

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/290103954>

Packaging of an instant "terasi" for diversified marketing

Article · January 2013

DOI: 10.5829/idosi.wasj.2013.26.nrrdsi.26016

CITATION

1

READS

181

12 authors, including:



Kamaruzaman Jusoff
Universiti Kebangsaan Malaysia

508 PUBLICATIONS 6,802 CITATIONS

SEE PROFILE



Muhidin Muhidin
Universitas Haluoleo

54 PUBLICATIONS 100 CITATIONS

SEE PROFILE



Haji Saediman
Universitas Haluoleo

48 PUBLICATIONS 96 CITATIONS

SEE PROFILE



Nur Rahmah
Universitas Negeri Makassar

8 PUBLICATIONS 9 CITATIONS

SEE PROFILE

Some of the authors of this publication are also working on these related projects:



Biometric View project



Fuzzy State Space Model of Multivariable Control System View project

Packaging of an Instant “*Terasi*” for Diversified Marketing

¹Surni, ²Kamaruzaman Jusoff, ¹Ayub M. Padangaran, ¹Taane La Ola, ¹Saediman, ¹Meisanti, ³Asnani, ⁴Muhidin, ⁴Djukrana Wahab, ⁵Murdjani Kamaluddin, ⁶Ilham Yamin and ¹Nur Rahmah

¹Social Economics of Agriculture Program,
Universitas Halu Oleo Kendari, South East Sulawesi, 93232 Indonesia

²Department of Forest Production, Faculty of Forestry,
Universiti Putra Malaysia, Serdang 43400 Selangor, Malaysia

³Faculty of Fisheries, Universitas Halu Oleo, Kendari, South East Sulawesi, 93232 Indonesia

⁴Faculty of Agriculture, Universitas Halu Oleo, Kendari, South East Sulawesi, 93232 Indonesia

⁵Faculty of Economy, Universitas Halu Oleo, Kendari, South East Sulawesi, 93232 Indonesia

⁶Faculty of Social Sciences and Humanities, Universiti Kebangsaan Malaysia, Bangi 43600 Selangor, Malaysia

Submitted: Sep 29, 2013; **Accepted:** Dec 1, 2013; **Published:** Dec 20, 2013

Abstract: The objective of this study is to create a model of poverty alleviation through a diversified marketing of instant *terasi* in South East Sulawesi. A descriptive farmer's share analysis was employed in the study. The results showed that the producer set three different base-prices for three types of *terasi* packs, namely the 15 g package of IDR 4,000, 10 g package of IDR 3,000 and 5 g package of IDR 1.500. An analysis of the farmer's share on 95 % of the producers based on traders and consumers point of view were satisfied with the high price of the model while traders gained much profit and consumer were satisfied on packaging, practiced in handling and serving, price and taste. It can be concluded that the *terasi* instant marketing in South East Sulawesi Province was preceded efficient. More work should be tested on the validity and precision of *terasi* model on other consumer goods in the other parts of Indonesia.

Key words: Marketing • Efficiency • *Terasi* • Poverty alleviation

INTRODUCTION

The world agriculture products are normally characterized by their bulky, perishable, cheap price and seasonal. So, the agriculture product need special handling and marketing to bring the product to the consumer in good condition. Agricultural industrial sectors revolution reveals those of its complex system [1]. For example, *tangchay* is a fermented vegetable product that is usually made from many kinds of vegetables and can be easily contaminated with pesticides. In Indonesia, the marketing of agriculture products have not yet been taken serious attention by the government. Although the government policy continuously focused on the alleviation of poverty, there has always been a number of problems facing its implementation. Despite such issues faced by the authority, the national development

programs have taken serious concerns and prioritize on the aspects of economic growth, jobs opportunity and poverty alleviation.

Experiences with the survival marketing strategies among rural petty commodity producers in Guatemala found that the small peasants could not survived if they only rely on agriculture produce due to the small agriculture markets [4]. In order for the peasant farmers to improve their standard of living, more business sectors should be quickly developed for more job opportunities to eradicate poverty. Moreover, this priority is expected to trigger the growth of other sectors, directly or indirectly by creating conducive environment for economic development. One of the products which can be potentially developed for the local community is the *terasi* powder (or instant *terasi*). It was initially developed in 2010 by a team of researchers from Universitas Halu Oleo

(UHO) in a community service program at Bajo Indah Micro-Enterprise in Kelurahan Lapulu, Kendari. This program is a follow-up of the extension service facilitated by the Provincial Planning Board in year 2008 and 2009. The idea to produce an instant *terasi* was based on the experience that the wet *terasi* sold in the current market is susceptible to contamination from various disease vectors such as the flies, rats and other insects. However, if *terasi* can be presented or rebranded in a more hygienic and attracted packaging and disease vectors free, it can be easily handled and transported and may dominate local, national, regional, as well as international markets.

Strategic marketing studies are important in selling a particular product where consumers, sales and producers were involved [5]. Big margins of profit are not that significant in marketing but how to sustain the marketability of such products is the focus of marketing management and products development [6]. Marketing is the philosophy of management that pushes business organizations towards consumer needs and their satisfaction. Consumer satisfaction is the main objective of marketing concepts. Moreover, sales person or sales representative has to identify and analyze the marketing opportunities that allow organization to take certain measures to satisfy the customers. Marketing analysis should be emphasized on the marketing records, forecast and analysis of each items sold, selling potential and targets of each product types, consumer and geographic location in a particular region [7]. In Mozambique, for instance, the key causal factors behind farmers' marketing decisions have been identified [8]. A two-step decision making processes where farmers decide, first, whether or not to participate in the market. Next, they decide how much to sell. A simple statistical concepts to analyze agricultural products marketing is required such as the horizontal and vertical price correlation analysis to show the level of market integration, coefficient of variation to illustrate inter-seasonal price variation and cost-benefit analysis and marketing margin (function cost analysis) and price distribution analysis from the farmer's up to the retailer's level indicating the amount of contribution from the middlemen who act as mediators between the consumers and producers [9]. This will create the changes in price commodities and income instability of the farmers pending on the supply and demand of their produce. The change in demand and bargaining power would change the commodity pricing, as well as the market conditions and bargaining activities [6].

In reality, the consumer price is greatly influenced by the prices at production centers and in the cities.

However, consumers at the city centers have an overall control over the consumer price in the rural areas where there is less bargaining power [6] and resulted in a competitive market structure [10]. Market efficiency is basically relative in size and scale. Marketing efficiency can also be measured using marketing margin concept applied to similar commodity with relatively small market margin and differ in various marketing channels [11]. The higher the farmer's share indicated an efficient marketing or the market structure was in a perfect competition. In contrary, when farmer's share (FS) is low ($FS < 50\%$), this indicates that the commodity marketing is imperfect or probably under a monopoly market structure. Moreover, marketing efficiency can also be measured from the degree of satisfaction of all parties that were directly involved in the commodity markets. *Terasi* powder is produced from wet *terasi* as raw material which was so far sold in the provincial markets. The product rebranded as instant *terasi* is expected to be more practical for the consumers since it will be packed-free of contamination and more hygienic, more attractive and longer storage time with easy handling and transport besides easy serving [12]. This commodity was produced by Bajo Indah Microenterprise based in Kelurahan Lapulu, Kendari. Based on raw materials, *terasi* is generally classified into shrimp and fish *terasi*. Shrimp *terasi* is reddish-brown in color with higher price, whilst fish *terasi* is black in color with a lower price. The shrimp *terasi* contains a higher level of iodine that originates from its raw material. It has been reported that the average nutrient contents in 100g of *terasi* were 30g proteins, 3.5g lipid, 3.5g carbohydrate, 32g mineral and 40g of water [13]. However, Bajo Indah Microenterprise rebranded the production from traditional or wet *terasi* to *terasi* powder since year 2010. The total production cost would be lower when instant *terasi* was produced in Kelurahan Lapulu, Kendari in comparesion to other regencies [14]. This study has proven that *terasi* powder is economically feasible as indicated by NBCR value of 1.73, NfV = Rp 29,082,520 and IRR of 32.55 %. This paper presents a socioeconomic analysis of Ngo SARA activities in Benty with a prospect of improving the farmer's income and standard of living.

MATERIALS AND METHODS

Location and Description of Study Area: Location of these study is South East Sulawesi Indonesia. The producer of *terasi* in Lapulu Village, Kendari City while 18 marketing agents in eight districts in Southeast Sulawesi.

Data Collection: Primary and secondary data were collected for this study. Primary data was collected by in-depth interviews with the upstream producer of the instant *terasi* and downstream traders and consumer of 18 marketing agents in eight regencies of South East Sulawesi Province. Secondary data was collected from producers of the instant *terasi*.

Data Analysis: Data collected was analyzed using descriptive methods based from the degree of satisfaction of all parties (FS) i.e producers, traders/marketing institutions and consumers. The producer was recorded as “satisfied” when the profit is more than 50 %. On the other hand, the traders were considered “satisfied” when they got profit from the sale of *terasi* powder. Moreover, the degree of consumer satisfaction depends on several variables among others are taste, packaging and pricing.

RESULTS AND DISCUSSION

Upstream Level Producers: The production of quality and hygienic instant *terasi* in 2012 was under the special supervision and patron of STRANAS Research Scheme. The agencies involved were Kendari Office of Health which issued the Home Industry Certificate on Food Production No. 202747101165 and Food and Drug Administration Office Laboratory in Kendari which analyzed the content of instant *terasi* comprising of 63 % protein, 8.96 % water and 22.94 % ash. In line with the effectiveness of this action research, the microenterprise production increased from 10 to 16 members or 40 % increased.

Human Resource Development: Training and guidance for the workers was continuously done to produce hygienic instant *terasi* that complies with the required health standard. Under the monitoring and supervision scheme of STRANAS, handling of instant *terasi* must comply with the required health standards and guidelines. Some of the trainings involved the use of apparels and its proper usage, methods for filling instant *terasi* into sachets of 5 g, 10 g and 15 g net weights and proper handling of the seal equipment.

Calculation of Base Price: According to calculations, the base price of the instant *terasi* was IDR 227.5/g which was determined from the following detail calculations below. It is to be noted that 1 kg of wet *terasi* is equivalent to 700 g of *terasi* powder.

(a) Expenses for producing 700 g *terasi* powder:
7 Liter of dry shrimp: IDR 49,000
1 glass of water: IDR 500
1 spoon of salt: IDR 500
Total expenses: IDR 50,000

(b) Expenses for producing *terasi* powder from wet *terasi*:
0.5 l of kerosene: IDR 1,500
Wage of labor: IDR 10,000
85 pieces of sachet @IDR 1,150: IDR 97,750
Total: IDR 159,250

According to the above calculation, the total cost for producing 700 g of *terasi* powder is IDR 159,250 or IDR 227.50 per g *terasi* powder.

The Set Price at Producer Level and Services Charge by Researchers: The base price at producer level was fixed to be IDR4,000 for the 15 g sachet, IDR 3,000 for the 10 g sachet and IDR 1,500 for the 5 g sachet. Therefore, the difference among the fixed price and production cost is IDR 55.83 per g. This price difference as stated in M.O.U is for the UHO researchers and their business partner Bajo Indah Microenterprise. Differences in prices of agricultural products was due to the difference between the rural and urban spatial infrastructural facilities, logistics and the spatially concentrated patterns of food grains storage [15]. Empirical analysis of rice price data from Madagascar suggests that price variability and skewness indeed differ between rural and urban areas in ways that adversely influence the relative welfare of the poor rural peasants.

Downstream Level Agents: Eighteen (18) marketing agents for instant *terasi* had been established in eight Kabupatens (regions) of Southeast Sulawesi Province. A total of 10 marketing agents were distributed in consumer centers around Kendari where one was in Wanci, the Capital City of Kabupaten Wakatobi and one in Bau-Bau City of Buton Island. The other marketing agents were found in South Konawe Kabupaten (2) and one each in Konawe Kabupaten, North Konawe Kabupaten, Kolaka Kabupaten and North Kolaka Kabupaten.

Profit Margin by Traders and Producers: A promotion price was offered at the agents level as follows: 15 g sachet for IDR 5,000, 10 g sachet for IDR 3,000 and for 5 g sachet for a special promotion price of IDR 3,500.

Table 1: Perception of marketing agents on instant *terasi* produces of Bajo Indah Microenterprise, Lapulu-Kendari City, Southeast Sulawesi, 2012

No	Marketing Agents	Evaluated Component			
		Packaging	Practicability	Price Level	Taste
1	Perumdos, Kemaraya Kendari	Very good	Good	Fair	Very good
2	Perumdos, Anduonohu Kendari	Attracted	Fair	Acceptable	Fair
3	Central Market, Kendari	Fairly good	Fair	Fair	Fair
4	Mandongga Market, Kendari	Good	Good	Acceptable	Good
5	Grossary Market bypass, Kendari	Very attracted	Good	Fair	Good
6	Konawe	Very good	Good	Fair	Fair
7	North Konawe	Attracted	Good	Fair	Fair
8	South Konawe	Good	Good	Fair	Good
9	North Kolaka	Very good	Good	Expensive	Good
10	Kolaka	Fairly good	Good	Expensive	Fair
11	Wakatobi	Good	Good	Fair	Good
12	Bau-bau, Buton	Attracted	Fair	Expensive	Good
13	Baruga Market, Kendari	Very good	Good	Expensive	Good
14	BTN Beringin, kendari	Attracted	Good	Fair	Good
15	Anduonohu Market, Kendari	Good	Fair	Fair	Good
16	Aepodu Market, Konsel	Very good	Good	Fair	Good
17	Other	Good	Fair	Acceptable	Fair
18	Moiyo Central Gift	Very good	Good	Fair	Good

The price margin and profit gained by traders (marketing agents) as calculated from this promotion prices were IDR 1,000 on the 15 g and 10 g sachets and IDR 500 on the 5 g sachet. The calculated profit gained by the traders was IDR 660 per 15 g sachet and IDR 160 per 10 g and 5 g sachet, respectively (or IDR 32.67 per g). Those profits were obtained from the difference of market margin (IDR 66.67/g) and average cost of IDR 34/g). Meanwhile for the producers, the average price portion gained by producer (FS) for all 18 marketing agents was 80.95 %. The FS value of packaging sizes was dominated by the 10 g sachet (85.71 %) followed by the 15 g sachet (80 %) and finally, the 5 g sachet (75 %). In terms of FS value, it could be concluded that the instant *terasi* marketing in South East Sulawesi is fairly efficient.

Consumer’s Satisfaction: Consumer’s satisfaction on the instant *terasi* was evaluated on 18 marketing agents in Southeast Sulawesi. The mean score on packaging was 3.28%, with 1.94% in usage and handling and 3.5% on taste. A mean score of 2.85% indicated that the consumers were dissatisfied with the *terasi*.

Marketing Efficiency of Instant *Terasi*: The producers was satisfied with a profit of 80.95% because the traders and consumers were almost satisfied with the packaging, practicability in usage and handling, price and taste.

Traders’ satisfaction on instant *terasi* sales were measured based on the gained profit per g of instant *terasi* sold. This profit was calculated from the market margin minus the average of marketing cost. The result showed that the profit gained by traders was IDR 32.67 per g indicating that the traders were satisfied too. On the other hand, the consumer’s satisfaction were measured using questionnaires survey which composed of packaging performance, practicability in usage and handling, price level and taste perceptions. The consumers seem to be fairly satisfied with a total mean score of 2.85%. Details on the perceptions of the marketing agents can be illustrated in Table 1.

CONCLUSION

The instant *terasi* produced of Bajo Indah Microenterprise contains 65.93 % proteins, 8.96 % water and 22.94 % ash. The instant *terasi* base price was sold at IDR 227.5 per g where an option packaging of 15, 10 and 5 g sachets are available at IDR 4,000, IDR 3,000 and IDR 1,500, respectively. A total of 18 instant *terasi* marketing agents have already been established at some selected consumer centers in the Regency or big towns in Southeast Sulawesi Province. The prices for the marketing agents for 15, 10 and 5 g sachets are IDR 5,000, 3,500 and 2,000, respectively. The profits gained by the gained by

the producers on 15, 10 and 5 g sachets were 80%, 85 % and 75 %, respectively. It can be concluded that the instant terasi marketing was efficient and the most popular and on demand instant *terasi* package is the 10 g sachets based on the farmer's share of 80.24 %, traders profit of IDR 41.56 per g and the consumer satisfaction index of 2.91.

REFERENCES

1. Li, X., 2010. Evolution Characteristic of Agricultural Industrial Clusters: A Perspective From The Small World Network Model. International Conference on Industrial Mechatronics and Automation, 2: 353-356.
2. Raiputta, J. and P. Suthiluk, 2009. Safety level of Tangchay currently available on the market and development of Tangchay production from cabbage for enhancement of quality and safety. Asian Journal of Food and Agro-Industry. Special Issue, pp: 390-403.
3. Camara, M., Y. Wen, S. Toure, S.M. Camara and M. Traore, 2011. Assessment of Ngo SARA activities on sustainable agriculture and poverty reduction in Benty, Guinea African Journal of Agricultural Research, 6(32): 6665-6673.
4. Smith, C.A., 1989. Survival strategies among rural petty commodity producers in Guatemala. International Labour Review, 28(6): 791-813.
5. Pride, William M. dan Farrell, 1995. Pemasaran Teori dan Praktek Sehari-hari, Penerbit Binarupa Aksara, Jakarta (*In Indonesian*).
6. Saefuddin, A.M., 1982. Pemasaran Produk Pertanian, Fakultas Pertanian, IPB Bogor (*In Indonesian*).
7. Supranto, J., 1986. Riset Pemasaran untuk Pengembangan Ekspor, Penerbit Erlangga, Jakarta (*In Indonesian*).
8. Heltberg, R. and F. Tarp, 2002. Agricultural supply response and poverty in Mozambique. Food Policy, 27(2): 103-124.
9. Azzaino, Zulkifli, 1982. Pengantar Tataniaga Pertanian, Departemen Ilmu-Ilmu Sosial Ekonomi Pertanian, IPB Bogor (*In Indonesian*).
10. Surni., 2009. Pemasaran Hasil Pertanian, Buku Ajar, Edisi Revisi, Fakultas Pertanian, Universitas Haluoleo, Kendari (*In Indonesian*).
11. Nurland, F., 1984. Pemasaran Produk Pertanian, Lephass Unhas, Ujung Pandang (*In Indonesian*).
12. Nadiryati, F., 2011. Analisis Kelayakan Teknis Usaha *Terasi* Bubuk pada Kelompok Usaha Bajo Indah di Kelurahan Lapulu Kecamatan Abeli Kota Kendari, Skripsi, Jurusan Agribisnis Faperta Unhalu, Kendari (*In Indonesian*).
13. Suprapti, 2002. Bisnis *Terasi*, <http://bisnisukm.com/pembuatan.terasi.htm>. Accessed on January 22nd, 2011 (*In Indonesian*).
14. Yeni Anggraeny, 2011. Analisis Kelayakan Finansial Usaha *Terasi* Bubuk pada Kelompok Usaha Bajo Indah di Kelurahan Lapulu Kecamatan Abeli Kota Kendari, Skripsi, Jurusan Agribisnis Faperta Unhalu, Kendari (*In Indonesian*).
15. Barrett, C.B., 1996. Urban bias in price risk: The geography of food price distributions in low-income economies. Journal of Development Studies, 32(6): 830-849.