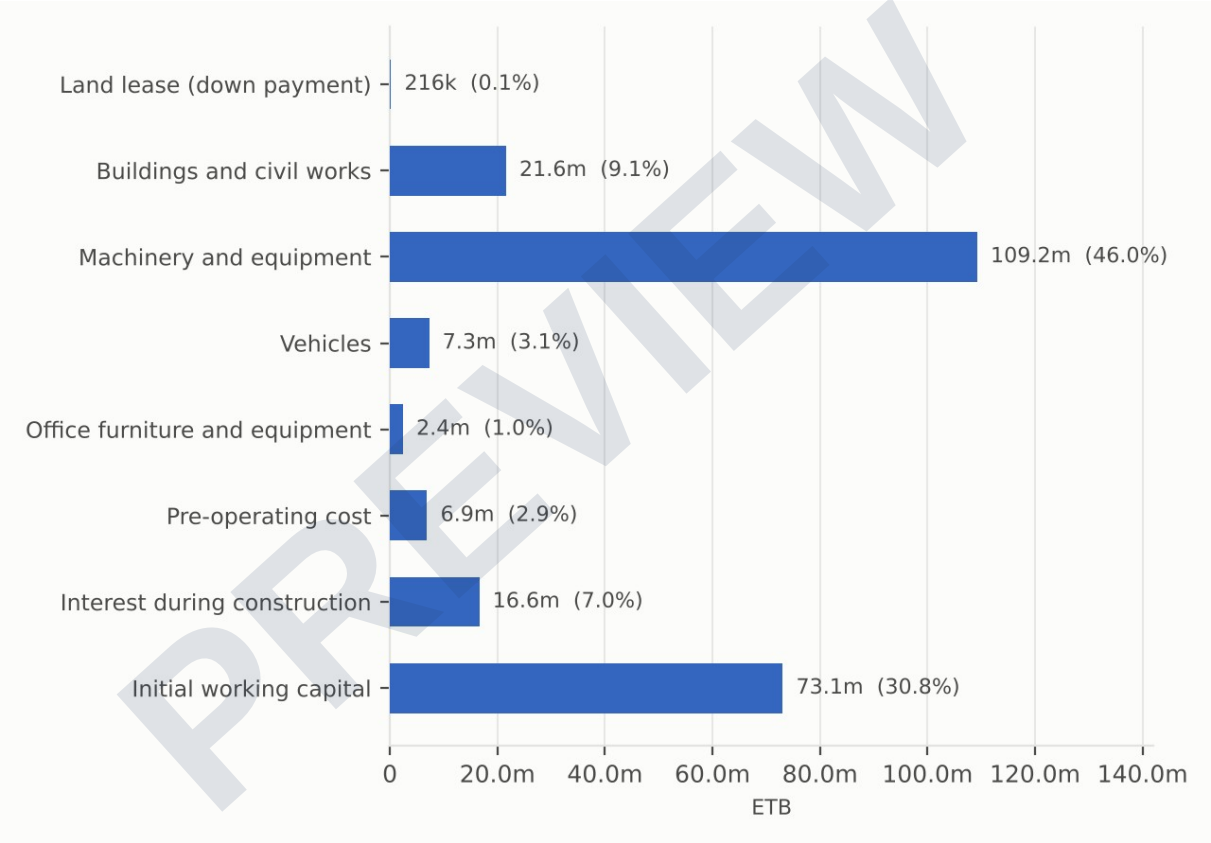

Figure 7.1 Structure of the total initial investment

7.2 Production cost

Annual production cost at full capacity is estimated at ETB 441.10 million. Raw and auxiliary materials account for 90.9 per cent of the total, utilities for 2.3 per cent, depreciation for 2.7 per cent and the cost of finance for 0.8 per cent. The remainder is labour, maintenance, administration and distribution.

Table 7.2 Annual production cost at full capacity ('000 ETB)

Item	Cost ('000 ETB)	Share (%)
Raw and auxiliary materials	400,772.3	90.86
Utilities	10,208.5	2.31
Maintenance and repair	5,462.3	1.24

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Table 8.1 Sensitivity of project returns

Case	Net present value (million ETB)	Internal rate of return (%)
Base case	**107.78**	**29.1**
Selling price -10%	-51.68	12.4
Selling price +10%	261.93	43.3
Raw material cost +15%	-92.95	8.3
Capital cost +20%	83.26	25.8
Capacity utilisation -10 points	94.79	27.8
Five-year income tax exemption	144.27	33.1

Each case varies one assumption against the base case, all others held constant.

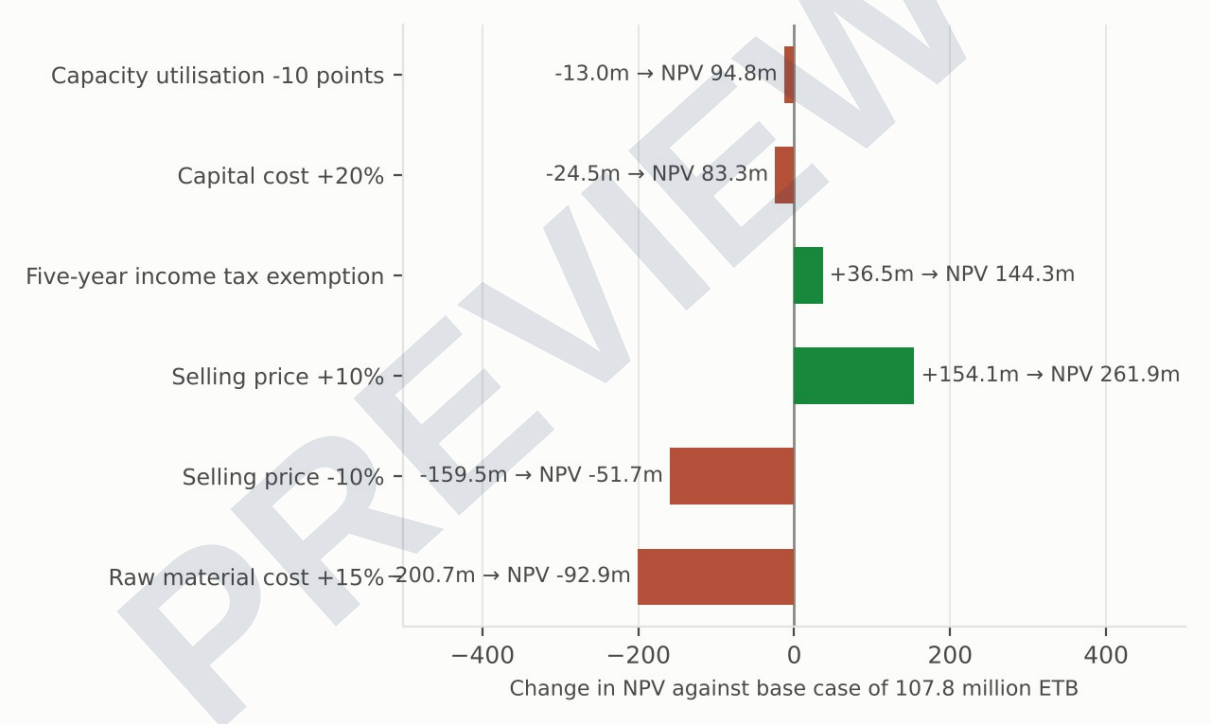

Figure 8.1 Effect of each assumption on net present value

The dominant exposure is the spread between the input cost and the selling price. A fall of 10 per cent in the selling price moves net present value from ETB 107.8 million to ETB -51.7 million, and a rise of 15 per cent in raw material cost moves it to ETB -92.9 million. The most damaging single case tested is "raw material cost +15%", which gives a net present value of ETB -92.9 million.

This is the central commercial risk of the project. Input prices and the product price are both set in markets that have moved sharply in recent years, and the margin between them is narrow enough that a moderate adverse move in either direction eliminates the return. Three mitigations are available and should be built into the business plan: forward purchase or contract supply of the principal inputs to fix cost over the production cycle; a pricing policy that passes input cost movements through promptly rather than absorbing them; and a working capital facility sized to carry seasonal input purchases so that buying is timed to the harvest rather than to cash availability.

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