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ABSTRACT

The research was conducted to document the flow of virgin coconut oil produced in Catarman, Northern Samar.

The major market outlets of the producers were the consumers of Northern Samar and nearby municipalities and are exported to USA supplied to Filipino Americans. Respondents of the study were the VCO producers and the local buyers of the product.

Production of virgin coconut oil was is traditional. There were only two processors of virgin coconut oil. Processors were also coconut farmers and produced their own raw materials. Average production per week was 1-2 liter but could be increased if there were orders. Virgin coconut oil was sold at Php. 180 per 350 ml bottle and USD 50 if sold in the USA.

The product flow of VCO processors was very simple because there were no intermediaries or middlemen involved. Producers sell directly to consumers. Consumers bought the product for food supplement, for body massage and as a beauty products.



Problems encountered by producers included the difficulty of manual production, limited production, high cost of raw materials and limited market outlet.

It is recommended that producers should improve production technology, packaging materials and products should be labeled to expand market.



INTRODUCTION

Rationale

The virgin coconut oil (VCO) is considered a non-traditional but highly priced commodity among the hundreds of product lines of coconut. It is an income boosting enterprise and is currently gaining popularity both in local and international markets. It is very much sought after and has established a niche market of its own as a functional food for human consumption because of its various health benefits claims. Since it is extracted from fresh and mature nuts and not from dried coconut meat (copra) it has astounding health and nutritional benefits. Based on the records, the trend of world demand for virgin coconut oil is rapidly increasing and production in the country is similarly coping up with this new expansion in the export arena. Moreover, increasing local consumption was also recorded based on local production and sales volumes reported by VCO producers to PCA. This industry was also proven profitable and promising as a low investment micro enterprise with high market demand. Thus, with virgin coconut oil becoming a promising export commodity, more and more VCO producers and traders have emerged like mushrooms everywhere in the country. This income generating enterprise can improve farm incomes by 5-8 folds over the traditional copra or sale of fresh nuts (Juliano, 2007).

Coconut oil production process is basically very different compared to the way commercial coconut oil is processed. The latter is extracted from copra or the dried coconut meat and is then refined, bleached and deodorized. Such coconut oil is usually used for cooking purposes. In the case of VCO the oil is extracted purely from fresh meat without any harsh heat or chemical treatment (hence the name “virgin”). With the popularity of the



VCO, improvement in processing, product development and utilization in the production of high-end products were made possible within a short duration. Innovation in labelling and packaging for the discerning consumers was offered by most producers. VCO is now available not only in bottle, but also in jars, soft gel capsules and as flavoured VCO in different tastes. Many high-end products like massage oils, lotions, balms, creams, and soaps made with VCO base are also available.



REVIEW OF LITERATURE

Production Status

According to Kotler (1989) a product is something that is viewed as capable of satisfying a want. A want is described as stated of felt deprivation in a person. This deprivation produces discomfort. The want energizes the person and puts him into an active state and gives him direction. The person will perceive certain things outside of himself that would satisfy his wants. Kotler also mentioned that product is anything that can be offered to market for attention, acquisition, use or consumption that might satisfy a need or want.

The Philippines is keeping its lead in VCO production over Indonesia which could be a competitor in the world market. However, considering that our country is ahead in this technology, we have a competitive edge with foreign investors interested to venture in this industry. At present, a production capacity of 2,931 mt was reported to PCA (2005) and according to absolutely no heat coconut oil Producers, Inc. (ACOPI), their members have the capacity to produce 50,000 L of VCO with the cold process technology (Juliano, 2007).

With the increasing numbers of producers' venturing in this business, the industry might be competition with the traditional products for stable supply of suitable nuts. The country is still considered as number one exporter of traditional coconut oil and other coconut products. It is also considered second in the world in terms of areas planted to coconut (3.1 M hectares), and despite this, a shortage in supply of nuts is an expected problem in the industry. With the increasing demand for VCO, the need for more raw



materials will eventually result in abrupt reduction of nut supply to oil millers and desiccated coconut (DC) plants. Furthermore, it also noted that most of the new VCO plants have emerge in locations where oil mills and DC plants are already located. Based on records of registered VCO plants (PCA, 2006) about 27.52% were established in Region VIII (Eastern Visayas), 18.9% in Southern Luzon (Region VI-A) and followed by Bicol (Region V) with 10.9% VCO producers (Table 1) there are only 40 VCO producers who are registered with BFAD mostly based on National Capital Region and Southern Luzon.

Opportunities

As a result of its increasing demand in niche market, many have ventured into virgin coconut oil production, mostly on a small scale. As such, more jobs generated and the nut requirements of the VCO plants improve the farm income of the coconut farmers. However, pricing of nuts should be regulated to ensure that the farmers will be benefited. With the increasing demand of the VCO in the domestic and international market, the declining status of the coconut industry changes its trend and started to gain economic advantage. For the farmer, the uncertain and wavering income from coconuts was stabilized through the increasing demand for nut supply. Enhance by the boom of VCO, which shows signs of becoming more interested in planting coconuts.

Other than the consumption of VCO as food supplement, its utilization in the production of health and high-end and natural products is a plus factor to be competitive in the niche market. Soaps, lotions, massage oil; beauty creams and lipsticks are some of the VCO-based products that are already available in the market.



Marketing and Demand of Virgin Coconut Oil

As cited by Miranda (1983), marketing is the process in society by which the demand structure for economics goods and services is anticipated and enlarge and satisfied trough the conception, promotion, exchange and physical distribution of goods and services. Marketing is where the customers is and it is the customers who in the end decides the fate of the business.

Entrepreneurs have been urged to venture into the virgin coconut oil industry due to the high demand from local and overseas markets. Deputy Agriculture and Agro-based Industries Minister Datuk Wira Johari Baharum, in making the call, said the prices of virgin coconut oil in the local market were currently high at between RM 40 and RM1 50 per kilogram. "This situation (high prices) has attracted the attention of many local entrepreneurs, especially those planting coconuts to produce the oil," he told reporters after opening a modified virgin coconut oil (MVCO) plant at Pasir Gudang in Johor Baru on Saturday. The plant costs RM3million and its MVCO product is the result of cooperation between WawasanTebrauSdnBhd and Malaysian Agricultural Research and Development Institute (Mardi). Johari said the prices of virgin coconut oil produced in Malaysia were not competitive when compared to those of the Philippines and Indonesia because their raw material and labor costs were much lower. As a result, he said, Mardi has started work to increase the value of virgin coconut oil by producing MVCO to enable local entrepreneurs to be more competitive in the international market. In addition, the production of virgin coconut oil and MVCO will be given priority in agriculture to make the cultivation of coconut trees more attractive, he added. Research by Mardi showed that MVCO can destroy bacteria and fungus simultaneously, does not contain steroid and is



rich in Vitamin E as well as being easy to penetrate the skin in helping the body to get rid of impurities. Mardi director-general Datuk Dr Abdul Shukor Abdul Rahman said it was aware of the potential of virgin coconut oil and started research on the product in 2006. "Mardi carried out further studies to produce MVCO which is free from anti-microbes. It has high marketing potential because of its various uses and nutritious quality said-Bernamas.

The rise in demand, both local and international, of Virgin coconut oil had become so great that a lot of people now are into this kind of business. Coconut tree is so abundant in the provinces that produce coconuts all year round, so there will never be a shortage for raw materials.

Export Performance

The Philippines still ranks as number one in the global market of vegetable oil and similarly with VCO, the country is the top exporter among coconut- growing countries. Thus, the quality of VCO has to be sustained to protect the industry. To realize this, quality standards and good manufacturing process have to be strictly implemented in order to conform to the domestic and internationally accepted products standards for VCO.

The Philippine Coconut Authority (PCA) recorded VCO exports from 1.80 to 475 mt from 2001-2005 with a mean value FOB US\$ 857,457(Table 1). In 2005, a total volume of 475 mt equivalent to FOB US\$1,612,323 (PCA, 2006) was exported to major countries, in particularly to the United States.



METHODOLOGY

Locale and Time of the Study

The study was conducted in Daganas, Catarman, Samar (production area) and in areas where virgin coconut oil is supplied or marketed particularly in Catarman, Samar.

The study was conducted on December 2012 to January 2013.

Respondent of the Study

The respondents of the study were the producers of virgin coconut oil, and the consumers or buyers of the product.

Data Gathering Procedure

Personal interview with the producers was done in collecting the data and other relevant information needed. An interview schedule was used as the research instrument used in the study. At least one supply chain was followed from production to consumption.

Data Gathered

The data gathered included the product, payment and information flow of VCO, actors in the supply chain, cost of production and marketing.

Data Analysis

The data gathered were tabulated and interpreted according to the objectives of the study. Data were analysed using frequency analysis, and supply chain mapping.



RESULTS AND DISCUSSION

Virgin Coconut Oil Production in Catarman, Samar

In Catarman, Samar, Virgin Coconut Oil (VCO) production is being introduced as one livelihood activity in the area. Major crop grown in Catarman, Samar is coconut and is one of the major producers of copra, a raw material for the production of cooking oil. With the research in product developments for coconut, the production of VCO is one of output of research. In VCO the oil is extracted purely from fresh coconut meat without any harsh heat or chemical treatment (hence the name “virgin”).

The introduction/promotion of this product is due to the health benefits in the consumption of VCO as food supplement and as cure for some illnesses. Health benefits include; hair care, skin care, stress relief, maintaining cholesterol levels, weight loss, increased immunity, proper digestion and metabolism, relief from kidney problems, heart diseases, high blood pressure, diabetes, HIV and cancer, dental care, and bone strength. These benefits of coconut oil can be attributed to the presence of lauric acid, capric acid and caprylic acid, and its properties such as antimicrobial, antioxidant, antifungal, antibacterial, soothing (www.organicfacts.net).

Because of these benefits, the Philippine Coconut Authority (PCA) introduced this livelihood to coconut production areas like Samar. VCO production in Catarman, Samar started in July, 2009 and still a continuing livelihood activity up to present.

Production is done through traditional method with no sophisticated machines or equipment used. Production coupled with the promotion of VCO for food supplements, as for beauty products had created demand of the products in the area. The increasing demand



for virgin coconut oil is because consumer believed that the said product can cure their illness.

Producers and Buyers of VCO

There are only two producers in Catarman, Samar, who process and sell VCO, Mr. Jaime Espina and Mrs. Elna Susing. There were also a few household who process coconut oil /VCO but for own consumption, consumed more as cooking oil and also for health purpose like for massaging. Thus, only the two producers were considered as respondents of the study. There were no traders identified or involved in the study, because, these producers sell directly to the end user of the products through their own store in the area.

Persons involved in the supply chain of VCO include the farmers who are also the producer or processor of VCO and consumers.

Farmer. Individual who have coconut trees, they may own the farm they cultivate or are tenants. Farmers supply coconut to the producers/processors of VCO. The farmer also process and sell copra. This is the major source of income of coconut farmers in the study area. In this research the farmers considered where those who supply the processors.

Producers/processors. Refers to individuals who processed VCO. These producers are also coconut farmers and process their own coconut produce and sell directly to the consumer or end user of the VCO. In this study there were only two VCO processors in Catarman, Samar that are producing for commercial, however, these two are not registered with BFAD. Based on records of registered VCO plants (PCA, 2006) about 27.52% were established in Region VIII (Eastern Visayas), 18.9% in Southern Luzon (Region VI-A) and followed by Bicol (Region V) with 10.9% VCO producers. There are only 40 VCO



producers who are registered with BFAD mostly based on National Capital Region and Southern Luzon.

Consumer. Refer to the end users of VCO. In the study, these are the individuals who buy VCO and used as food supplement or for massage and for hair care and other uses of the product.

Profile of Producers/Processors and Consumers

Table 2 presents the profile of the respondents (processors and consumers) as to their age, educational attainment and occupation.

Age. The two processors belonged to the age bracket of 36-50 years old and 51-65 years old. Nineteen of the consumers were within the age bracket of 36-50, seven were between the age bracket of 21-35 years old, 2 were in the age bracket of 20 and below, one is in the age bracket of 51-65 years and one in age bracket of 66 and above. The result implies that more of the older respondents (36 -50) and above uses VCO products, maybe for food supplement and cure some illnesses. The younger ones maybe uses the product for beauty purposes.

Educational attainment. As shown in Table 1, processors have reached elementary level. For the consumer respondents, nine (30%) of the respondents are elementary, seven (23%) are high school and fourteen (47%) are college. Result shows that the processors had reached the elementary level and majority of the consumers had formal education and have even finished a degree.

Occupation. The table shows that the two VCO processors were also engaged in farming and one is engaged in business, where he get orders of VCO from buyers in United



States of America and let his workers in Samar produce VCO and deliver to US.

The table also shows that ten (33%) of the consumer respondents are into farming, eight of them were government employees, four were into business, only one is a laborer, three were students, two were housekeepers and two were private employees.

Frequency and Reason of Consumers for Buying VCO

Table 3 shows information on the frequency of purchase and reason for buying VCO product by the consumers. Most (97%) of the consumer respondents mentioned that they buy VCO as they need the product. There is one respondent who buy VCO every month.

All the respondents buy VCO products for health purposes such for medicine for some illness such as hypertension, proper digestion and metabolism, diabetes and other illnesses. Thus, 47% of the respondents uses the product as medicine, 40% uses as food supplement and 13% uses the product for beautification purposes as for skin and hair care.

Production Practices

VCO production in Catarman employs still the traditional method of producing coconut oil, that is why according the processors processing takes them a longer time as compared with processors in Los Banos, Laguna who uses machines in the processing. Table 4 shows the production practices as to reasons for VCO processing, source of raw materials and volume and frequency in processing.



SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Summary

The research was conducted to determine the flow of virgin coconut oil produced in Catarman, Northern, Samar.

The market outlets of the producers were the consumers of Northern Samar and are exported in USA where most of the buyers are Filipino American Citizens.

Respondents of the study were the producers and the local buyers of the product.

Processors produce the virgin coconut oil using tradition/manual method in processing virgin coconut oil. The processors are also coconut farmers and produce their own raw materials. Production volume depends on the order, average production per week is estimated at 1-2 liters per week and is sold at Php 180 per 350 ml. Packaging material used is the 350 ml transparent plastic bottle. The product flow of VCO processors is very simple because there are no intermediaries or middlemen involved. Producers sell directly to consumers.

Problems encountered in production were the following: it is difficult to produce virgin oil, limited production and high cost of raw materials. In terms of marketing, the problem is the limited market outlet for their product.

For the consumers, they buy VCO because of the health and beauty benefits that could be derived from the product, as food supplement and to cure some illnesses.



Conclusions

There were only two VCO processors and production practice is still traditional done manually, thus, production is limited and market outlet is also limited. Product flow is simple because no middlemen involved, this is due to the limited output, thus, processors also do not have the courage to expand market. The processors are not also accredited by BFAD, thus also one of the reason why they do not have the confident to expand market to other areas outside Visaya. Products do not have label, thus do not have trade name which is a way to promote the product.

Recommendations

Producers should improve the production technology used in the production of virgin coconut oil produced in Catarman, Northern Samar. To improve efficiency of production increasing production per week, new technology should be employed.

Continuous product innovation should be done to make the product more marketable, improve handling and packaging to make it more attractive to consumer like putting labels, thus the need to register the product and also in order to expand the market of the product.



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