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HOMEMADE DULCE GATAS

Dulce gatas is a sweet, milk-based concoction or dessert that can easily be processed at home.

Buffalo's milk is a high-end commodity in itself. Owing to its richness, it can be processed into various products that command good price, thus profit. Beyond ready-to-drink buffalo's milk, its solid milk products are demanded by high-value markets.

One of the bestselling processed milk products in Silay City, Negros Occidental, is dulce gatas – a sweet, milk-based concoction or dessert. Long before Mrs. Jelita D. Nivera met the PCC personnel at La Carlota Stock Farm (LCSF), she was making dulce gatas out of native carabao's milk from the local farmers. The volume of milk she was processing into dulce gatas averaged 67 gallons per month at that time. After meeting the PCC at LCSF team and given assurance of the availability of the needed buffalo's milk, she was able to increase her production volume to an average of 158 gallons per month. This translates to an average of PhP133,668.00 gross income, or an average of PhP41,712.00 net income per month. Her main market is in Bacolod, Silay, and Tagaytay in Cavite.

However, the following step-by-step guide on how to make dulce gatas from buffalo's milk is not available just anywhere, and is always one of the questions during carabao dairying and milk processing orientations.

Solution

Processing tools and materials:

1. Wooden ladle
2. Frying pan
3. Plastic wrapper
4. Measuring spoon/cups
5. Stove (can be charcoal-operated)
6. Tray
Ingredients:
 - a. Carabao's raw milk 1 gallon
 - b. Refined sugar 2½ cups
 - c. Glucose syrup 2 cups

Procedure



1. Mix raw milk, refined sugar and glucose in a pan.
2. Cook at medium heat until the mixture boils with regular stirring.
3. Continue cooking with constant stirring over low heat until it turns brown with small globules and thick consistency.
4. Transfer into a clean tray. Cool (40°C to 50°C)



5. Wrap in colored plastic. Pack in a suitable container and seal. Mark with the expiration date (DP + 3 months). Store in a refrigerator (4°C to 10°C).



Results

A. Expenses for dulce gatas production per gallon of milk

Item	Cost (Php)
LPG	40
Carabao's milk	320
Labor	105
Glucose	50
Refined Sugar	27
Plastic wrapping material and container	40
Total	582

B. Gross income or revenue per gallon of milk processed into dulce gatas

Item	Dulce Gatas Produced (g)	Price (Php)	Income (Php)
Dulce gatas	1,880	0.45/g	846

C. Return on Investment (ROI)

C.1. Total expenses for the production of dulce gatas out of 30 gallons of carabao's milk:

Processing tools, ingredients and materials used:

Item	Cost (Php)
Wooden ladle	50
Frying pan	450
Measuring spoon/cups	200
Stove and burner	2,500
Tray	100
Carabaos' milk	9,600
Gasul	600
Labor	3,000
Glucose	1,500
Sugar	600
Plastic wrapping material	900
Plastic container	600
Processing tools	2,400
Total	22,500

C.2. Total Revenue to produce dulce gatas from 30 gallons of carabao's milk:
= Php25,380.

$$\begin{aligned} \text{ROI} &= \frac{\text{Total Revenue} - \text{Total Expenses}}{\text{Total Expenses}} \times 100 \\ &= \frac{\text{Php } 25,380 - \text{Php } 22,500}{\text{Php } 22,500} \times 100 \\ &= \mathbf{12.8\%} \end{aligned}$$

Lessons Learned

A small farmer-entrepreneur is insured of having a net income of Php264 per gallon of milk that he processes into dulce gatas. Given that the farmer can process a gallon of carabao's milk into dulce gatas in a day, or 30 gallons of milk in a month, he is expected to earn a gross income of Php25,380.00, or a net income of Php2,880.00 per month with an ROI of 12.8 percent.

Home-based milk processing is more suitable for farmers who are interested to start up a small business.

Dulce gatas-making does not require any sophisticated instrument.

Keywords: dulce gatas



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ABOUT THE MATERIAL

iASK, an acronym for innovative answers, solutions, and knowledge, is a knowledge product series packaged and produced by the Philippine Carabao Center with the Southeast Asian Regional Center for Graduate Study and Research in Agriculture. This iASK issue is specifically intended to help processors of dulce gatas in improving the quality of their product.

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