

BUSINESS SET-UP GUIDE

Ice Lolly Production

Business Profile Summary

You will need a market that can support sales of at least K83 per day.

You will need around K5,000 to start the business.

Profit potential for this business is around K5,000 per year.

Sales

You will need a market that can support the sale of K500 - K1,000 per week. This guide is focussed on starting a small scale ice lolly production business and selling the product in the local markets.

There exists a strong demand for ice lollies as most people enjoy eating them due to the hot weather prevalent in most parts of Papua New Guinea.

Location

This guide is focussed on producing ice lollies at home and selling the product in the local markets. Hence the owner will need to rent a market stall to sell the product.

Food Preparation Area

The Food Preparation area must be clean and hygienic. It should be large enough to carry out the various stages of ice lolly production & packing viz:

1. Preparing the ice lolly mixture.
2. Dispensing the mixture into the plastic tubes.
3. Sealing the tubes.
4. Freezing the ice lollies.

Costing the Business

Equipment Cost

The following list represents a range of possible equipment needed for establishing a basic ice lolly producing business:

Item	Estimated Cost	Purpose	Update Cost
Equipment			
Plastic drum 25 litres	18	mixing & dispensing	
Ice lolly machine (electric)	1426	making ice lollies	
Freezer	800	freezing the ice lollies	
Eskies	500	storing ice lollies at market stall	

Total equipment	2744		
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The prices used are estimated average cost based on Port Moresby prices at the time this guide was prepared. A column has been provided for the user to update these cost.

The above capital requirements are based on the principle of starting a small scale ice lolly producing operation with minimum outlay of capital.

Staff

A basic ice lolly operation could be started by an owner helped by a family member.

Position	Main Responsibility	Monthly Salary
Owner	Manage business- decide products and prices, prepare food, order supplies, supervise all staff	K450
Helper (1)	Assist in all areas	K150
Total salary		K600

Raw Materials

Product costing is detailed in Annex I.

Your major raw material is fruit concentrate, plastic tubing & water. Most of the materials are available from Rutec. You must always look out for similar materials available from other suppliers at a cheaper cost. You can also use cordials instead of fruit concentrate for making ice lollies.

Based on the costing in Annex 1, your raw material cost will be as follows:

Sale per day		Cost of raw materials per day		Total raw material cost per day	Raw material purchase - per month (28 days)
Kina	# ice lollies	ingredients	packaging*		
60	300	12	13	25	700
80	400	16	20	36	1008
100	500	20	24	44	1232

* Packaging includes plastic tubes at 7 toea each.

Licences/Registration

The size and nature of this business does not require company registration and should be set-up as a sole proprietor or partnership.

Please contact the nearest provincial authorities or NCDC to obtain details of licences required. For the purpose of this guide, the annual licence fee is estimated at K150.00.

Operating Cost

An ice lolly producing business has certain operating costs. Some of these costs are:

- paid once when you establish services such as water, electricity ;
- some are paid on a monthly basis.

When you start your business you will usually need some working capital (money) to establish services, pay certain yearly expenses and to meet some of your monthly operating costs until the business can generate enough income to meet these costs. In the case of an ice lolly producing business this should only be for the first month.

The size and nature of this business probably will not warrant renting a new place. Hence the operating costs listed below are on the basis of incremental costs incurred to run the business. For the purposes of this guide, it has been assumed that the product will be sold through the local market.

Below is a table showing the start-up and monthly operational cost associated with an ice lolly producing business.

Operational cost	Initial working capital	Monthly
Licence	150	0
Rent	220	220
Water charges		50
Electricity charges		100
Depreciation*		14
Ice		50
Cleaning supplies	80	25
Miscellaneous	25	25
Total operational cost	475	484

*** Depreciation calculation**

Depreciation is a business cost that takes account of the “wearing out” of assets, equipment, tools and vehicles. It is a non-cash expense of a business but is still a cost. We need to calculate depreciation for assets with a long life.

Based on the Papua New Guinea Income Tax Act, the following depreciation rates are applicable to most small businesses.

Income Tax Act, Depreciation Rates - Prime cost method

<u>Asset</u>	<u>Annual Depreciation Rate</u>
Tools and Equipment	7.5%
Motor Vehicles	20.0%
Office Furniture	7.5%
Retail Building	2.0%
Factory Building	7.5%

To calculate depreciation for a medium size bakery we have to apply the required rate to the assets with a long life as follows:

Ice lolly machine (electric)	1426
Freezer	800
Total	2226

To calculate depreciation for this business we have to apply the required rate to the capital cost as follows : Depreciation = 7.5% X 2226 = K167 per year or K14 per month.

Start-up Costs

You will need money to meet a number of other cost in order to start your business as shown in the following table:

Item	Total	Update
Equipment	2744	
Staff	600	
Raw materials (first month)	700	
Operating working capital	475	
Total start-up cost	4519	

The cost to start a ice lolly business is around K5,000.

Profitability

Monthly Profit and Loss

	Break even Sales		
	83	100	150
Sale per day			
Sales per month (25 days)	2068	2800	3750
Cost of raw materials	1034	1400	1875
Gross profit	1034	1400	1875
Operational expenses			
Rent (market stall)	220	220	220
Wages	600	600	600
Electricity	100	100	100
Water	50	50	50
Depreciation	14	14	14
Cleaning supplies	25	25	25
Miscellaneous	25	25	25
Total	1034	1034	1034
Operating profit per month before tax	0	366	841

Break even sales

If we assume a mark-up of 100 % on all products then the break even sales for this business is around K83 per day. This means that if you sell less than K83 per day, you will make a loss. If you sell more than K83 per day, you will make a profit.

Financing the Business

It is assumed that the business will be financed using savings rather than borrowed funds. However it is possible to approach various lending institutions to supplement own funds

with borrowed funds. Your local branch of the Small Business Development Corporation can assist you with identifying these institutions.

Please be aware of the following facts about borrowed funds:

- 20% of the project cost must be financed using savings, before the lending institution will consider lending the funds.
- The above expenses and profit must be adjusted to take into account the additional interest expense.
- A detailed projected cash flow statement must be prepared to ensure that the business generates enough cash to repay the loan.
- Borrowed funds introduce greater risk in a business. In general the greater the level of borrowed funds, the greater the risk.
- While SBDC may assist you in approaching lending institutions, it cannot guarantee the success of any loan application.

Assuming we finance the business with a loan for 80% of the start-up cost @ 14 % interest, over 12 months, your interest and monthly payment will be as follows:

Start-up cost	=	5000
Own funds 20 %	=	1000
Loan funds 80 %	=	4000
Total interest on loan	=	560
Monthly payments		380

Business Planning

Before turning your idea into an operating business, collect information and make plans to see if your business will be successful. Just like an engineer who prepares a plan before building a bridge, a business owner needs to prepare a business plan.

A business plan is a written document that describes in detail all aspects of your business. Preparing a business plan will help you to think carefully and find out if there are any weaknesses in your business idea.

Most importantly, a business plan gives an opportunity to try out your business idea on paper rather than in reality. It is much better to do a business plan and find out that the idea is not good than to start a business that will fail.

Where can you get help?

There are a number of organisations that can help you establish this business to include:

Name of Organisation	Address	Phone/Fax	Assistance
Small Business Development Corporation	P O Box 286 Waigani	Ph 3250100 Fx 325-0801	Start Your Business training and business advise and assistance.

Name of Organisation	Address	Phone/Fax	Assistance
	P.O. Box 1106 Kokopo P.O. Box 1613 Mt. Hagen P.O. Box 1092 Wewak	Ph 982 8201 Fx 982 8664 Ph 542 1067 Fx 542 1275 Ph 856 3201 Fx 856 3204	
Small Business Development Corporation	P.O. Box 103, Lae	Ph 472 1677 Fx 472 3876	Technical training in food processing. Advice and assistance. Sourcing of equipment
Appropriate Technology & Community Development Institute	Private Mail Bag Lae, Morobe Province	473-4781 473-4303	Technical information and books Skills training. Technical advice.
Food Processing & Preservation Unit (FPPU)	P.O. Box 19 UniTech Lae	473-4562 475-7868	Technical training in food processing & preservation quality control & hygiene. Sourcing of equipment

Suppliers

Contact Addresses/Numbers

Name of Supplier	Location	Mailing Address	Phone	Fax
Freezer				
Brian Bell & Company Pty Ltd	Port Moresby Goroka Mt Hagen Eriku, Lae Malekula Street, Lae Kokopo	P O Box 1228, Boroko P O Box 336, Goroka P O Box 88, Mt Hagen P O Box 255, Lae P O Box 1338, Rabaul	3255411 7321622 5421999 4721433 4723377 9829027	3250167 7322048 5423279 4721548 4723368 9829141
Plastic Drum, Ice Lolly Machine, Concentrate, Plastic tubing				
Rutec by Variform (PNG) Pty Ltd	Port Moresby	P O Box 304, Waigani	321 1592	3217301
W H Industries Pty Ltd	Port Moresby	P O Box 5020, Boroko	3251155	3251308
Colorpak Pty Ltd	Lae Port Moresby	P O Box 58, Lae P O Box 126, Jacksons	4757077 3233644	4757493

Appendix I

Costing and pricing - Orange Ice Lolly

Ingredients:

Orange concentrate

Water

Plastic tubing

Costing:

Ingredients	Qty	Cost Kina	Update
Orange concentrate	5 litres	27.00	
Water	30 litres		
Plastic tubing	700 tubes	35.00	
Total ingredient cost		62.00	
Cost for 700 lollies of 50 ml		62.00	
Cost for 1 ice lolly of 50 ml		0.09	

Selling Price:

Obviously your selling price cannot be below Kina 0.09

To determine your selling price try and investigate prices for similar items available. If there is a similar item, then your price will be close to that price.

Probably a reasonable price for the above product will be K0.20.

Be prepared to review prices if your product is not selling.

Appendix II

Rutec Ice Lolly Machine