

CHAPTER IV

PRODUCT CALCULATION

4.1 Cost of Production

4.1.1 Variable Cost

Table 1. Variable Cost

No.	Description	Total (unit)	Cost/unit (Rp)	Cost/day (Rp)	Cost/bottle (Rp)
1.	Black Rice	3 kg	24.000	72.000	2.400
2.	Kefir Grain	300 gr	5.000	150.000	5.000
3.	Granulated Sugar	0.6 kg	12.500	7.500	250
4.	Water	22 L	5000	110.000	3.700
5.	Packaging	30	6500	195.000	6.500
TOTAL				534.500	17.850

Notes :

1 month = 24 work days

1 days = production 30 bottle(s)

Variable Cost / 1 month = Rp 534.500,- x 24 days
= Rp 12.828.000,-

Variable Cost / 1 year = Rp 12.828.000,- x 12 months
= Rp 153.936.000,-

Production capacity(24 work days) = 30 bottle x 24 days
= 720 bottle (@ 250ml)

4.1.2 Overload Cost

Table 2. Overload Cost

Description	Needs (unit) / month	Cost / unit (Rp)	Cost / month (Rp)
Employee's Salary	2 people	700.000	1.400.000
Electricity and Water	-	250.000	250.000
TOTAL			1.650.000

Notes :

Employees are in charge in production and distribution division.

4.2 Fixed Cost

Table 3. Fixed Cost

Description	Cost
Digital Scale	200.000
Plastic Strainer	15.000
Napkin	10.000
Blender	200.000
TOTAL	425.000

4.3 Break Event Point (BEP)

Notes :

Interest Rate = 15% (investment plans at least 5 years)

Depreciation = 20% x Rp 425.000,- = Rp 85.000,-

Cost of Production / 1 month

= Variable Cost + Overhead Cost + ((20% x Fixed Cost) : 12)

= Rp 12.828.000,- + Rp 1.650.000,- + ((20% x Rp 425.000,-):12)

= Rp 12.828.000,- + Rp 1.650.000,- + Rp 7.083,33

$$= \text{Rp } 14.485.083,-$$

Cost of Production / bottle

$$= \text{Rp } 14.485.083,- : 720 \text{ bottle}$$

$$= \text{Rp } 20.118,17,-$$

Selling Price / bottle

$$= \text{Rp } 20.118,17,- + (15\% \times \text{Rp } 20.118,17,-)$$

$$= \text{Rp } 23.135,89,-$$

$$= \text{Rp } 24.000,-$$

Profit / bottle

$$= \text{Selling Price} - \text{Cost of Production / bottle}$$

$$= \text{Rp } 24.000,- - \text{Rp } 20.118,17,-$$

$$= \text{Rp } 3.881,83,-$$

Profit Total / day

$$= \text{Rp } 3.881,83,- \times 30 \text{ bottle}$$

$$= \text{Rp } 116.454,9,-$$

BEP (unit)

$$= \text{Fixed Cost} : (\text{Selling Price} - \text{Cost of Production})$$

$$= \text{Rp } 425.000,- : (\text{Rp } 24.000,- - \text{Rp } 20.118,17,-)$$

$$= \text{Rp } 425.000,- : \text{Rp } 3.881,83,-$$

$$= 109,503 \text{ unit} = 110 \text{ unit}$$

BEP (Rp)

$$= \text{Fixed Cost} : (1 - (\text{Cost of Production} / \text{Selling Price}))$$

$$= \text{Rp } 425.000,- : (1 - (\text{Rp } 20.118,17 / \text{Rp } 24.000,-))$$

$$= \text{Rp } 2.627.626,660 = \text{Rp } 2.627.627,-$$