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AGRO-PROCESSING / LIVESTOCK INPUTS



Poultry 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 poultry feed in Addis Ababa with an installed capacity of 3,750 tonnes per annum, operating one shift of 8 hours per day, 300 working days per annum.

The total investment requirement is estimated at ETB 70.57 million. Fixed investment accounts for ETB 37.42 million, or 53.0 per cent of the total; pre-operating cost including interest during construction accounts for ETB 6.74 million; and initial working capital accounts for ETB 26.41 million. Of the total, ETB 15.50 million is required in foreign currency for imported machinery and equipment, equivalent to USD 96 thousand at the ruling rate of ETB 161.45 to the United States dollar.

At full capacity the plant produces 3,750 tonnes per annum with a sales value of ETB 191.60 million at an ex-factory price of ETB 51,093.00 per t. Annual production cost at full capacity is ETB 159.65 million, of which raw and auxiliary materials account for 83.8 per cent.

Discounted at 18 per cent, the project returns a net present value of ETB 52.01 million and an internal rate of return of 34.7 per cent. The initial investment is recovered in 3.0 years. The break-even point is reached at 35.0 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 29 people. It establishes backward linkages with the agriculture and agro-processing sectors, drawing on oilseed crushing, flour milling 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	3,750
Ex-factory price	ETB per t	51,093.00
Sales revenue at full capacity	million ETB	191.60
Total initial investment	million ETB	70.57
of which foreign currency	million ETB	15.50
Production cost at full capacity	million ETB	159.65
Net profit after tax, final year	million ETB	22.36
Net present value at 18 per cent	**million ETB**	**52.01**
Internal rate of return	**per cent**	**34.7**
Payback period	years	3.0
Break-even capacity utilisation	per cent	35.0
Employment	persons	29

Source: study computation, 2026.

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Year	Projected national demand	Unsatisfied demand	Share available to Addis Ababa and surrounding corridor
2028	56,207	56,154	8,423
2029	59,017	58,964	8,845
2030	61,968	61,915	9,287
2031	65,066	65,013	9,752
2032	68,320	68,267	10,240
2033	71,736	71,683	10,752
2034	75,323	75,270	11,290
2035	79,089	79,036	11,855
2036	83,043	82,990	12,449

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.

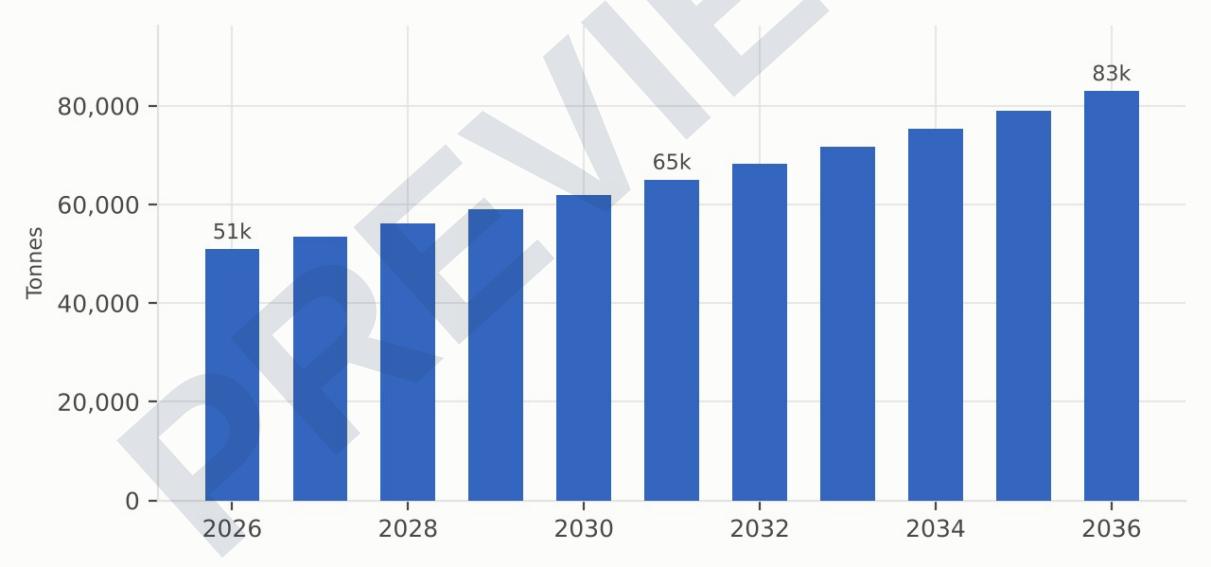

Figure 3.1 Unsatisfied demand for poultry feed, 2026 to 2036

3.2 Pricing and distribution

Poultry feed prices follow the formulation and its nutrient density. The ex-factory price adopted for this study is ETB 51,093 per tonne, equivalent to ETB 5,109 per quintal, being the 2012 factory-gate basis for this product restated to the current price level. It is set a little below the price charged by established producers, which is the pricing position a new entrant needs in order to win volume from them.

Sales are made at the factory gate and through stores in the major poultry-producing towns. Commercial layer and broiler units are the anchor customers because they buy in volume and on repeat schedules; smallholder demand is reached through the store network and through cooperatives.

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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.

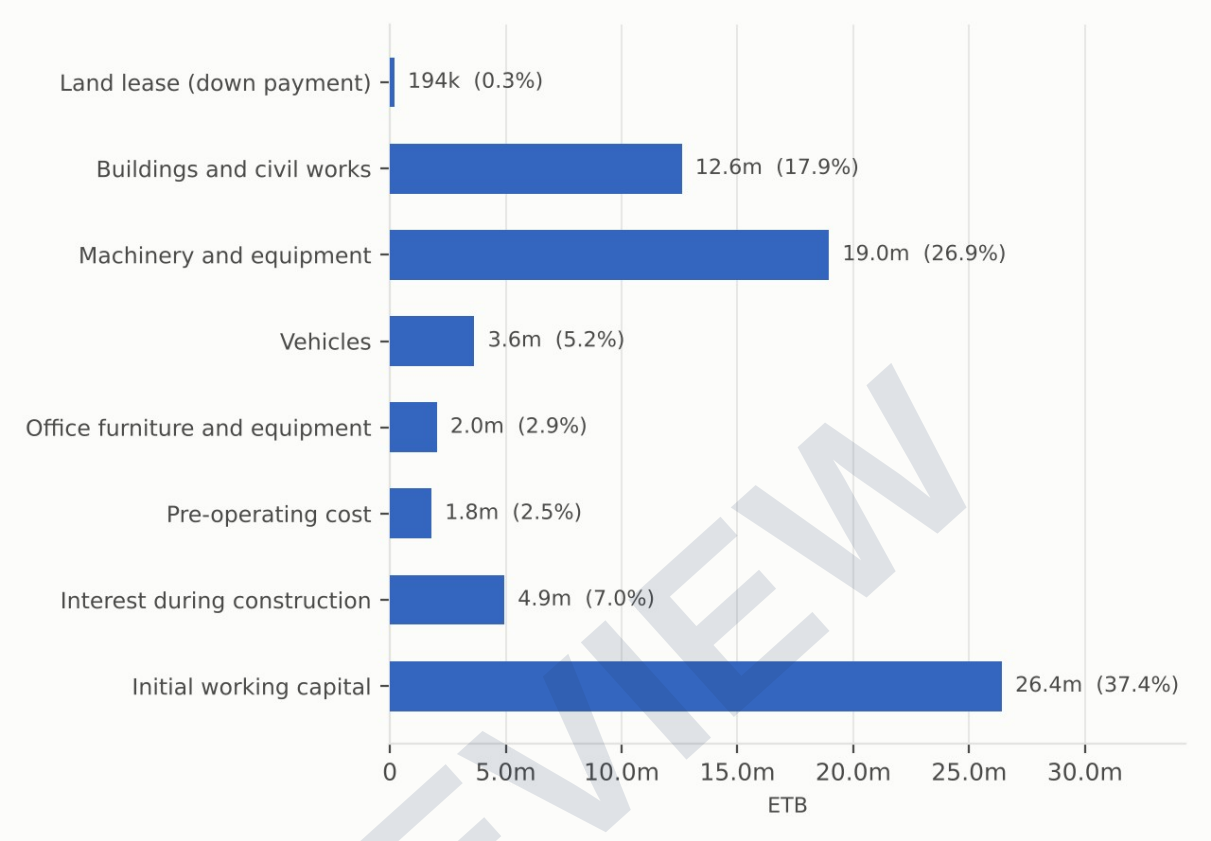

Figure 7.1 Structure of the total initial investment

7.2 Production cost

Annual production cost at full capacity is estimated at ETB 159.65 million. Raw and auxiliary materials account for 83.8 per cent of the total, utilities for 5.5 per cent, depreciation for 1.6 per cent and the cost of finance for 0.7 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	133,734.4	83.77
Utilities	8,725.9	5.47
Maintenance and repair	947.6	0.59
Labour	3,707.9	2.32
Labour overheads	741.6	0.46
Administration	4,055.0	2.54
Land lease	62.5	0.04
Marketing and distribution	4,055.0	2.54
Total operating cost	**156,029.8**	**97.73**

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Case	Net present value (million ETB)	Internal rate of return (%)
Selling price -10%	-4.36	16.5
Selling price +10%	107.98	50.8
Raw material cost +15%	-9.90	14.8
Capital cost +20%	46.43	31.8
Capacity utilisation -10 points	45.78	32.7
Five-year income tax exemption	68.89	40.7

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

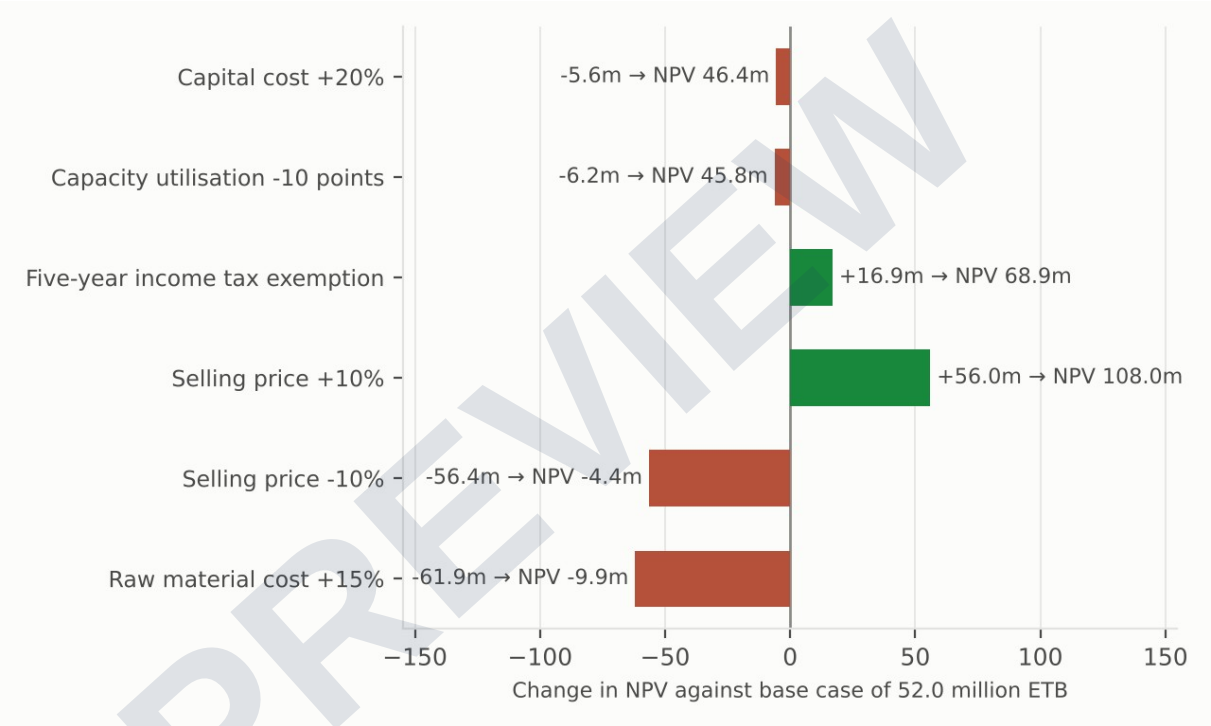

Figure 8.1 Effect of each assumption on net present value

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 52.0 million to ETB -4.4 million, and a rise of 15 per cent in raw material cost moves it to ETB -9.9 million. The most damaging single case tested is "raw material cost +15%", which gives a net present value of ETB -9.9 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.

Capital cost is a secondary exposure. Machinery is imported and is therefore exposed to the exchange rate; a further depreciation of the birr raises the investment requirement without raising revenue in proportion. Equipment should be ordered against a firm quotation with a defined validity period, and the foreign currency requirement should be secured before the order is placed.

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