

Title = Upgrading of Princess
Cakes and Pastries

Costumer = Mrs Patricia F Chen

Address = Aurora East, Diffun
Quirino

Spin = null

RTEC

- Project Title
- Project Proponent:
PRINCESS CAKE AND PASTRIES
- Spin
- I - Brief Description of the Project:

The business started about 20 years ago. The owner together with her late husband started in a homemade rice cakes as their product and sold only to friends, neighbors and to the local market. It was established in 1990.

When her husband passed away, he left her the business. The owner continued the production with the help of her three children. What started out as a small venture became an income generation. Since then, this helped in sending her children in school.

Today, their business continues with her children helping in the production. All the

children are now graduated in college and landed jobs that can help her in the business. Many times when there are a lot of orders they get/hire additional manpower to augment the labor force. She markets her products at the local market in Diffun, school canteens, neighbors, friends and taking orders from customers.

- A - Company Profile

- Proponent:
PRINCESS CAKE AND PASTRIES
- Contact Person:
Mrs. PATRICIA F. CHEN
- Position:
Owner/Proprietor
- Address
- Tel. No.:
09156514473
- Ownership:
Single proprietorship
- Business Registration:
DTI No. 00503266
- Business Permit No.:
2012-370
- Year Established:
1990
- No. of Employees:
5

- B - Objectives/Purpose

- General:

To develop and sustain employment generation in the community through the upgrading of this micro enterprise through Innovation System Support of the DOST.

- Specific:

1. To acquire production equipment like heavy duty cake

- mixer, stainless tray rack, stainless working tables.
- 2. To improve product packaging and labeling
- 3. To ensure product quality through laboratory analysis
- 4. To provide consultancy services on GMP, HACCP, and MPEX

◦ C - Expected Output:

- 1. Increase in the volume of products by 50 percent
- 2. Increase in the productivity by 20 percent
- 3. Increase in sales by 50 percent
- 4. Increase in employment of 5 persons in 3 years

◦ D -DOST Interventions::

- Provision of Equipment through Innovation System Support (ISS, SET-UP)
- Technology trainings on HACCP, GMP, 5'S and Productivity.
- Training on Product Packaging and Labeling;
- Product Analysis and Shelf Life Analysis through DOST RSTL;
- Assist in the appropriate packaging and labeling design.

• II - Compliance of Requirements:

Requirements	Complied	Not Complied
1. Endorsement of the Regional Director		
2. <i>Project Proposal</i>	/	
3. Proponent's letter of interest to avail the financial assistance and commitment to payback including their proposed repayment schedule	/	
4. Copy of business permit and licenses	/	
5. Certificate of Registration of Business Name with DTI, SEC, or CDA	/	

6. Board resolution authorizing the borrowing and designating authorized signatories for the financial assistance (if available)		/
7. Three(3) quotations from equipment supplier fabricators	/	
8. Complete technical design / drawing of the equipment to be purchased /fabricated		/
9. Line Item Budget(LIB) should reflect the counterpart of proponent, DOST 02 and SET-UP,(and other collaborators) the sum of which will be the Total Project Cost	/	
10. Financial Report (<i>For the past 3 years</i>)	/	
11. Five-Year Projected Income Statement with <i>Return of Investment</i>	/	
12. TNA with <i>photos of Firm production area and Plant lay-out</i>	/	
13. <i>Pre-Implementation Project Information Sheet(PIS)</i>	/	

- III - Highlight of Evaluation
 - A - Management and Administrative Aspect:

At present, there are three (3) direct laborers in the production area including the owner. The owner does the marketing works also. Sometimes when demands/orders are high they get an additional manpower for the production process. They prefer to hire their neighbors specially the students during school vacation as a way of helping them.

There is no definite organizational structure. The Owner/manager supervises all works of laborers, record keeping, planning, and all aspects of business management.

No particular purchasing system is being followed by the company. Record of supplies and materials is available. Part-time laborers are paid in a daily basis and wages are given immediately just after the work. Some incentives of laborers are free lunch and meryenda.

- **B -Technical Aspect:**

The production area was actually a part of their residential house. It has 85.5 sq.m. floor area. There is slight 5S implementation in the working area wherein general cleaning takes place every after a day's work.

Trainings on Good Manufacturing Practices (GMP) and Food Safety was already participated by the owner. Laborers used mask, hairnets and apron during the production process.

The company produces Cassava cakes, cakes for all occasions, and other kinds of pastries. For the cassava cake it consumes 2,880 kilos of cassava per year and for the other different cakes it consumes 192 bags of flour per year.

Production can hardly increase for lack of heavy duty and bigger capacity of equipments. Also, they lack packaging and label materials of the products. They are targeting all the school canteens and offices in the province and outside or nearby provinces. This is for product identity and advertisement/promotion.

To increase production, equipments and packaging materials are recommended which is stated in recommendations.

There is lack of training of laborers. Training may boost their self image and increase their skills in cake and pastry production

- **C - Financial Aspect with Schedule of Repayment:**

The company has difficulty to put in additional capital for the purchase of additional processing equipment. Also, they can hardly cope with volume of order for the packaging and labeling. As presented in the Income Statement, the present capital is only used in the production operation.

Repayment Schedule:

Month	Year 1	Year 2	Year 3	Year 4
January	5,580.00	5,580.00	5,580.00	16,741.00
February	5,580.00	5,580.00	5,580.00	16,740.00

March	5,580.00	5,580.00	5,580.00	16,740.00
April	5,580.00	5,580.00	5,580.00	16,740.00
May	5,580.00	5,580.00	5,580.00	16,740.00
June	5,580.00	5,580.00	5,580.00	16,740.00
July	5,580.00	5,580.00	5,580.00	16,740.00
August	5,580.00	5,580.00	5,580.00	16,740.00
September	5,580.00	5,580.00	5,580.00	16,740.00
October	5,580.00	5,580.00	5,580.00	16,740.00
November	5,580.00	5,580.00	5,580.00	16,740.00
December	5,580.00	5,580.00	5,554.00	16,714.00
TOTAL	66,960.00	66,960.00	66,934.00	200,855.00

▪ Repayment Schedule:

Month	Year 1	Year 2	Year 3	Year 4
January	5,580.00	5,580.00	5,580.00	16,740.00
February	5,580.00	5,580.00	5,580.00	16,740.00
March	5,580.00	5,580.00	5,580.00	16,740.00
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July	5,580.00	5,580.00	5,580.00	16,740.00
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November	5,580.00	5,580.00	5,580.00	16,740.00
December	5,580.00	5,580.00	5,554.00	16,714.00
TOTAL	66,960.00	66,960.00	66,934.00	200,855.00

*Include Option to buy equipments @ 55% of the total Assistance amounting to P 1,0042.75 to be paid on the Last Payment.

Thirty Six (36) Post Dated Checks (PDCs) will be forwarded to DOST SET-UP upon the release of financial assistance. Payment will be on a monthly basis without interest. Other terms and conditions are presented in the Memorandum of Understanding (MOA).

▪ Computation of PBA:

PARTIAL BUDGET ANALYSIS

Added Cost

Annual Depreciation Cost (Equipment) = $P71,855 / 3 = P 23,951.00$

Additional Utility Cost

(2012-2011 Operating Exp) = P
217,488.00

Opportunity Cost (15% of the total amount Requested)

(15% x P200,855) = P
30,128.00

Sub Total

= P271,567.00

Added Benefits

Projected Increase (stated in the Proposal) X Gross Income

(50% of P688,500.0) = P
344,250.00

Net Benefit per annum =
P72,683.00

Net Benefit per Month
= P 6,057.00

The net benefit per month of P6,057.00 is higher than the monthly rental of P5,580.00, therefore, the proponent can refund the cost of technology.

◦ **D - Marketing Aspect:**

The plan of the owner is to penetrate all school canteens and offices in the province and nearby provinces. Also, to have a display center along the national highway of Diffun particularly in front of Diffun Gymnasium and have at least one display centers in every municipality.

At present, marketing of the product is being made by its sole marketer, the owner to different school canteens and offices in the municipality of Diffun. She takes orders from clients too. The proponent cannot meet the demand of the province considering low production due to lack of equipment and packaging materials of products.

The use of packaging materials (for the cassava cakes) with direct printed label will be used. The labels design that is being used now for the different products is just a simple text art design by the owner. Design of the packaging materials for all the products will be made through the assistance of DOST 02.

- IV - Socio-Economic and Waste Management:

There is no major waste management concern by the company. The common wastes are cassava peelings and rejects. These are being disposed properly in a garbage pit and eventually used as organic fertilizer for their vegetable garden when decomposed. Waste waters in production processes are disposed directly in the drainage canal.

- V - Budgetary Requirements: Line Item Budget:

Particulars	Proponent	DOST SET-UP
Existing		
Land and Building	550,000.00	
Equipments	73,000.00	
Furniture and Fixture	68,000.00	
Proposed Equipment		
1 unit Cake Mixer		38,665.00
1 unit SS Table		20,900.00
1 unit Tray Rack		12,290.00
Packaging and Labeling		129,000.00
Sub-Total	P691,000	P200,855.00
Total Project Cost		P891,855.00

- VI - Comment/Recommendation:

Based from the project proposal submitted/prepared by PSTD of Quirino, the Technology Need Assessment Report of the DOST Regional Team, the 3rd Party RTEC members agreed on the following comments and recommendations:

1. From the financial statement, the trend of gross sales and income of the SME is increasing. The proponent is so eager to increase its production but the financial capacity cannot meet the need for upgrading.
2. The company seeks SETUP assistance for the following processing equipment needed to improve quality of products:
 - Heavy Duty Cake Mixer, 10 qrtz, Biomix with 2 bowl, whip, beater, and hook which is needed to maximized/increase production.
 - Stainless Working Table, 24" x 5" x 32" with 1/2 table underneath with bullet footing- for better working environment and to ease cleaning and having better product quality. This also ensures safe food products.

- Tray Racks, 18 layers x 4 " with aluminum screen cover & door with caster- for food safety purposes.
- Packaging Materials- to prolong shelf-life and improve quality of the products and to have product identity that can penetrate bigger market in the province and adjacent provinces.

**JONAS C. RALUTIN
AQUINO**

3rd Party RTEC Member

LYNFA L.

3rd Party RTEC Member

BEULAH B. ESTRADA

3rd Party RTEC Chairman

APPROVED BY:

URDUJAH A. TEJADA

Regional Director

- Recommendation

SPPF

- Project Title
- Proponent:
PRINCESS CAKE AND PASTRIES
 - Tel. No.:
09156514473
 - Company Name:
Princess Cake and Pastries
 - Type of Business:
Food Processing
 - Address of Business
 - Date of Registration:
August, 2008-August,2013

- Registration No.:
DTI No. 00503266

- Implementing Agency:

Department of Science and Technology Regional Office 2, (DOST RO2)

Provincial Science and Technology Center- Quirino (PSTC-Quirino)

- Cooperating Agencies:

Food Nutrition Research Institute (FNRI-DOST)

- Total Project Cost

- Set-Up:
P 200,855.00
- Proponent Counter Part:
P 691,000.00

- Objectives

- General:

To develop and sustain employment generation in the community through the upgrading of this micro enterprise through Innovation System Support of the DOST.

- Specific:

1. To acquire production equipment like heavy duty cake mixer, stainless tray rack, stainless working tables.
2. To improve product packaging and labeling
3. To ensure product quality through laboratory analysis
4. To provide consultancy services on GMP, HACCP, and MPEX

- DOST assistance Requested:

- Provision of Equipment through Innovation System Support (ISS, SET-UP)
- Technology trainings on HACCP, GMP, 5'S and Productivity.

- Training on Product Packaging and Labeling;
 - Product Analysis and Shelf Life Analysis through DOST RSTL;
 - Assist in the appropriate packaging and labeling design.
- **Project Background/Rationale**
 - **1 - Company:**

The business started about 20 years ago. The owner together with her late husband started in a homemade rice cakes as their product and sold only to friends, neighbors and to the local market. It was established in 1990.

When her husband passed away, he left her the business. The owner continued the production with the help of her three children. What started out as a small venture became an income generation. Since then, this helped in sending her children in school.

Today, their business continues with her children helping in the production. All the children are now graduated in college and landed jobs that can help her in the business. Many times when there are a lot of orders they get/hire additional manpower to augment the labor force. She markets her products at the local market in Diffun, school canteens, neighbors, friends and taking orders from customers.

- **Company Profile**
- **Ownership:**
Single proprietorship
- **Registration:**
DTI No. 00503266
- **Type of Business:**
Food Processing
- **Business Activity:**
Cakes and Pastries
- **Number of Workers:**
Three (3) regular Two (2) part-time
- **Skill Expertise:**
Decorative Cakes and Pastries

- **2 - Organizational Structure:**

The company is considered as a micro enterprise. It is a sole proprietorship

that the owner directly work, supervises his workers, and doing marketing of some products. There is no established organizational structure set by the owner.

◦ 3 - Production Site,Area,location:

The production site is located at Purok 1, Aurora East, Poblacion, Diffun, Quirino which is about 300 meters away from the National Highway. It is very accessible to transport vehicles. The production area is 30 sq. m. attached to the residential house of the proponent.

◦ 4 - Products:

Cassava Cakes, Pastries (Lengua), Birthday Cakes, Chiffon Cakes, Wedding Cakes.

◦ 5 - Cost of Production:

Product	Volume of Production/Year	Unit Cost of Production (P)	Unit sales	Annual Cost of Production (P)	Gross Sales
Cassava Cakes	3600 pcs	40/box	50	144,000	180,000
Chiffon Cakes	600 units	250/unit	350	150,000	210,000
Bday cakes	60 units	350/unit	500	21,000	30,000
Wedding Cakes	30 units	700/unit	1300	21,000	39,000
			TOTAL	P336,000	P459,000

- 6 - Product Selling Price
- 7 - Production Volume
- 8 - Production Capacity
- 9 - Raw Material Used:

The raw materials are cassava, flour, sugar, eggs, milk, decorations, packaging materials and other bakery ingredients.

◦ 10 - Source of Raw Materials:

The proponent orders cassava from local producers/farmers in the province by volume in a wholesale basis. The flour that was being used is purchased in Santiago City where the price is cheaper. Other ingredients are bought at Santiago City and at the local market of Diffun.

- **Market Aspect**

- **1 - Market Situation:**

Cassava cake is one of the all time favorite native cakes (“kakanin”) that people loves to eat especially during meryenda time. Because of its palatable taste and nutritional value there is a ready market and high demand for it not only in the province but even outside and nearby provinces. The production of cassava cakes in the province has not yet been established unlike in other provinces where there are already big and known producers of this product.

- **2 - Current Market Outlet:**

The current market outlets are the school canteens in the municipality of Diffun like Quirino State College, Diffun High School and the different elementary schools. Some are disposed to District Hospitals and at the Provincial Capitol canteen. In special occasions like birthdays, Christening and wedding, Princess Cakes and Pastries is known in the community.

- **3 - Competitors:**

At the meantime there is no competitor in the municipality for the cassava cakes. At the nearby municipalities like Cabarroguis there are some small/local producers of cassava cakes too. For the other cakes, competitors are the local bakeries in Diffun and sometimes the big firms/bakery like Cindy’s Bakeshop and N.E. Bakeshop in Santiago City where customers are the one directly went and makes an order.

- **4 - Existing Problems(If Any):**

The business has a limited production which is due to the lack of production

equipment/facilities. Secondly, it has packaging without labeling design of their products. Lastly, the proponent has not yet established its market outside the province.

- 5 - Market Plan/Strategies:

The owner is planning to distribute her products to all schools and offices in nearby municipalities especially at Cabarroguis and Aglipay in the south and Cordon in the north. She plans of having a display center along the national highway particularly in front of Diffun Gymnasium for easier access by her clients.

- TechnologicalAspect

- 1 - Production Process/es
- 2 - Existing Equipment:

The firm has the following facilities/equipments:

1 unit Mixer, Kitchen Aid(0.5hp) 6 qrtz capacity

1 unit Oven, 12 plates

1 unit Grater

1 unit Mechanical Grinder

2 Handy Mixer

Baking Pan for Cassava, 40 pcs.

Baking Pan for Birthday & Wedding Cakes, 30 pcs.

- 3 - Production Capability:

At present the center can process at least 10 kg of flour per week or 480 kg per year. Also it is processing 60kg of cassava per week or 2,880 kg per year. This would be increased to 50% when the assistance will be made.

- 4 - Production Constraints on Production Line:

The production is not maximized due to the absences of heavy duty mixer. The owner is still using the 1.5 kg capacity mixer. The packaging design of their product was not yet establish and therefore it cannot display well is groceries and public market. The TNA team recommended the stainless table for food hygiene and food safety purposes.

◦ 5 - Personal Skills that are Handicapped without Technology:

All the listed S&T Interventions has to be properly implemented or addressed like the GMP, HACCP, and the proper packaging and label of products. This is in order to upgrade the business to have better quality product and competitiveness.

◦ 6 - Proposed Technology and Skills Upgrading intervention:

- Provision of Equipment through Innovation System Support (ISS, SET-UP) such as the following:

> Cake Mixer – to increase the volume of production from 1.5 kg to 10 kg capacity per batch. This will decrease lead time in the preparation of cakes.

> Stainless Table – For proper food hygiene and food safety purposes. This will eliminate food contamination of bacteria and other foreign matters. This was recommended by the TNA team.

> Tray Rack – for orderly display of products after cooking. Also, it will serve as display of products for market purposes.

> Packaging and Label – for purposes of promotion and better market strategies. The Packaging and label is solely for the cassava cakes to be displayed in markets, display centers and big grocery stores.

- Training on 5S and Good Manufacturing Practices(GMP), HACCP and CP;
- Product Analysis and Shelf Life Analysis to the DOST RO2 RSTL;

◦ 7 - Equipment Specification:

Quantity	Particulars	Specification
1 unit	Cake Mixer	10 quartz, Biomixer with 2 bowl, whip, beater, and hook
1 unit	Stainless Steel Table	24"X5"X32", with ½ table underneath with bullet footing
		18 layers X 4" with aluminum

1 unit	Tray Rack	screen cover & door with casters
31,000 pcs	Packaging & Label	195 mm x 195 mm x 3mm cartoon, Shiny.

◦ 8 - Cost of Equipment:

Quantity	Particulars	Specification	Amount
1 unit	Cake Mixer	10 quartz, Biomixer with 2 bowl, whip, beater, and hook	P 38,665.00
1 unit	Stainless Steel Table	24"X5"X32", with ½ table underneath with bullet footing	P 20,900.00
1 unit	Tray Rack	18 layers X 4" with aluminum screen cover & door with casters	P 12,290.00
31,000 pcs	Packaging	195 mm x 195 mm x 3mm cartoon, Shiny.	130,000.00

◦ 9 - List of Equipment Suppliers/Fabricators:

1. Baylon's Bakery Equipment Supply and Fabrication

Maharlika Highway, Santiago City, Isabela

2. HDL Bakery Equipment

Santiago City, Isabela

3. Bakery land Food Equipment

Santiago City, Isabela

4. FCT Publishing, Inc.

Malvar St. Santiago City

◦ 10 - Importance of Additional Equipment and Personal Training:

The acquisition of additional equipment would surely result to 50 percent increase in production volume. Personnel training would improve product quality and competitiveness in the market.

◦ 11 - DOST Intervention/Schedule Activities:

ACTIVITIES	2012			
	Q1	Q2	Q3	Q4
1. Conduct Technology Need Assessment (TNA)	X			
2. Preparation of Project Proposal.		X		
3. Conduct (RTEC) Regional Technical Evaluation Committee		X		
4. Submit Proposal to NPMO wait for comments and suggestion from RTEC NPMO		X		
5. Preparation of MOA and signing of MOA between DOST R02 and DOST CO and between DOST R 02 and the costumer		X		
6. Released of funds from SET-UP		X		
7. Acquisition of equipment/facilities		X		
8. Installation of Equipment		X		
9. Training (5's, Productivity, Quality and Work Improvement, Record Keeping and Financial Analysis)		X		
10. Supervision of Production				
11. Quality Product assessment				
12. Marketing (Joining techno fairs,etc.)				
13. Monitoring and evaluation				

- 12 - Expected Output/Impact Results:

- a. Increase in the volume of products by 50 percent
- b. Increase in the productivity by 20 percent
- c. Increase in sales by 50 percent
- d. Increase in employment of 5 persons in 3 years

- Waste Management Disposal

- 1 - Volume of Waste Generated Monthly:

The project yields a very limited bio-degradable waste product from cassava and waste waters used while in production processes. Waste water in cleaning utensils and decoration's scraps are the only waste observed.

- 2 - Kind of Waste:

The kind of waste generated in the project is the cassava peelings and the rejects, waste waters used in production process and in cleaning utensils and paper boxes.

- 3 - How they are Disposed:

Production waste of the business is not a problem because they are being utilized by the proponent as an organic fertilizer for their vegetable garden. They have a compost pit at their backyard where they put their wastes and keep there until it will decompose and ready to use. The waste water used in cleaning utensils is directly thrown at the canal.

- Financial Aspect

- 1 - Financial Capacity:

(Please refer to the attached Financial Statement)

- 2 - Financial Constraints:

The company has difficulty to put in additional capital for the purchase of additional processing equipment. Also, they can hardly cope with volume of order for the packaging and labeling. As presented in the Income Statement, the present capital is only used in the production operation.

◦ 3 - Cash Flow/Financial Statement:

	2011	Year 2	Year 3	Year 4	Year 5
CASH INFLOW					
Cash Beginning		P48,410	P59,045	P96,090	P129,250
Sales	P459,000	688,500	757,350	833,085	916,390
<i>Loan Assistance</i>	-	200,855	-	-	-
TOTAL CASH INFLOW	P459,000	P937,765	P816,395	P929,175	P1,045,640
CASH OUTFLOW					
Equipment Procurement	-	200,855	-	-	-
Raw Materials Procurement	312,480	451,248	496,373	546,011	600,000
Labor	23,520	35,280	38,808	42,688	46,957
Cash Selling & Admin. Expenses	10,000	20,000	20,000	30,000	35,000
Other Improvement	-	25,000	10,000	15,000	50,000
Income Tax Payment	4,590	9,377	8,164	9,292	10,000
Principal Payment	-	66,960	66,960	66,934	-
Withdrawals	60,000	70,000	80,000	90,000	100,000
TOTAL CASH OUTFLOW	P410,590	P878,720	P720,305	P799,925	P843,957
NET INFLOW (OUTFLOW)	P48,410	P59,045	P96,090	P129,250	P202,683

◦ 4 - Projected Income Statement for Five Year:

	2011	2012	2013	2014	2015
GROSS SALES					
Birthday, Wedding & Christening Cakes	P279,000.00	P418,500.00	P460,350.00	P506,385.00	P557,020.00
Cassava Cakes	180,000.00	270,000.00	297,000.00	326,700.00	359,370.00
Total	P459,000.00	P688,500.00	P757,350.00	P833,085.00	P916,390.00
Less: Operating Capital					
Flour	P43,680.00	P48,048.00	P52,852.80	P58,138.08	P63,951.36
Sugar	50,400.00	75,600.00	83,160.00	91,476.00	100,623.00
Eggs	23,520.00	35,280.00	38,808.00	42,688.80	46,957.44
Veg. Oil	43,680.00	65,520.00	72,072.00	79,279.20	87,207.60
Decorations	60,480.00	90,720.00	99,792.00	109,771.20	120,748.80
Flavorings	16,800.00	25,200.00	27,720.00	30,492.00	33,541.20
Other Ingredients	26,880.00	40,320.00	44,352.00	48,787.20	53,665.60

Electric & Water	30,240.00	45,360.00	49,896.00	54,885.60	60,374.00
Fuel/LPG	16,800.00	25,200.00	27,720.00	30,492.00	33,541.00
Labor	23,520.00	35,280.00	38,808.00	42,688.80	46,957.00
Amortization to DOST	-	66,960.00	66,960.00	66,934.00	-
Total	P336,000.00	P553,488.00	P602,140.00	P655,632.00	P647,500.00
	0	00	80	88	77
NET SALES	P123,000.00	P135,012.00	P155,209.00	P177,452.00	P268,800.00
	0	00	20	12	73
ROI	36.61	24.39	25.78	27.07	41.51

Assumptions:

> Expected to Increase Gross sales to 50% in 2012 due to ISS intervention then 10% every year thereafter.

> The operating expenses would also increase by 50% then 10% increase every year thereafter. This includes the additional manpower for the succeeding years after the ISS intervention.

◦ 5 - Proposed Project Budget/Capital Outlay(LIB):

Particulars	Proponent	DOST SET-UP
Existing		
Land and Building	550,000.00	
Equipments	73,000.00	
Furniture and Fixture	68,000.00	
Proposed Equipment		
1 unit Cake Mixer		38,665.00
1 unit SS Table		20,900.00
1 unit Tray Rack		12,290.00
Packaging and Labeling		129,000.00
Sub-Total	P691,000	P200,855.00
Total Project Cost		P891,855.00

◦ 6 - Proposed Monthly Repayment Scheme/Mode of Payment:

Month	Year 1	Year 2	Year 3	Year 4
January	5,580.00	5,580.00	5,580.00	16,741.00
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September	5,580.00	5,580.00	5,580.00	16,740.00
October	5,580.00	5,580.00	5,580.00	16,740.00
November	5,580.00	5,580.00	5,580.00	16,740.00
December	5,580.00	5,580.00	5,554.00	16,714.00
TOTAL	66,960.00	66,960.00	66,934.00	200,855.00

*Include Option to buy equipments @ 5% of the total Assistance amounting to P 1,0042.75 to be paid on the Last Payment.

Thirty Six (36) Post Dated Checks (PDCs) will be forwarded to DOST SET-UP upon the release of financial assistance. Payment will be on a monthly basis without interest. Other terms and conditions are presented in the Memorandum of Understanding (MOA).

TNA1

- Name of Enterprise:
Princess Cake and Pastries
 - Contact Person:
Mrs. PATRICIA F. CHEN
 - Position:
Owner/Proprietor
 - Office Address:
Aurora East, Diffun, Quirino
 - Tel. No.:
09156514473
 - Fax No.:
None
 - E-mail Address:
None
 - Factory Address:
Aurora East, Diffun, Quirino
 - Tel. No.:
0915-651-4473
 - Fax No.:
None

- E-mail Address:
none

- Website:
None

- General Agreements:

MOA Signed

- Enterprise Profile
 - Name of Enterprise:
Princess Cake and Pastries
 - Production Site/Location:
Aurora East, Diffun, Quirino
 - Business Permit No.:
2012-370
 - Year Registered:
April 2012
 - Brief Enterprise Background:

The business started about 20 years ago. The owner together with her late husband started in a homemade rice cakes as their product and sold only to friends, neighbors and to the local market. It was established in 1990.

When her husband passed away, he left her the business. The owner continued the production with the help of her three children. What started out as a small venture became an income generation. Since then, this helped in sending her children in school.

Today, their business continues with her children helping in the production. All the children are now graduated in college and landed jobs that can help her in the business. Many times when there are a lot of orders they get/hire additional manpower to augment the labor force. She markets her products at the local market in Diffun, school canteens, neighbors, friends and taking orders from customers.

- Year Enterprise was Established:
1990

- Initial Capitalization:
P 10,000.00

- Type of Organization:

Single proprietorship

- Enterprise Registration No.:
DTI-00503266

- Year Registered:
2008-2013

- Classification According to Capital:

Micro (less than 1.5 M)

- Present Capitalization:
P 50,000.00

- Classification according to Employment:

Micro (1-9)

- Number of Employees:

5

- Business Activity:

Food Processing

- 1 - Specific Product or Services the Enterprise:

- > Cassava Cakes

- > Pastries

- > Birthday Cakes

- > Wedding Cakes

- 2 - Reason Why Assistance is being sought:

- > **To increase production through additional equipment**

- **Heavy Duty Cake Mixer, SS Working table, Tray Racks**

- > **To enhance product through Packaging support**

- 3 - Have you consulted any other individual:

Yes- DTI-Quirino for the packaging of the cassava cake but did not push through.

- Number of Workers:

- 5

- Skill/Expertise:

- Decorative Cakes and Pastries

- Organizational Structure:

The company is considered as a micro enterprise. It is a sole proprietorship that the owner directly work, supervises his workers, and doing marketing of some products. There is no established organizational structure set by the owner.

- 4 - Enterprise Plan for the

- Next 5 Years:

- > **Have own Display Center in the market especially in front of the Diffun Gymnasium**

- > **Penetrate all school canteens, offices and grocery stores in Cabarroguis and nearby municipalities.**

- Next 10 Years:

- > **Have their own display center in every municipality in the province.**

- 5 - Current agreement and alliance undertaken:

> none

- Benchmark Information
 - Production and Supply Chain

- Raw Material:

Raw Material	Source	Unit Cost (P)	Volume Used
FLOUR	Santiago City	P44/kg.	3-5 kg/week
Cassava	Local Producer in the province	P400/sack	60 kg/week

- Production:

Product	Volume of Production/Year	Unit Cost of Production (P)	Annual Cost of Production (P)
Cassava Cake	30 boxes/day	P35/box	P7,350/week
Chiffon	5 cakes/day	P240/cake(regular)	P8,400/week
Pastries(Lengua)	20 jars/day	P35/box	P4,900/week
Birthday cake	15 cakes/month	P250/cake(regular)	P3,750/month
Wedding cake	10 cakes/month	P780/cake (small)	P7,800/month

- Production Equipment:

Type of Equipment	Specifications	Capacity
1 Mixer	Kitcken Aid,(0.5 hp)	6 qrtz.
1 Oven	-	12 plates
1 Grater	Portable	-
2 Handy Mixer	Portable	-
Baking pan for Cassava	-	40 pcs.
Baking pan for other cakes	-	30 pcs.

- Production Problem and Concern:

Production is not maximized due to the absences of heavy duty mixer because their own mixer has bag down. The packaging design of their product was not yet establish. Therefore it cannot compete to the market since there is no identity yet of the product to customers.

To increase/upgrade production the following equipments are needed:

a.) Heavy Duty Cake Mixer- To maximized/increase production

b.) Stainless Steel Working Table- For better working environment, to ease cleaning and for better product quality. For Food Safety measure.

c.) Stainless Steel Tray Racks- For food Safety purposes.

d.) Packaging Materials - to have product identity and to penetrate bigger market in the province and adjacent provinces.

- Production Waste Management System:

Production Waste Management System

Production wastes are cassava peelings and rejects. They are put in a compost pit of the proponent at their backyard. Waste water used during production process are being disposed properly in the canal going to their backyard.

- Production Plan:

Production Plan

The proponent is expecting to increase her production from 3-5 kg/week of flour to 10 kg./week and from 60 kg./week of cassava to 120 kg./week.

- Plant Lay-out
- Process flow
- Inventory System:

Inventory System

Record keeping of the supplies and materials used in the production is available.

- Maintenance Program:

Maintenance Program

There is no definite maintenance program of equipment. Technician service is called when equipment malfunctions.

- CGMP/HACCP Activities:

CGMP/HACCP Activities

The proponent has no training of HACCP yet but she already have the training on GMP and Food Safety last March 6-7,2012 at MIT, Madella that was conducted by DOST-02.

- Supplies/Purchasing System:

Supplies/Purchasing System

There is no purchasing system being followed. The proponent is ordering cassava from local producer/farmers in the province. Other ingredients needed for the production are bought at the local market.

- Marketing
 - Marketing Plan:

%u25BA Marketing Plan

To increase sale, the proponent wish to establish a display center along the national highway of Diffun particularly in front of the Diffun Gymnasium and to distribute products to all school canteens, offices and grocery store in the province.

- Market Outlets and Number:

Market Outlets and Number

At present, the proponent distributes her products mainly to school canteens, offices in Diffun, District Hospital and to the Provincial Capitol.

- Promotional Strategies:

Promotional Strategies

The use of appropriate packaging material for the product will be used. Design for packaging of the cassava cake will be made for product identity and promotion. To have at least one distributor to penetrate all school canteens and offices in nearby municipalities.

- Market Competitors:

Market Competitors

For Cassava cake, there is no competitor in Diffun but in the nearby municipalities like in Cabarroguis are the small/local producers. For the other cakes and pastries competitors are the local bakeries in the municipality and sometimes big manufacturer/bakery in Santiago City like Cindy's Bakeshop and N.E. Bakeshop

- Packaging
 - Nutritional Evaluation:
None
 - Bar code:
None
 - Product Label:
Princess Cakes and Pastries by the owner

- Expiry Date:
None

- Finance

- Cash Flow:

Please see financial report

- Source(s) of Capital/Credit:

Source of capital of the owner comes from the sale of their business and some from her working children.

- Accounting System:

The proponent keeps records on the sales, materials and operational expenses for accounting purposes.

- Human Resources

- Hiring Criteria:

There is no issue yet in hiring of labor because the business is still micro. The proponent together with her children does the production. But the proponent prefers to hire there neighbours especially the student to help them in their school allowances

- Incentives to Employees:

Free lunch and meryenda for her hired/part-time employees/laborers.

- Training and Development:

The owner has attended skills training and productivity training. While her daughter was a B.S. HRM graduate and

attended different trainings like Pastry and Baking.

- Safety Measures Practiced:

The manager has attended the Food Safety and Good Manufacturing Practices Training conducted by DOST R02.

- Other Employee Welfare:

None

- Other Concern::
None

TNA4

- Company:
Princess Cake and Pastries
- Address
- Scope of Assessment:

The TNA covered the following areas:

1. Strategic Directions
• Vision, Mission and Values
• Plans
• Strategic Alliances, Current Agreements
2. Management Aspects
• Human Resource Management
• Purchasing
• Work Environment
• Occupational Health and Safety Management
3. Technical Aspects
1. Operational & Outsourcing Practices
• Production System
• Production Lay-out
• Work Study/Improvement
• Equipment Management and Maintenance
• Quality Assurance System
2. Product and Process Performance & Improvement

• Performance Measures and Results – Process
• Performance Measures and Results – Product
3. Waste Management
• Environmental management system
D. Marketing Aspects
• Key Factors of Marketing – Presentation, Place, Promotion, Price, Packaging, Customer Focus, Strategies, Advertising
• Creativity and Innovation
* Scope of TNA is based on Technology Assessment Plan (TAP)

- Summary of Assessment
 - Background:

The business started about 20 years ago. The owner together with her late husband started in a homemade rice cakes as their product and sold only to friends, neighbors and to the local market. It was established in 1990.

When her husband passed away, he left her the business. The owner continued the production with the help of her three children. What started out as a small venture became an income generation. Since then, this helped in sending her children in school.

Today, their business continues with her children helping in the production. All the children are now graduated in college and landed jobs that can help her in the business. Many times when there are a lot of orders they get/hire additional manpower to augment the labor force. She markets her products at the local market in Diffun, school canteens, neighbors, friends and taking orders from customers.

- Methodology:

The TNA was conducted through interview with the Owner/manager. Also, an ocular visit of the processing plant was made by the DOST-02 and PSTC staffs. The assessment was conducted on March 7, 2012 at the proponent's production center in Aurora East, Diffun, Quirino.

- Summary of Findings:

1. Strategic Direction

The company envisions increasing its volume of production by 50 %. They plan to have their display center along the National Highway of Diffun

particularly in front of Diffun Gymnasium and to penetrate all school canteens and offices in the province. The owner also wants to have at least one display center in every municipality in Quirino.

Its long term vision is to penetrate not only the whole province but also nearby provinces and national market too.

2. Management Aspect

a. Human Resources

At present, there are three (3) direct laborers in the production area including the owner. The owner does the marketing works also. Sometimes when demands/orders are high they get an additional manpower for the production process. They prefer to hire their neighbors specially the students during school vacation as a way of helping them.

There is no definite organizational structure. The Owner/manager supervises all works of laborers, record keeping, planning, and all aspects of business management.

b. Purchasing

No particular purchasing system is being followed by the company. Record of supplies and materials is available.

c. Work Environment (Structures and facilities management and maintenance)

The production area was actually a part of their residential house. It has 85.5 sq.m. floor area.

There is slight 5S implementation in the working area although general cleaning takes place every after a day's work.

Trainings on Good Manufacturing Practices (GMP) and Food Safety was already participated by the owner.

d. Occupational Health and Safety (Safety measures, employees welfare)

Part-time laborers are paid in a daily basis and wages are given immediately just after the work. Some incentives of laborers are free lunch and meryenda.

Laborers used mask, hairnets and apron during the production process.

3. Technical Aspect

a. Operational and Outsourcing Practices

The proponent orders cassava from local producers in the province by volume in a wholesale basis. The flour being used is purchased in Santiago City where the price is cheaper. Other ingredients are bought at Santiago City and at the local market of Diffun.

The company has no definite maintenance program of equipment. Technician service is called when equipment malfunctions. Most of the existing equipment and utensils the company is using were purchased from 2000 - 2008.

b. Product and Process Performance & Improvement

The company produces Cassava cakes, cakes for all occasions, and other kinds of pastries. For the cassava cake it consumes 2,880 kilos of cassava per year and for the other different cakes it consumes 192 bags of flour per year.

Production can hardly increase for lack of heavy duty and bigger capacity of equipments. Also, they lack packaging and label materials of the products. They are targeting all the school canteens and offices in the province and outside or nearby provinces. This is for product identity and advertisement/promotion.

To increase production, equipments and packaging materials are recommended which is stated in recommendations.

There is lack of training of laborers. Training may boost their self image and increase their skills in cake and pastry production.

c. Waste Management

There is no major waste management concern by the company. The common wastes are cassava peelings and rejects. They are being disposed properly in a garbage pit and eventually used as organic fertilizer for their vegetable garden when decomposed. Waste waters in production processes are disposed in their backyard.

4. Marketing Aspects

The plan of the owner is to penetrate all school canteens and offices in the province and nearby provinces. Also, to have a display center along the national highway of Diffun particularly in front of Diffun Gymnasium and have at least one display centers in every municipality.

At present, marketing of the product is being made by its sole marketer, the owner to different school canteens and offices at the municipality of Diffun. She takes orders too from clients. The proponent cannot meet the demand of the province considering low production due to lack of equipment and packaging materials of products.

The use of packaging materials (for the cassava cakes) with direct printed label will be used. The labels design that is being used now for the different products is just a simple text art design by the owner. Design of the packaging materials for all the products will be made through the assistance of DOST 02.

- **Conclusions:**

There is an increasing demand for cassava cakes in the province considering that this is one of the all time favorite “kakanin” and “meryenda.” Consumer considers its nutritional value and affordable price too. There is no big competitor of cassava cakes in the province.

From the financial statement, the trend of gross sales and income is increasing. The proponent is so eager to increase its production but the financial capacity cannot meet the need for upgrading.

- **Recommendations:**

The TNA team recommends the upgrading of Princess Cake and Pastries through SETUP assistance with the following support:

1. Acquisition of the identified equipments with specifications and brands that is known to the proponent such as the following:

a.) Heavy Duty Cake Mixer, 10 qrtz, Biomix with 2 bowl, whip, beater, and hook

- to maximized/increase production.

b.) Stainless Working Table, 24”X5”X32” with ½ table underneath with bullet footing

- for better working environment and to ease cleaning and having better product quality.

c.) Tray Racks, 18 layers X 4” with aluminium screen cover & door with caster

- for food safety purposes.

d.) Packaging Materials- to have product identity and to penetrate bigger market in the

province and adjacent provinces

2. Training of laborers on GMP, Food Safety, Productivity and Quality, 5S.
3. Training of the manager on 5S, HACCP, Productivity and Quality
4. Expose of the company to different technology and trade fairs.