

BUSINESS SET-UP GUIDE

Peanut Roasting

Business Profile Summary

You will need a market that can support sales of at least K73 per day.

You will need around K2,500 to start the business.

Profit potential for this business is around K6,000 per year.

Market

You will need a market that can support the sale of K250 - K500 per week. This guide is focussed on starting a small scale operation that will roast and sell peanuts through trade stores, supermarkets, clubs, hotels and markets.

There exists a strong demand for roasted peanuts as most people enjoy eating peanuts.

While fresh peanuts are widely available, roasted peanuts are not easily available in many parts of the country. Roasting increases the shelf life of peanuts and can be carried out with peanuts in the shell or de-shelled. The majority of peanuts sold in the supermarkets in PNG are de-shelled peanuts. Hence this guide focuses on the roasting of de-shelled peanuts.

Location

The owner has several options for selling the product as follows:

1. At the local market.
2. Through shops.
3. Through hotels & clubs.

If the owner wishes to sell direct to the end customer, then the location with the highest traffic should be chosen. This will generally mean higher expenses in the form of rent.

If the owner wishes to sell through shops, hotels or clubs, then the business can be started from a house. However, the owner will have to accept a lower mark-up to allow for a margin to be made by the shop owner.

Food Preparation Area

The food preparation area must be clean and hygienic. It should be large enough to carry out the various stages of peanut roasting and packing to include.:

1. De-shelling.
2. Cleaning & sorting.
3. Roasting.
4. Hulling or de-husking.

5. Salting.
6. Packing & sealing.

It is also important to use good quality peanuts to avoid health problems that can come from toxins that can result from bad quality peanuts and poor storage conditions.

Costing the business

Equipment cost

The following list represents the equipment needed for establishing a small scale peanut roasting business:

Item	Estimated cost - Kina	Purpose	Update cost
Equipment			
Manual peanut roaster	150	roast peanuts	
Cooling trays (2)	120	cooling hot roasted peanuts prior to packing	
Bag sealer	320	packing roasted peanuts	
Total equipment	590		

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 an effective small scale peanut roasting operation with minimum outlay of capital. In case a peanut roaster is not available, the operation could be started with a wok, spoons & wooden ladles.

Staff

A basic peanut roasting operation could be started by an owner helped by a family member.

Position	Main responsibility	Monthly salary
Owner	Manage business- decide products and prices, roast & package peanuts, order supplies, sell peanuts.	K450
Helper (1)	Assist in all areas	K150
Total salaries		K600

Raw materials

Product costing is detailed in appendix I.

Your major raw material is peanuts. Availability and price you pay for peanuts will be determined to some extent by the weather conditions. In times of drought, availability will be less and price will be high. Try and buy regularly from a few farmers. Once your

suppliers know that you will be buying regularly, they will adjust their production to meet your demand. Current prices for a bag of 50 kg of peanuts is around K40.

Based on the costing in appendix 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 working days)
Kina	# packs	ingredients	packaging*		
40	57	13	6	19	532
60	86	20	9	29	812
80	114	26	11	37	1036

* Packaging includes labels at 5 toea each and plastic packs at 5 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

A peanut roasting business has certain operational 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 need 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 a peanut roasting business this should only be for the first month.

The size and nature of this business probably will not warrant renting a new place. Electricity is not needed, but water is essential to the operation. 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 shops, hotels and clubs.

Below is a table showing the start-up and monthly operational cost associated with a peanut roasting business.

Operational cost	Initial working capital	Monthly
Wages	600	600
Licence	150	0
Water charges	0	14
Depreciation*	0	4

Office supplies	30	15
Cleaning supplies	50	25
Miscellaneous	25	10
Total operational cost	855	668

Start-up Costs

Besides the equipment cost 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	590	
Raw materials (first month)	812	
Operational working capital	855	
Total Start-up Cost	2257	

The cost to start a peanut roasting business is around K2,500.

Profitability

Monthly Profit and Loss

	Break even Sales			
Sale per day	73	100	150	200
Sales per month (25 days)	1818	2500	3750	5000
Cost of raw materials	909	1250	1875	2500
Gross profit	909	1250	1875	2500
Operational expenses				
Rent (market stall)	220	220	220	220
Wages	600	600	600	600
Electricity	10	10	10	10
Water	14	14	14	14
Office supplies	15	15	15	15
Cleaning supplies	25	25	25	25
Miscellaneous	25	25	25	25
Total	909	909	909	909
Operating profit per month before tax	0	341	966	1591

Break even sales

If we assume a mark-up of 100 % on all products then the break even sales for this business is around K73 per day. This means that if you sell less than K73 per day, you will make a loss. If you sell more than K73 per day, you will make a profit.

Financing the business

The size and nature of this business is such that savings must necessarily be used for financing the business.

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 P.O. Box 1106 Kokopo P.O. Box 1613 Mt. Hagen P.O. Box 1092 Wewak	Ph 3250100 Fx 325-0801 Ph 982 8201 Fx 982 8664 Ph 542 1067 Fx 542 1275 Ph 856 3201 Fx 856 3204	Start Your Business training and business advise and assistance.
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 Technology Section of the Department of Applied Science	Private Mail Bag Lae Morobe Province	Ph 473-4555 Fx 472-4067	Training and on-the-job experience
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
Peanut Roaster				
Small Industries Centre	Gordons, Port Moresby	P O Box 5601, Hohola	3258135 3258846	3258822
Cooking Equipment, Utensils etc.				
Brian Bell & Company Pty Ltd	Port Moresby	P O Box 1228, Boroko	3255411	3250167
	Goroka	P O Box 336, Goroka	7321622	7322048
	Mount Hagen	P O Box 88, Mt Hagen	5421999	5423279
	Eriku, Lae	P O Box 255, Lae	4721433	4721548
	Malekula Street, Lae		4723377	4723368
	Kokopo/ Rabaul	P O Box 1338, Rabaul	9829027	9829141
T.E. (PNG) Pty Ltd	Waigani	P O Box 1388, Boroko	3256322	3250350
	Port Moresby Voco Point Lae	P O Box 669, Lae	4726262 4726246	4721323
Kai Kai Cookware	Taraka, Lae	P O Box 565, Lae	4720511	4757299
Bag Sealer				
Rutec by Variform (PNG) Pty Ltd	Port Moresby	P O Box 304, Waigani	3211592	3217301
Packaging Materials				
Lam's Trading Pty Ltd	Waigani, Port Moresby	P O Box 88, Boroko	3253321 3232382	3232802
W H Industries Pty Ltd	Port Moresby	P O Box 5020, Boroko	3251155	3251308
Colorpak Pty Ltd	Lae	P O Box 58, Lae	4757077	4757493
	Port Moresby	P O Box 126, Jacksons	3233644	
NPC & Austraphane Marketing	Port Moresby	P O Box 1175, Boroko	3253211 3253182	3255618
Raw Material Suppliers				
Patrick Transport	Gabutu, Port Moresby	P O Box 1758, Boroko	3217490 3217300	3217228
Alotau Enterprises	Alotau	P O Box 27, Alotau	6411246 6411366	6411270
Garamut Enterprises Pty Ltd	Wewak	P O Box 96, Wewak	8562106 8562356	8562324
	Maprik	P O Box 166, Vanimo	8581219	
George Seto & Co Pty Ltd	Wewak	P O Box 69, Wewak	8562822	8562439
Madang Wholesale Pty Ltd	North Coast Road, Madang	NIL	8523611	
Voco Point Trading Pty Ltd	Voco Point, Lae	P O Box 4121, Lae	4724300 4724864	4723042
N Poya (Group) Pty Ltd	Banz Minj	P O Box 57, Banz	5462273 5465521	5462325 5462325

Name of Supplier	Location	Mailing Address	Phone	Fax
Seeto Kui	Lae	P O Box 456, Lae	4721111 4720906	4721335 4720890
	Gordons, Port Moresby	P O Box 1405, Boroko	3254700 3254215	3257208
Super Value Store Pty Ltd	Lae	P O Box 1988, Lae	4721688	4726103
	Mt Hagen	P O Box 165, Mt Hagen	5422764	5422763
	Port Moresby	P O Box 1180, POM	3252965	3230820
M & S Tsang Pty Ltd	Madang	P O Box 19, Madang	8522428	8523016
Kabuka Trading Pty Ltd	Dobel, Mt Hagen	P O Box 264, Mt Hagen	5451355	
Associated Distributors Niugini	Lae	P O Box 4019, Lae	4724666	4720085 4723198

Appendix I

Costing and pricing calculation -Roasted peanuts (100 gms)

Ingredients:

50 Kgs peanut bag (Not shelled) K40.00 per bag.

Water

Salt

Plastic bag

Label

Costing:

Ingredients	Qty	Cost Kina	Update
Peanuts (shelled)	100gms	0.20*	
Salt	To taste	0.03	
Plastic bag		0.05	
Label		0.05	
Total ingredient cost		0.33	
Cost per 100 gms Bag		0.33	

*After allowing 60% loss in weight for de-shelling & loss in moisture due to drying.

Selling Price:

Obviously your selling price cannot be below K0.33

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.

As you will be selling your product through shops, hotels or clubs, so you would have to allow a reasonable margin for the reseller.

Probably a reasonable price for the above product will be K0.70.

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

Appendix II

How to produce roasted peanuts

The process involves the following steps:-

(1) **Decorticating:** Removal of outer skin or de-shelling. This can be done either manually or mechanically using peanut decorticator, which can be hand, operated or motorised. A wide range of decorticators is available.

(2) **Cleaning and Sorting of shelled peanuts.** Removal of shells, dirt and extraneous matters manually.

(3) **Roasting** of shelled peanuts which can be done on open fire using a simple frying pan and a stove (fuel can be Gas, Diesel, Kerosene, Charcoal, Firewood, Agriculture wastes etc.), carefully turning the nuts continuously by a spoon or wooden ladle.

Roasting can also be accomplished by means of a simple drum type or an electric oven, 150 to 180°C for eight (8) to ten (10) minutes, ensuring no over-roasting. Nuts should be uniformly roasted, until cream colored, without darkening, blackening and charring. It is done till nuts start popping up in the frying pan or trays. In certain countries peanuts are roasted mixed with very hot riverbed fine sand in a preferably clay pot over an open fire furnace.

(4) **Hulling:** By means of rubbing action the red skins are removed. This is also called dehusking. The roasted nuts are cooled quickly in the air to prevent uneven development of colour. Dehusking is difficult when the nuts are hot as on cooling the skins get loose and are gently rubbed using both hands or against a wire mesh or flywire. The loose skins are blown off using either winnowing baskets or by tossing the nuts on a tray skilfully or even by using electric fans or blowers.

(5) **Salting:** Powdered salt when sprinkled over peanuts won't stick, hence for salting there are two ways:

a) The shelled nuts before roasting are soaked in salt water - about 5% concentration for 30 to 60 minutes and then roasted as described above.

b) More simpler method is to use a small amount of higher concentration of salt water brine) and sprinkling over or applying it by hands on the roasted peanuts and again roasting for a short time (say, 2-4 minutes) to get rid of the excess moisture.

(6) **Packing and sealing:** This involves cooling of salted peanuts in trays and filling or packing them 'm plastic pouches and heat sealing them 'm airtight containers.

Sealing is also done in two ways: (i) The ends of plastic pouch is rolled over a used Hacksaw blade and held against a candle flame gently to seal it, or (ii) using impulse type electric plastic bag sealers. The sealed pouches are then labelled.