



AN ISO 9001 : 2015 CERTIFIED COMPANY

Detailed project report

Sample edition

Projections from FY 2027-28

Project report

# Coconut Water

Installed capacity 3,000 litres per day

Sector Fruit and vegetable processing

Total project cost ₹466.01 lakh

**Illustrative sample**  
Figures are representative

## Project at a glance

Coconut Water  
3,000 litres per day

| Product                | Coconut Water         | Sector                  | Fruit and vegetable processing |
|------------------------|-----------------------|-------------------------|--------------------------------|
| Installed capacity     | 3,000 litres per day  | Annual capacity         | 9,00,000 litres per year       |
| Selling price (ex-GST) | ₹164 per litre        | Working days            | 300 a year                     |
| Manpower               | 44 people             | Plant and machinery     | ₹242.86 lakh                   |
| Total project cost     | <b>₹466.01 lakh</b>   | Promoter's contribution | ₹116.50 lakh (25%)             |
| Term loan              | ₹349.51 lakh (75%)    | Cash credit limit       | ₹51.92 lakh                    |
| Revenue, Year 3        | ₹1,033.20 lakh at 70% | Net profit, Year 3      | ₹114.05 lakh                   |
| Return on investment   | <b>24.4% a year</b>   | Break-even, Year 3      | <b>40.0% of capacity</b>       |
| Average DSCR           | <b>1.96</b>           | Payback period          | 3.3 years                      |

This is an illustrative sample. Its figures are generated from industry-typical ratios to show the format and depth of an NPCS project report. They are not taken from any NPCS report or any real project, and should not be used for investment or lending decisions.

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## 1 Introduction

The project modelled here is a unit producing coconut water in the fruit and vegetable processing sector, sized at 3,000 litres per day. Working 300 days a year, the plant can turn out 9,00,000 litres per year at full capacity. The product's applications range from ready-to-drink retail bottles to base for blended juices and smoothies.

Each section follows the layout of a bank-format project report: project cost, means of finance, working capital, profitability, cash flow, balance sheet, debt service and break-even. In Year 3, running at 70% of capacity, the model unit sells ₹1,033.20 lakh worth of coconut water and keeps ₹114.05 lakh as net profit.

## 2 Uses and applications

The product is bought for these main uses:

- Ready-to-drink retail bottles
- Hotels, restaurants and cafes
- Gyms, sports and wellness outlets
- Hospitals and pharmacies
- Base for blended juices and smoothies

## 3 Market potential

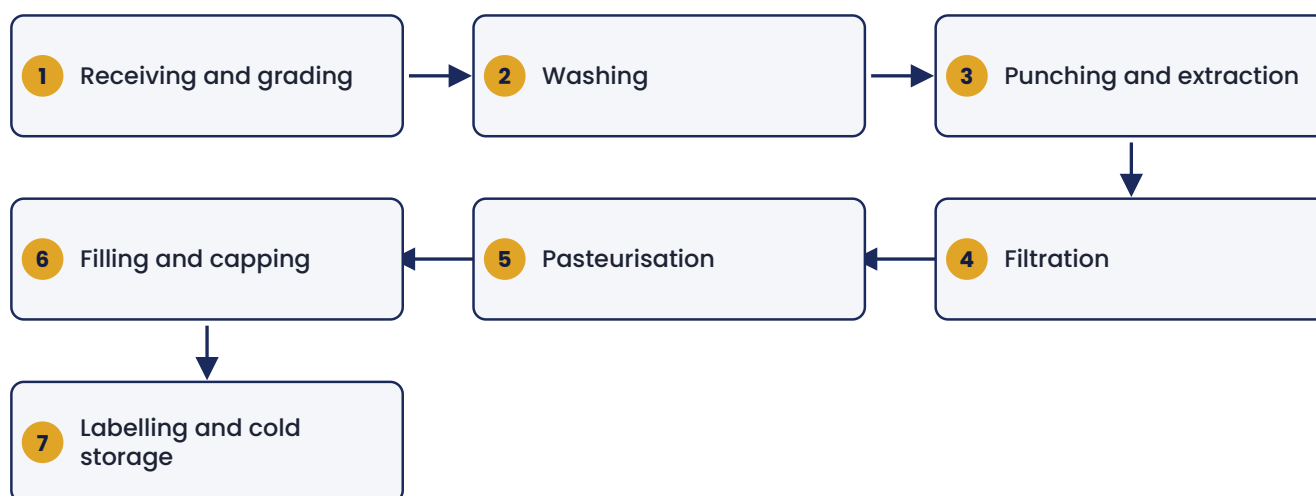
Demand for packaged coconut water comes from city buyers who want tender coconut water without buying and cutting whole nuts, and from gyms, hospitals and cafes that need a steady supply. Units compete on taste, shelf life and price, and those close to coconut growing areas in Tamil Nadu, Karnataka, Kerala and Andhra Pradesh buy tender nuts more cheaply and with less transit loss.

Sales are typically made to supermarkets and modern retail chains; distributors and general trade retailers; hotels, restaurants and cafes; gyms, sports nutrition and wellness stores; hospitals and pharmacies; and online grocery platforms.

Because demand and competition vary from one district to the next, the market section of a full report is prepared for the promoter's chosen location, with a list of existing manufacturers.

## 4 Manufacturing process

Production of coconut water follows seven main steps, from receiving and grading to labelling and cold storage. The flow chart shows how material moves through the plant.



Process flow for coconut water

- 1 Receiving and grading.** Tender coconuts of 6 to 8 months maturity are checked for cracks and sorted by size so that water yield and taste stay uniform.
- 2 Washing.** Nuts are scrubbed and washed in chlorinated water to remove dirt and microbes from the husk before opening.
- 3 Punching and extraction.** A punching machine opens each nut and the water is drained into chilled stainless steel tanks within minutes to limit browning.
- 4 Filtration.** The water passes through bag and cartridge filters to remove husk fibre and kernel bits, and ascorbic acid is dosed to protect colour.
- 5 Pasteurisation.** A plate heat exchanger heats the water briefly to inactivate enzymes and microbes and then chills it back quickly to keep the fresh taste.
- 6 Filling and capping.** Bottles are rinsed, filled and capped on an automatic line in a clean room and passed through a tunnel cooler.
- 7 Labelling and cold storage.** Bottles are sleeved, batch coded and held in a cold room until dispatch through chilled distribution.

## 5 Raw materials

The main raw materials are tender green coconuts, ascorbic acid and citric acid, and filter cartridges and process consumables. In Year 3, at 70% utilisation, raw materials cost ₹423.01 lakh, about 40.9% of sales. The table shows how this cost splits between materials.

| Raw material                              | Share of cost | Year 3 cost (₹ lakh) |
|-------------------------------------------|---------------|----------------------|
| Tender green coconuts                     | 90.0%         | 380.71               |
| Ascorbic acid and citric acid             | 4.0%          | 16.92                |
| Filter cartridges and process consumables | 6.0%          | 25.38                |
| <b>Total raw materials</b>                | <b>100.0%</b> | <b>423.01</b>        |

## 6 Plant and machinery

The machinery list below covers the main production equipment, costed at ₹242.86 lakh in total. Prices are indicative. A full report gives specifications and supplier names, and a bank-format DPR uses the quotations you obtain.

| Machinery and equipment                               | Indicative cost (₹ lakh) |
|-------------------------------------------------------|--------------------------|
| Tender coconut punching and water extraction machine  | 29.14                    |
| Stainless steel chilled collection and buffer tanks   | 21.86                    |
| Cartridge and bag filtration system                   | 14.57                    |
| Plate heat exchanger pasteuriser with chiller         | 48.57                    |
| Automatic bottle rinsing, filling and capping machine | 53.43                    |
| Tunnel cooler                                         | 17.00                    |
| CIP system                                            | 19.43                    |
| Shrink sleeve labelling and batch coding machine      | 19.43                    |
| Cold storage room                                     | 19.43                    |
| <b>Total plant and machinery</b>                      | <b>242.86</b>            |

## 7 Land, building and utilities

Land and site development is taken at ₹42.52 lakh and building and civil works at ₹109.94 lakh. Other fixed assets, including electrification, furniture, testing equipment and power backup, add ₹24.80 lakh. Land rates vary widely by location, so these are the figures most likely to change in a real project.

Utilities in Year 3 cost ₹58.81 lakh for power and fuel, or 5.7% of sales. The plant also needs a reliable water supply for cleaning and domestic use, and for the process where required.

## 8 Manpower

Staffing for the model unit is 44 people, at a Year 1 cost of ₹82.32 lakh. Wages are escalated by 5% each year in the projections.

| Category                                   | Number    | Monthly wage (₹) | Annual cost (₹ lakh) |
|--------------------------------------------|-----------|------------------|----------------------|
| Management, supervision and administration | 7         | 27,000           | 22.68                |
| Skilled workers and operators              | 15        | 17,000           | 30.60                |
| Semi-skilled and unskilled workers         | 22        | 11,000           | 29.04                |
| <b>Total (Year 1)</b>                      | <b>44</b> |                  | <b>82.32</b>         |

## 9 Licences and approvals

A unit of this kind typically needs the following registrations and approvals. Requirements vary by state and by the exact product, so confirm them with the local authorities before applying.

- Udyam (MSME) registration
- GST registration
- Consent to establish and consent to operate from the State Pollution Control Board
- Factory licence or registration under the applicable labour law, where the workforce threshold applies
- Fire safety NOC, where required
- Trade licence from the local body
- FSSAI manufacturing licence
- Legal Metrology registration for packaged commodities
- EPR registration as a brand owner under the Plastic Waste Management Rules

## 10 Project cost and means of finance

Setting up the unit costs ₹466.01 lakh in all, of which plant and machinery is ₹242.86 lakh. The estimate includes a 5% contingency on building and machinery, pre-operative expenses and the margin money needed to start working capital.

| Cost of project                                                        | ₹ lakh        |
|------------------------------------------------------------------------|---------------|
| Land and site development                                              | 42.52         |
| Building and civil works                                               | 109.94        |
| Plant and machinery                                                    | 242.86        |
| Other fixed assets (electrification, furniture, lab equipment, DG set) | 24.80         |
| Contingencies                                                          | 17.64         |
| Preliminary and pre-operative expenses                                 | 10.94         |
| Margin money for working capital                                       | 17.31         |
| <b>Total cost of project</b>                                           | <b>466.01</b> |

### Means of finance

Funding follows a 75:25 split between bank loan and promoter's contribution, with a term loan of ₹349.51 lakh and promoter funds of ₹116.50 lakh. The bank also provides a cash credit limit of ₹51.92 lakh for working capital.

| Source of funds                                         | ₹ lakh        |
|---------------------------------------------------------|---------------|
| Promoter's contribution (25%)                           | 116.50        |
| Term loan from bank (75%)                               | 349.51        |
| <b>Total means of finance</b>                           | <b>466.01</b> |
| <i>Cash credit limit for working capital (separate)</i> | <i>51.92</i>  |

## 11 Working capital

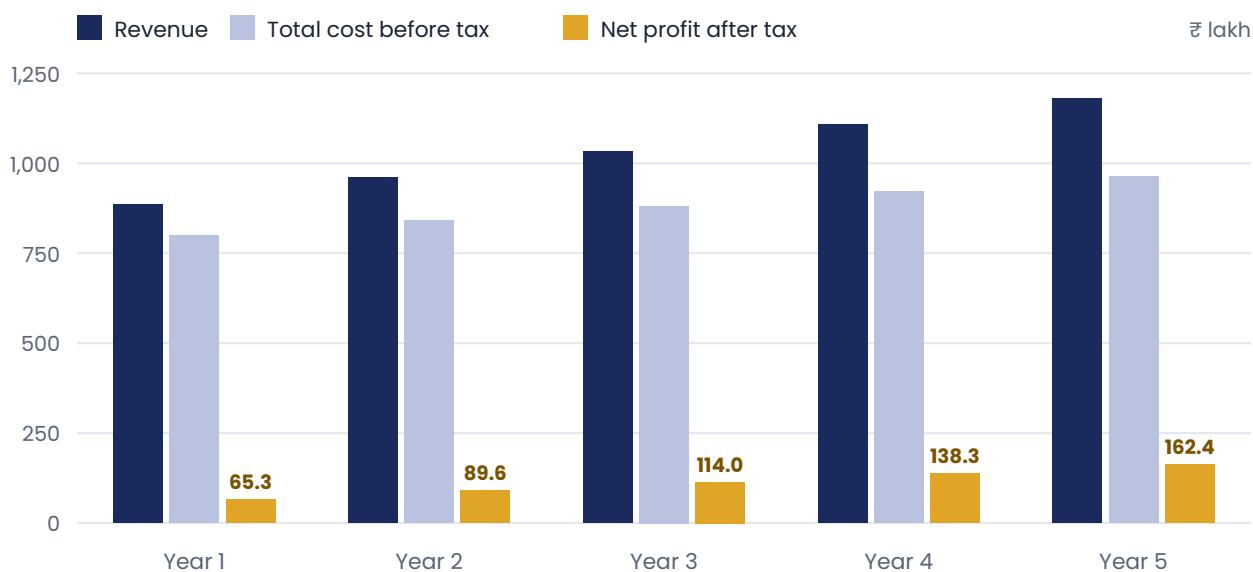
The unit needs ₹69.23 lakh of working capital in Year 1, based on 3 days of raw material stock, 10 days of finished goods and 30 days of customer credit, net of 20 days of supplier credit. Of this, ₹51.92 lakh comes from the bank and ₹17.31 lakh from the promoter.

| Particulars (₹ lakh)               | Year 1<br>FY 2027-28 | Year 2<br>FY 2028-29 | Year 3<br>FY 2029-30 | Year 4<br>FY 2030-31 | Year 5<br>FY 2031-32 |
|------------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Raw material stock (3 days)        | 2.98                 | 3.23                 | 3.48                 | 3.73                 | 3.97                 |
| Work in progress (2 days)          | 2.71                 | 2.93                 | 3.14                 | 3.35                 | 3.57                 |
| Finished goods (10 days)           | 16.87                | 18.20                | 19.53                | 20.86                | 22.20                |
| Trade receivables (30 days)        | 72.79                | 78.85                | 84.92                | 90.99                | 97.05                |
| <b>Total current assets</b>        | <b>95.35</b>         | <b>103.21</b>        | <b>111.07</b>        | <b>118.93</b>        | <b>126.79</b>        |
| Less: trade creditors (20 days)    | 26.12                | 28.30                | 30.47                | 32.65                | 34.83                |
| <b>Working capital requirement</b> | <b>69.23</b>         | <b>74.91</b>         | <b>80.60</b>         | <b>86.28</b>         | <b>91.96</b>         |

## 12 Projected profitability

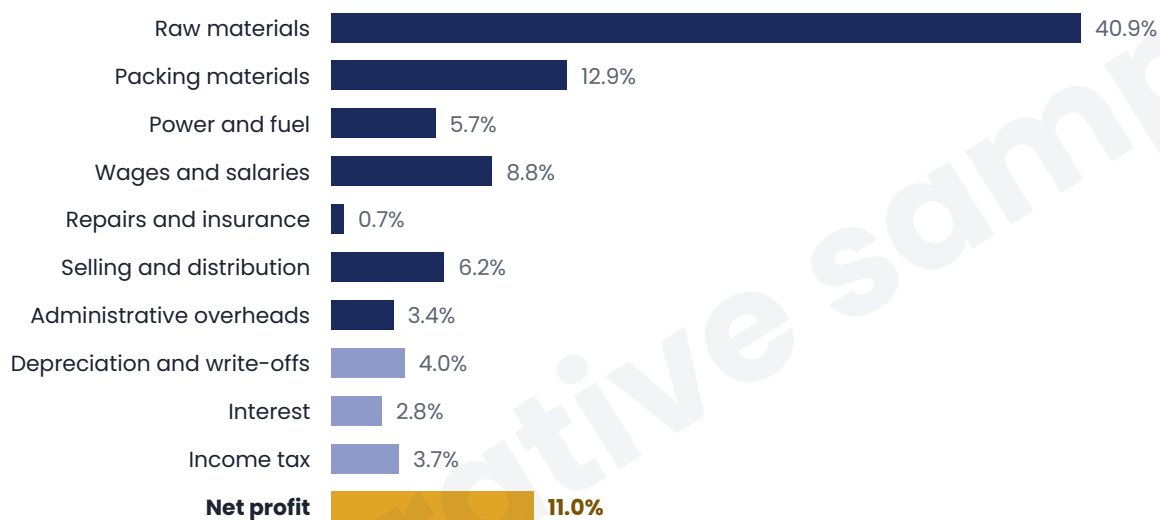
The unit is profitable from the first year, with a net profit of ₹65.34 lakh on sales of ₹885.60 lakh. By Year 5 sales reach ₹1,180.80 lakh and net profit ₹162.43 lakh, giving an average net margin of 10.8% across the projection.

| Particulars (₹ lakh)              | Year 1<br>FY 2027-28 | Year 2<br>FY 2028-29 | Year 3<br>FY 2029-30 | Year 4<br>FY 2030-31 | Year 5<br>FY 2031-32 |
|-----------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Capacity utilisation (%)          | 60%                  | 65%                  | 70%                  | 75%                  | 80%                  |
| Revenue from operations           | 885.60               | 959.40               | 1,033.20             | 1,107.00             | 1,180.80             |
| Raw materials consumed            | 362.58               | 392.80               | 423.01               | 453.23               | 483.44               |
| Packing materials                 | 114.13               | 123.64               | 133.15               | 142.66               | 152.17               |
| Power and fuel                    | 50.41                | 54.61                | 58.81                | 63.01                | 67.21                |
| Wages and salaries                | 82.32                | 86.44                | 90.76                | 95.30                | 100.06               |
| Repairs and maintenance           | 4.86                 | 5.10                 | 5.36                 | 5.62                 | 5.90                 |
| Insurance                         | 1.58                 | 1.58                 | 1.58                 | 1.58                 | 1.58                 |
| Cost of production                | 615.88               | 664.17               | 712.67               | 761.40               | 810.36               |
| <b>Gross profit</b>               | <b>269.72</b>        | <b>295.23</b>        | <b>320.53</b>        | <b>345.60</b>        | <b>370.44</b>        |
| Selling and distribution expenses | 54.62                | 59.18                | 63.73                | 68.28                | 72.83                |
| Administrative overheads          | 31.79                | 33.38                | 35.05                | 36.80                | 38.64                |
| <b>Operating profit (EBITDA)</b>  | <b>183.31</b>        | <b>202.67</b>        | <b>221.75</b>        | <b>240.52</b>        | <b>258.97</b>        |
| Depreciation                      | 52.27                | 45.13                | 39.00                | 33.72                | 29.17                |
| Preliminary expenses written off  | 2.19                 | 2.19                 | 2.19                 | 2.19                 | 2.18                 |
| Interest on term loan             | 36.02                | 30.23                | 22.78                | 14.52                | 5.34                 |
| Interest on cash credit           | 5.71                 | 5.71                 | 5.71                 | 5.71                 | 5.71                 |
| <b>Profit before tax</b>          | <b>87.12</b>         | <b>119.41</b>        | <b>152.07</b>        | <b>184.38</b>        | <b>216.57</b>        |
| Income tax                        | 21.78                | 29.85                | 38.02                | 46.10                | 54.14                |
| <b>Profit after tax</b>           | <b>65.34</b>         | <b>89.56</b>         | <b>114.05</b>        | <b>138.28</b>        | <b>162.43</b>        |



Revenue, total cost before tax and net profit after tax, ₹ lakh

### Where each rupee of sales goes in Year 3



Each cost head as a percentage of Year 3 sales

## 13 Cash flow statement

The cash flow statement sets out the sources and uses of funds year by year. The unit stays cash positive throughout and closes Year 5 with a cash balance of ₹407.65 lakh after meeting the loan repayments due.

| Particulars (₹ lakh)                    | Year 1<br>FY 2027-28 | Year 2<br>FY 2028-29 | Year 3<br>FY 2029-30 | Year 4<br>FY 2030-31 | Year 5<br>FY 2031-32 |
|-----------------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| <b>Sources of funds</b>                 |                      |                      |                      |                      |                      |
| Promoter's contribution                 | 116.50               | –                    | –                    | –                    | –                    |
| Term loan from bank                     | 349.51               | –                    | –                    | –                    | –                    |
| Cash credit (working capital) from bank | 51.92                | –                    | –                    | –                    | –                    |
| Net profit after tax                    | 65.34                | 89.56                | 114.05               | 138.28               | 162.43               |
| Depreciation                            | 52.27                | 45.13                | 39.00                | 33.72                | 29.17                |
| Preliminary expenses written off        | 2.19                 | 2.19                 | 2.19                 | 2.19                 | 2.18                 |
| Increase in trade creditors             | 26.12                | 2.18                 | 2.17                 | 2.18                 | 2.18                 |
| <b>Total sources</b>                    | <b>663.85</b>        | <b>139.06</b>        | <b>157.41</b>        | <b>176.37</b>        | <b>195.96</b>        |
| <b>Application of funds</b>             |                      |                      |                      |                      |                      |
| Fixed assets                            | 437.76               | –                    | –                    | –                    | –                    |
| Preliminary and pre-operative expenses  | 10.94                | –                    | –                    | –                    | –                    |
| Increase in inventories                 | 22.56                | 1.80                 | 1.79                 | 1.79                 | 1.80                 |
| Increase in trade receivables           | 72.79                | 6.06                 | 6.07                 | 6.07                 | 6.06                 |
| Repayment of term loan                  | 31.22                | 67.56                | 75.01                | 83.27                | 92.45                |
| Drawings                                | –                    | –                    | –                    | –                    | –                    |
| <b>Total application</b>                | <b>575.27</b>        | <b>75.42</b>         | <b>82.87</b>         | <b>91.13</b>         | <b>100.31</b>        |
| <b>Net cash flow</b>                    | <b>88.58</b>         | <b>63.64</b>         | <b>74.54</b>         | <b>85.24</b>         | <b>95.65</b>         |
| Opening cash balance                    | –                    | 88.58                | 152.22               | 226.76               | 312.00               |
| <b>Closing cash balance</b>             | <b>88.58</b>         | <b>152.22</b>        | <b>226.76</b>        | <b>312.00</b>        | <b>407.65</b>        |

## 14 Projected balance sheet

Over the projection, retained profits build the promoter's net worth from ₹173.09 lakh to ₹686.16 lakh, and the term loan reduces from ₹318.29 lakh to nil as it is repaid.

| As at year end (₹ lakh)              | Year 1<br>FY 2027-28 | Year 2<br>FY 2028-29 | Year 3<br>FY 2029-30 | Year 4<br>FY 2030-31 | Year 5<br>FY 2031-32 |
|--------------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| <b>Liabilities</b>                   |                      |                      |                      |                      |                      |
| Promoter's capital                   | 116.50               | 116.50               | 116.50               | 116.50               | 116.50               |
| Reserves and surplus                 | 65.34                | 154.90               | 268.95               | 407.23               | 569.66               |
| Term loan                            | 318.29               | 250.73               | 175.72               | 92.45                | –                    |
| Cash credit from bank                | 51.92                | 51.92                | 51.92                | 51.92                | 51.92                |
| Trade creditors                      | 26.12                | 28.30                | 30.47                | 32.65                | 34.83                |
| <b>Total liabilities</b>             | <b>578.17</b>        | <b>602.35</b>        | <b>643.56</b>        | <b>700.75</b>        | <b>772.91</b>        |
| <b>Assets</b>                        |                      |                      |                      |                      |                      |
| Gross fixed assets                   | 437.76               | 437.76               | 437.76               | 437.76               | 437.76               |
| Less: accumulated depreciation       | (52.27)              | (97.40)              | (136.40)             | (170.12)             | (199.29)             |
| <b>Net fixed assets</b>              | <b>385.49</b>        | <b>340.36</b>        | <b>301.36</b>        | <b>267.64</b>        | <b>238.47</b>        |
| Preliminary expenses not written off | 8.75                 | 6.56                 | 4.37                 | 2.18                 | –                    |
| Inventories                          | 22.56                | 24.36                | 26.15                | 27.94                | 29.74                |
| Trade receivables                    | 72.79                | 78.85                | 84.92                | 90.99                | 97.05                |
| Cash and bank balance                | 88.58                | 152.22               | 226.76               | 312.00               | 407.65               |
| <b>Total assets</b>                  | <b>578.17</b>        | <b>602.35</b>        | <b>643.56</b>        | <b>700.75</b>        | <b>772.91</b>        |

## 15 Depreciation

Fixed assets are depreciated on the written-down value method, at 15% a year for plant and machinery, 10% for building and 10% for other assets. Land carries no depreciation.

Preliminary and pre-operative expenses are written off in equal parts over five years.

| Particulars (₹ lakh)                                         | Year 1<br>FY 2027-28 | Year 2<br>FY 2028-29 | Year 3<br>FY 2029-30 | Year 4<br>FY 2030-31 | Year 5<br>FY 2031-32 |
|--------------------------------------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| <b>Building and civil works (cost ₹115.44 lakh, 10% WDV)</b> |                      |                      |                      |                      |                      |
| Opening written-down value                                   | 115.44               | 103.90               | 93.51                | 84.16                | 75.74                |
| Depreciation                                                 | 11.54                | 10.39                | 9.35                 | 8.42                 | 7.57                 |
| Closing written-down value                                   | 103.90               | 93.51                | 84.16                | 75.74                | 68.17                |
| <b>Plant and machinery (cost ₹255.00 lakh, 15% WDV)</b>      |                      |                      |                      |                      |                      |
| Opening written-down value                                   | 255.00               | 216.75               | 184.24               | 156.60               | 133.11               |
| Depreciation                                                 | 38.25                | 32.51                | 27.64                | 23.49                | 19.97                |
| Closing written-down value                                   | 216.75               | 184.24               | 156.60               | 133.11               | 113.14               |
| <b>Other fixed assets (cost ₹24.80 lakh, 10% WDV)</b>        |                      |                      |                      |                      |                      |
| Opening written-down value                                   | 24.80                | 22.32                | 20.09                | 18.08                | 16.27                |
| Depreciation                                                 | 2.48                 | 2.23                 | 2.01                 | 1.81                 | 1.63                 |
| Closing written-down value                                   | 22.32                | 20.09                | 18.08                | 16.27                | 14.64                |
| <b>Total depreciation</b>                                    | <b>52.27</b>         | <b>45.13</b>         | <b>39.00</b>         | <b>33.72</b>         | <b>29.17</b>         |
| Preliminary expenses written off                             | 2.19                 | 2.19                 | 2.19                 | 2.19                 | 2.18                 |

## 16 Term loan repayment

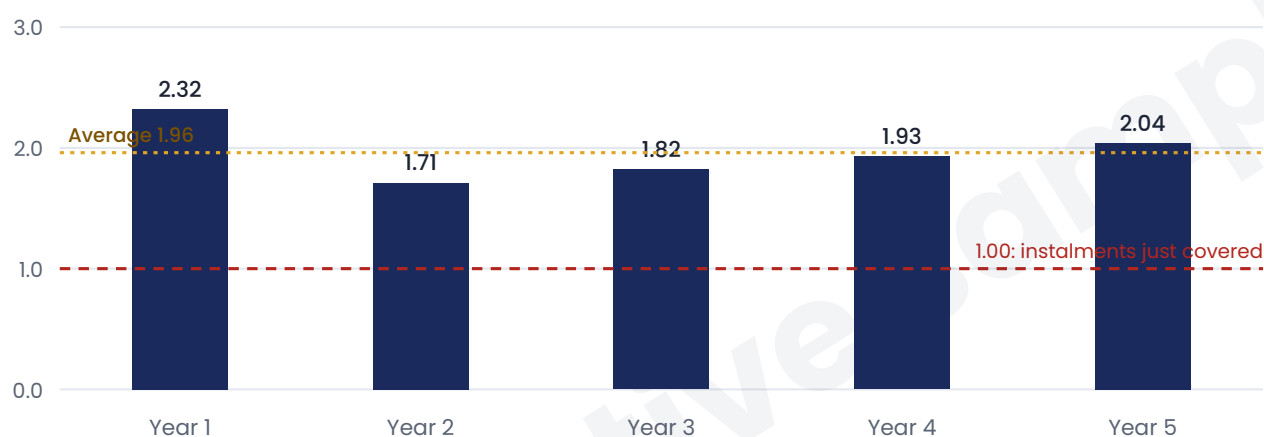
Repayment of the ₹349.51 lakh term loan starts after a moratorium of 6 months, during which interest at 10.5% is serviced. The loan is then cleared in 54 EMIs of ₹8,14,924 each, and the annexure gives the monthly schedule.

| Particulars (₹ lakh)   | Year 1<br>FY 2027-28 | Year 2<br>FY 2028-29 | Year 3<br>FY 2029-30 | Year 4<br>FY 2030-31 | Year 5<br>FY 2031-32 |
|------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Opening balance        | 349.51               | 318.29               | 250.73               | 175.72               | 92.45                |
| Interest               | 36.02                | 30.23                | 22.78                | 14.52                | 5.34                 |
| Principal repaid       | 31.22                | 67.56                | 75.01                | 83.27                | 92.45                |
| <b>Closing balance</b> | <b>318.29</b>        | <b>250.73</b>        | <b>175.72</b>        | <b>92.45</b>         | <b>—</b>             |

## 17 Debt service coverage

Cash available for debt service covers the term loan instalments 1.96 times on average, and never less than 1.71 times (Year 2).

| Particulars (₹ lakh)                        | Year 1<br>FY 2027-28 | Year 2<br>FY 2028-29 | Year 3<br>FY 2029-30 | Year 4<br>FY 2030-31 | Year 5<br>FY 2031-32 |
|---------------------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Net profit after tax                        | 65.34                | 89.56                | 114.05               | 138.28               | 162.43               |
| Depreciation and write-offs                 | 54.46                | 47.32                | 41.19                | 35.91                | 31.35                |
| Interest on term loan                       | 36.02                | 30.23                | 22.78                | 14.52                | 5.34                 |
| <b>Total available for debt service (A)</b> | <b>155.82</b>        | <b>167.11</b>        | <b>178.02</b>        | <b>188.71</b>        | <b>199.12</b>        |
| Principal repayment                         | 31.22                | 67.56                | 75.01                | 83.27                | 92.45                |
| Interest on term loan                       | 36.02                | 30.23                | 22.78                | 14.52                | 5.34                 |
| <b>Total debt service (B)</b>               | <b>67.24</b>         | <b>97.79</b>         | <b>97.79</b>         | <b>97.79</b>         | <b>97.79</b>         |
| <b>DSCR (A / B)</b>                         | <b>2.32</b>          | <b>1.71</b>          | <b>1.82</b>          | <b>1.93</b>          | <b>2.04</b>          |

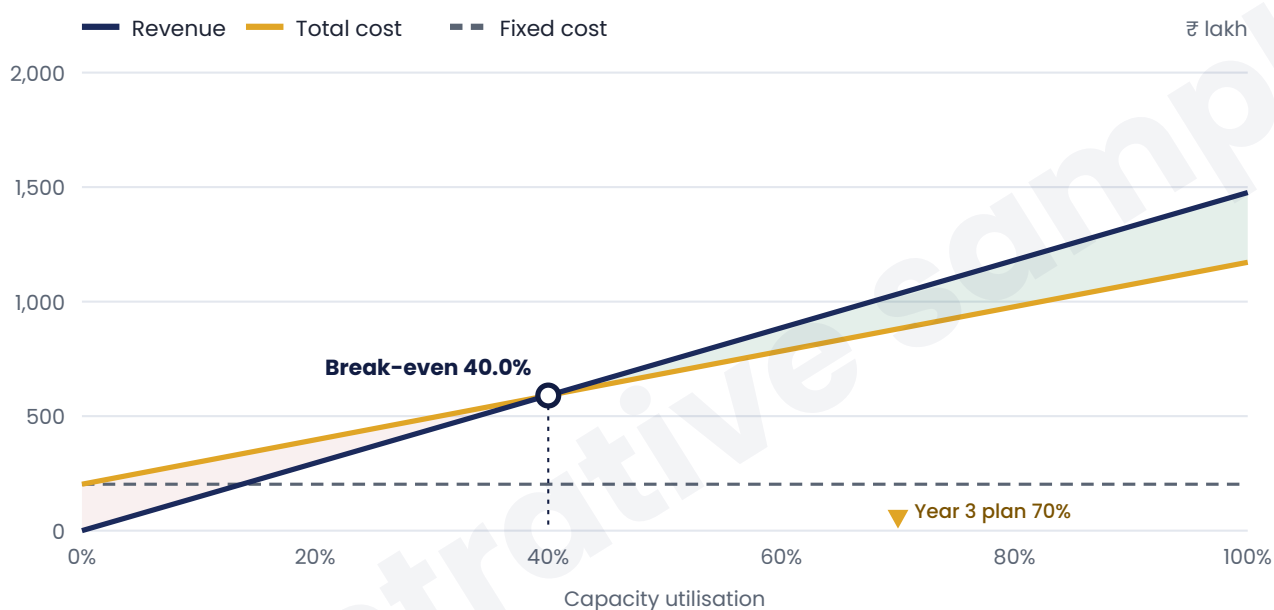


DSCR by year. A ratio above 1.00 means cash accruals cover the term loan instalments.

## 18 Break-even analysis

The unit needs to run at 40% of capacity to break even in Year 3, well below the 70% assumed for that year. Cash break-even, which excludes depreciation and write-offs, is 31.8%.

| Particulars (₹ lakh)                          | Year 1<br>FY 2027-28 | Year 2<br>FY 2028-29 | Year 3<br>FY 2029-30 | Year 4<br>FY 2030-31 | Year 5<br>FY 2031-32 |
|-----------------------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Revenue from operations                       | 885.60               | 959.40               | 1,033.20             | 1,107.00             | 1,180.80             |
| Variable costs                                | 581.74               | 630.23               | 678.70               | 727.18               | 775.65               |
| <b>Contribution</b>                           | <b>303.86</b>        | <b>329.17</b>        | <b>354.50</b>        | <b>379.82</b>        | <b>405.15</b>        |
| Fixed costs (incl. depreciation and interest) | 216.74               | 209.76               | 202.43               | 195.44               | 188.58               |
| Break-even as % of installed capacity         | 42.8                 | 41.4                 | 40.0                 | 38.6                 | 37.2                 |
| Cash break-even as % of installed capacity    | 32.0                 | 32.1                 | 31.8                 | 31.5                 | 31.0                 |
| Break-even sales                              | 631.69               | 611.37               | 589.99               | 569.62               | 549.61               |



Break-even chart at Year 3 prices and costs, scaled to full capacity. Shaded areas show the loss zone (left) and profit zone (right).

## 19 Financial ratios

The table summarises the main ratios a lender reviews. The current ratio is 2.36 or better in every year, and the debt-equity ratio falls from 1.84 at the end of Year 1 to zero by Year 5.

| Ratio                                     | Year 1<br>FY 2027-28 | Year 2<br>FY 2028-29 | Year 3<br>FY 2029-30 | Year 4<br>FY 2030-31 | Year 5<br>FY 2031-32 |
|-------------------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Current ratio                             | 2.36                 | 3.18                 | 4.10                 | 5.10                 | 6.16                 |
| Quick ratio                               | 2.07                 | 2.88                 | 3.78                 | 4.77                 | 5.82                 |
| Debt-equity ratio (term loan / net worth) | 1.84                 | 0.95                 | 0.46                 | 0.18                 | 0.00                 |
| Total outside liabilities / net worth     | 2.29                 | 1.25                 | 0.68                 | 0.34                 | 0.13                 |
| Interest coverage ratio                   | 3.09                 | 4.32                 | 6.34                 | 10.11                | 20.60                |
| DSCR                                      | 2.32                 | 1.71                 | 1.82                 | 1.93                 | 2.04                 |
| Gross profit margin (%)                   | 30.5                 | 30.8                 | 31.0                 | 31.2                 | 31.4                 |
| Operating profit (EBITDA) margin (%)      | 20.7                 | 21.1                 | 21.5                 | 21.7                 | 21.9                 |
| Net profit margin (%)                     | 7.4                  | 9.3                  | 11.0                 | 12.5                 | 13.8                 |
| Return on capital employed (%)            | 23.7                 | 27.4                 | 29.7                 | 30.7                 | 30.8                 |
| Break-even (% of installed capacity)      | 42.8                 | 41.4                 | 40.0                 | 38.6                 | 37.2                 |

## 20 Key assumptions

- Commercial production starts in April 2027, and all assets are in use from the first year.
- Capacity utilisation of 60% in Year 1, rising to 80% by Year 5, over 300 working days a year.
- Selling price of ₹164 per litre, excluding GST, held constant through the projection.
- Raw materials at 40.9% of sales, packing materials at 12.9%, power and fuel at 5.7%, and selling and distribution at 6.2%.
- Wages and salaries rise by 5% a year; repairs and administrative overheads rise by 5% a year.
- Working capital based on 3 days of raw material, 2 days of work in progress, 10 days of finished goods and 30 days of receivables, less 20 days of creditors.
- Term loan at 10.5% interest with a 6-month moratorium and 54 monthly instalments; cash credit at 11% on 75% of the working capital requirement.
- Depreciation on the written-down value method at Income Tax Act rates; income tax at a flat 25% of profit for simplicity.
- Contingency of 5% on building and machinery; preliminary and pre-operative expenses written off over five years.
- All amounts in ₹ lakh unless stated otherwise, excluding GST.

## 21 Conclusion

The model shows that a coconut water unit sized at 3,000 litres per day can be financed 75:25 by a bank and its promoter, service its loan with an average DSCR of 1.96, and return about 24.4% a year on a project cost of ₹466.01 lakh. These are sample figures. A real project needs a report built on its own site, quotations and market.

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This document is a computer-generated illustrative sample. The capacity, prices, costs and projections are representative assumptions for a typical small-scale unit and are not based on any specific project, location or quotation. Statutory requirements change and vary by state. Niir Project Consultancy Services accepts no liability for decisions taken on the basis of this sample.

## A Annexure: monthly loan repayment schedule

Term loan of ₹349.51 lakh at 10.5% a year. Amounts in ₹ lakh.

| No. | Month    | Opening balance | Interest | Principal | Instalment | Closing balance |
|-----|----------|-----------------|----------|-----------|------------|-----------------|
| 1   | Apr 2027 | 349.51          | 3.06     | –         | 3.06       | 349.51          |
| 2   | May 2027 | 349.51          | 3.06     | –         | 3.06       | 349.51          |
| 3   | Jun 2027 | 349.51          | 3.06     | –         | 3.06       | 349.51          |
| 4   | Jul 2027 | 349.51          | 3.06     | –         | 3.06       | 349.51          |
| 5   | Aug 2027 | 349.51          | 3.06     | –         | 3.06       | 349.51          |
| 6   | Sep 2027 | 349.51          | 3.06     | –         | 3.06       | 349.51          |
| 7   | Oct 2027 | 349.51          | 3.06     | 5.09      | 8.15       | 344.42          |
| 8   | Nov 2027 | 344.42          | 3.01     | 5.14      | 8.15       | 339.28          |
| 9   | Dec 2027 | 339.28          | 2.97     | 5.18      | 8.15       | 334.10          |
| 10  | Jan 2028 | 334.10          | 2.92     | 5.23      | 8.15       | 328.88          |
| 11  | Feb 2028 | 328.88          | 2.88     | 5.27      | 8.15       | 323.61          |
| 12  | Mar 2028 | 323.61          | 2.83     | 5.32      | 8.15       | 318.29          |
| 13  | Apr 2028 | 318.29          | 2.79     | 5.36      | 8.15       | 312.92          |
| 14  | May 2028 | 312.92          | 2.74     | 5.41      | 8.15       | 307.51          |
| 15  | Jun 2028 | 307.51          | 2.69     | 5.46      | 8.15       | 302.05          |
| 16  | Jul 2028 | 302.05          | 2.64     | 5.51      | 8.15       | 296.55          |
| 17  | Aug 2028 | 296.55          | 2.59     | 5.55      | 8.15       | 290.99          |
| 18  | Sep 2028 | 290.99          | 2.55     | 5.60      | 8.15       | 285.39          |
| 19  | Oct 2028 | 285.39          | 2.50     | 5.65      | 8.15       | 279.74          |
| 20  | Nov 2028 | 279.74          | 2.45     | 5.70      | 8.15       | 274.04          |
| 21  | Dec 2028 | 274.04          | 2.40     | 5.75      | 8.15       | 268.29          |
| 22  | Jan 2029 | 268.29          | 2.35     | 5.80      | 8.15       | 262.48          |
| 23  | Feb 2029 | 262.48          | 2.30     | 5.85      | 8.15       | 256.63          |
| 24  | Mar 2029 | 256.63          | 2.25     | 5.90      | 8.15       | 250.73          |
| 25  | Apr 2029 | 250.73          | 2.19     | 5.96      | 8.15       | 244.77          |
| 26  | May 2029 | 244.77          | 2.14     | 6.01      | 8.15       | 238.76          |
| 27  | Jun 2029 | 238.76          | 2.09     | 6.06      | 8.15       | 232.70          |
| 28  | Jul 2029 | 232.70          | 2.04     | 6.11      | 8.15       | 226.59          |
| 29  | Aug 2029 | 226.59          | 1.98     | 6.17      | 8.15       | 220.42          |
| 30  | Sep 2029 | 220.42          | 1.93     | 6.22      | 8.15       | 214.20          |
| 31  | Oct 2029 | 214.20          | 1.87     | 6.27      | 8.15       | 207.93          |
| 32  | Nov 2029 | 207.93          | 1.82     | 6.33      | 8.15       | 201.60          |
| 33  | Dec 2029 | 201.60          | 1.76     | 6.39      | 8.15       | 195.21          |
| 34  | Jan 2030 | 195.21          | 1.71     | 6.44      | 8.15       | 188.77          |
| 35  | Feb 2030 | 188.77          | 1.65     | 6.50      | 8.15       | 182.28          |
| 36  | Mar 2030 | 182.28          | 1.59     | 6.55      | 8.15       | 175.72          |
| 37  | Apr 2030 | 175.72          | 1.54     | 6.61      | 8.15       | 169.11          |
| 38  | May 2030 | 169.11          | 1.48     | 6.67      | 8.15       | 162.44          |
| 39  | Jun 2030 | 162.44          | 1.42     | 6.73      | 8.15       | 155.71          |

| No. | Month    | Opening balance | Interest | Principal | Instalment | Closing balance |
|-----|----------|-----------------|----------|-----------|------------|-----------------|
| 40  | Jul 2030 | 155.71          | 1.36     | 6.79      | 8.15       | 148.93          |
| 41  | Aug 2030 | 148.93          | 1.30     | 6.85      | 8.15       | 142.08          |
| 42  | Sep 2030 | 142.08          | 1.24     | 6.91      | 8.15       | 135.17          |
| 43  | Oct 2030 | 135.17          | 1.18     | 6.97      | 8.15       | 128.21          |
| 44  | Nov 2030 | 128.21          | 1.12     | 7.03      | 8.15       | 121.18          |
| 45  | Dec 2030 | 121.18          | 1.06     | 7.09      | 8.15       | 114.09          |
| 46  | Jan 2031 | 114.09          | 1.00     | 7.15      | 8.15       | 106.94          |
| 47  | Feb 2031 | 106.94          | 0.94     | 7.21      | 8.15       | 99.73           |
| 48  | Mar 2031 | 99.73           | 0.87     | 7.28      | 8.15       | 92.45           |
| 49  | Apr 2031 | 92.45           | 0.81     | 7.34      | 8.15       | 85.11           |
| 50  | May 2031 | 85.11           | 0.74     | 7.40      | 8.15       | 77.70           |
| 51  | Jun 2031 | 77.70           | 0.68     | 7.47      | 8.15       | 70.23           |
| 52  | Jul 2031 | 70.23           | 0.61     | 7.53      | 8.15       | 62.70           |
| 53  | Aug 2031 | 62.70           | 0.55     | 7.60      | 8.15       | 55.10           |
| 54  | Sep 2031 | 55.10           | 0.48     | 7.67      | 8.15       | 47.43           |
| 55  | Oct 2031 | 47.43           | 0.42     | 7.73      | 8.15       | 39.70           |
| 56  | Nov 2031 | 39.70           | 0.35     | 7.80      | 8.15       | 31.90           |
| 57  | Dec 2031 | 31.90           | 0.28     | 7.87      | 8.15       | 24.03           |
| 58  | Jan 2032 | 24.03           | 0.21     | 7.94      | 8.15       | 16.09           |
| 59  | Feb 2032 | 16.09           | 0.14     | 8.01      | 8.15       | 8.08            |
| 60  | Mar 2032 | 8.08            | 0.07     | 8.08      | 8.15       | –               |