

## Added Value Analysis of Skin Crackers at Home Industry in Batusangkar City

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**Abstract**— Agroindustry of skin crackers is an effort to create added value of cow/ buffalo leather into the skin crackers. This study aims to determine profit, the added value of cow/ buffalo leather processing into the skin crackers and benefit received by the owners and labors of added value skin crackers. The research method is a case study on skin crackers home industry "Mahkota Kulit" in Batusangkar City. Collected data were analyzed by using a simple statistical tools as well as descriptive and quantitative approach. The results showed that the the profit of each production process of Mahkota Kulit skin crackers is IDR 2,795,490.45 or IDR 88,745.73/kg, R/C 2.2 (efficient). Production of skin crackers capable of producing added value from processing of cow/ buffalo skin into the skin crackers IDR 73,785/kg with added value ratio of 70.2%. The benefit received by the owners of the production factors can be seen from the amount of margin IDR 83,000/kg, distribution margins for the business owners of 87.62%, 1.28% for labor and the contribution for other inputs is 11.10%.

**Keywords**— skin cracker, added value, profit analysis, home industry

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### I. INTRODUCTION

Industrial and trade development programs in West Sumatra is directed to encourage the growth of small and medium scale agroindustry and agribusiness to optimize the utilization of available resources, so that the positive impact on employment, which can increase community incomes [1]. According to Wiwik [2] demanded abilities agribusiness actors in performing the processing of agricultural product such as farm commodities, through the development of agribusiness and agro-livestock sector. This activity is expected to facilitate the diversity of production and increasing the added value and competitiveness of farm commodities.

Agroindustry of skin crackers is one form of productive household enterprises, in addition for creating added value of leather cow/ buffalo into high value products. This home industry can absorb workers who are around the area of production so as to reduce unemployment and increase community incomes.

Batusangkar city is one of the skin crackers production centers in West Sumatra. According to data of the Department of Industry and Trade Tanah Datar Regency [3] there are 26 skin crackers businesses in Tanah Datar Regency. One of the biggest skin crackers business is Mahkota Kulit with sales turnover of 3.6 billion/year. Skin

raw material obtained from slaughterhouses in West Sumatra. But the problem, how much the profit, the added value obtained from the processing of leather cow/ buffalo into the skin crackers and whether the agroindustry is able to provide real added value to business owners and labor?

Based on these ideas, this study aims to determine (1). profit, (2) the added value of cow/ buffalo leather processing into the skin crackers and (3) benefit received by the owners and workers of added value skin crackers.

### II. METHOD

The research method is a case study on skin crackers home industry of "Mahkota Kulit" in Batusangkar City. Primary data were processed by using quantitative descriptive analysis of the profit and added value, benefit received by the owners and labors of added value skin crackers.

#### A. The Research Variables

The research variables:

- (1). The amount of raw material used and the amount of production of skin crackers
- (2). Skin cracker production costs consist of leather price cow/ buffalo, auxiliary materials costs (salt, garlic, cooking oil), wage labor.
- (3). The selling price of the skin crackers

### B. Profit Analysis

$$\pi = TR - TC$$

$\pi$  = Profit skin crackers industry (IDR)

TR = Total revenues skin crackers industry (IDR)

TC = Total cost of skin crackers industry (IDR)

Business efficiency in the production process of the skin crackers used analysis of R/C ratio. The formula :  $R/C = TR/TC$  where the business is efficient and profitable if  $R/C > 1$ , if  $R/C = 1$ , break even and if  $R/C < 1$  then the business is inefficient and unprofitable.

### C. Added Value Analysis

TABLE I  
FORMAT OF ANALYSIS OF ADDED VALUE PROCESSING

No	Output, Input, Price	Formula
1	Production (kg/year)	A
2	Raw material (kg/year)	B
3	Labor (HOK)	C
4	Conversion Factor (1/2)	A/B
5	Labor Coefficient (3/2)	C/B
6	Average of product price (IDR/kg)	D
7	Average of wage (IDR/HOK)	E
	<b>Profit</b>	
8	Raw Material Price (IDR/kg)	F
9	Contribution of Other Inputs (IDR/kg)	G
10	Production Value (4x6) (IDR/kg)	$M \times D = K$
11	a. Added Value (10-9-8) (IDR/kg)	$K - F - G = L$
	b. Ratio of Added Value (11a/10) (%)	$L/K = H \%$
12	a. Benefits for Labor (5x7) (IDR/kg)	$M \times E = P$
	b. Labor Share (12a/11a) (%)	$P/L = Q \%$
13	a. Profit (11a-12a)	$L - P = R$
	b. Rate of Profit (13a/11a) (%)	$R/L = O$
	<b>Benefit for Service of Production Factor</b>	
14	Margin (Rp/kg)	$K - F - S$
	• Profit of Direct labor (12a/14)x100	$(P/S) \times 100 = T$
	• Profit of Other inputs (9/14)x100	$(G/S) \times 100 = U$
	• Profit of Entrepreneur (13a/14)x100	$(R/S) \times 100 = V$

Source : Sudiyono (2004)

## III. RESULT AND DISCUSSION

### A. Business Profile

Home Industry of skin crackers 'Mahkota Kulit' has been pioneered by the owner since 1990. Raw materials use cow or buffalo leather obtained from abattoir in Bukittinggi, Padang Panjang and Sawahlunto with price is IDR. 22,000/kg. Skin crackers production capacity of 45 kg/day. Production is carried out by a wet process. Auxiliary materials used are garlic, salt and cooking oil. The use of an adjuvant for every 1 kg of skin cracker production is garlic 0.0095 kg (IDR 152), salt 0.019 kg (IDR 38) and 0.95 liters of cooking oil (IDR 9,025).

Production of skin crackers consists of 'latua' crackers and ready for consumption crackers with a selling price of IDR 180,000/kg and IDR 120,000/kg. Both production is marketed to the Tanah Datar district as to restaurants, cafes and markets. Sales were also carried out of the city of Pekanbaru, Rengat and Jakarta.

Labor consist of 16 people who comprise 31% of men and 69% women. Labor education 81.3% had completed high

school. Labor wage of IDR 50,000/ day or equivalent to IDR 6,250/ hour.

### B. Profit

TABLE II  
PROFIT OF SKIN CRACKERS EACH PRODUCTION PROCESS (/DAY)

No	Items	Value (IDR)
1	Total Revenue	2,307,509.42
2	Total Cost of Production	5,103,000
3	Profit/day	2,795,490.45
4	Profit / Kg	88,745.73

Source : Results of Primary Data Processing, 2015

The profit of each production process of Mahkota Kulit skin crackers is IDR 2,795,490.45 or IDR 88,745.73/kg. The profit gained of this business is higher than from other skin crackers business in West Sumatra such as research of Arisandi et al [4] profits of skin crackers business each production process IDR 1,663,921.30. Similarly, when compared with other research, profits per kg of skin crackers Mahkota Kulit is also higher, the research results of Yuzaria et al [5], the average profit skin crackers IDR 69,239/kg and profit each production process IDR 25,649.57/kg [6].

R/C ratio of skin crackers that produced of Mahkota Kulit business is 2.2. It shows that business is profitable. When compared with R/C ratio of the research of Arisandi et al is 1.71 where it is known that the skin crackers business has also been efficient due to the value of R/C ratio on the skin crackers business  $> 1$ .

### C. Added Value Analysis

The added value generated is determined by the supply of raw materials, production management, the level of technology used, the institutional market, and environment factors [7]. The technology limitations of entrepreneurs cause limited production, so that the benefits received by producers is not maximized. Besides technology, workforce skills also affect the success of the agroindustry.

Agroindustry of skin crackers produce added value from processing of cow/buffalo leather became skin crackers and provide rewards for owners and workers. The results of this analysis indicate how much added value contained in every one kg of skin crackers and how much consideration given to the owner and workers in every one kg of skin crackers. From 45 kg cow/ buffalo skin produce 31.5 kg skin crackers with a conversion factor of 0.7 which means that 1 kg of cow/buffalo skin produces 0.7 kg. The added value of the production of skin crackers is IDR 73,785/kg with added value ratio 70.2%. Added value of skin crackers effort greater than the similar business as the result of research of Arisandi et al [4] which added value is IDR 20,582.96/kg/process or 51.46%.

The benefit received by the owners of the production factors can be seen from the amount of margin IDR 83,000/kg with distribution margins for the business owners of 87.62%, 1.28% for labor and the contribution for other inputs is 11.10%.

TABLE III  
ANALYSIS OF ADDED VALUE OF SKIN CRACKERS PROCESSING

No	Output, Input, Price	
1	Production (kg/day)	31.5
2	Raw material (kg/day)	45
3	Labor (hour/day)	8
4	Conversion Factor (1/2)	0.7
5	Labor Coefficient (3/2)	0.17
6	Average of product price (IDR/kg)	150,000
7	Average of wage (IDR/hour)	6,250
<b>Profit</b>		
8	Raw Material Price (IDR/kg)	22,000
9	Contribution of Other Inputs (IDR/kg)	9,215
10	Production Value (4x6) (IDR/kg)	105,000
11	a.Added Value (10-9-8) (IDR/kg)	73,785
	b.Ratio of Added Value (11a/10) (%)	70.2
12	a.Benefits for Labor (5x7) (IDR/kg)	1,062.5
	b. Labor Share (12a/11a) (%)	1.4
13	a. Profit (11a-12a)	72,722.5
	b. Rate of Profit (13a/11a) (%)	99
<b>Benefit for Service of Production Factor</b>		
14	Margin (IDR/kg)	83,000
	• Profit of Direct labor (12a/ 14)x100	1.28
	• Profit of Other inputs (9/14)x100	11.10
	• Profit of Entrepreneur (13a/14)x100	87.62

Source : Results of Primary Data Processing, 2015

#### IV. CONCLUSIONS

Based on the results of this research that presented earlier, the profit of each production process of Mahkota Kulit skin crackers is IDR 2,795,490.45 or IDR 88,745.73/kg, R/C 2.2 (efficient). Production of skin crackers capable of producing added value from processing of cow/ buffalo skin into the skin crackers IDR 73,785/kg with added value ratio of 70.2%. The benefit received by the owners of the production factors can be seen from the amount of margin IDR 83,000/kg, distribution margins for the business owners of 87.62%, 1.28% for labor and the contribution for other inputs is 11.10%.

#### REFERENCES

- [1] Department of Animal Husbandry. Livestock Development Programme in 2010. The Provincial Government of West Sumatra. 2010
- [2] Wiwik, Isnalita. Mapping Study of Small and Medium Enterprises in the Context of Pre Restructuring, , Economic Magazine Year XIII No 1 April.2003
- [3] Department of Industry and Trade Tanah Datar Regency. Annual Report 2010/201. 2011
- [4] Arisandi, Novita. M. Nurung, and Sri, Sugiarti. Revenue Analysis, Efficiency and Added Value of Skin Crackers Business (A Case Study of Home Industry Mr. Ja'ung In Bangkahulu Sub Districk).University of Bengkulu. 2015
- [5] Yuzaria,D., Fitriani, Iskandar I. 2012. Analysis of Cost and Profitability Skin Crackers Industry In West Sumatra. Proceedings of the National Seminar and Annual Meeting of the Division of Agricultural Sciences College of BKS-West Region. 2012
- [6] Adli. Analysis of Revenue of Skin Crackers Business 'Alhamdulillah' in Pulau Punjung Sub Distric Dhamasraya Regency. Faterna Unand. 2013
- [7] Zakaria. Analysis of the Added Value of Agroindustri Lanting In Kebumen Central Java. Thesis Graduate School of Agricultural Economics. UGM. Yogyakarta.2000.