

Analysis of Added Value of Bamboo into Woven Bamboo Products in Punggawukawu Village, Benua District, South Konawe Regency (Case Study of the Narti Sekar Craft Business Group)

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Abstract

This study analyzes the process of making woven bamboo products and calculates the amount of added value resulting from the process of making woven bamboo in Punggawukawu Village, Benua District, South Konawe Regency. The types of data used in this study were primary data and secondary data. Primary data were obtained through interviews while secondary data were obtained from various references related to literature related to this research. This research was conducted from November 2022 to March 2023. The determination of the research location was purposive and the method used in this research was the Case Study method. This study was analyzed using a qualitative descriptive method and the Hayami method. The results of this study indicate that 1) The process of processing bamboo into hats includes the process of cutting bamboo, cleaning, splitting, drying, drying, plaiting, and installing woven head mats, bamboo around the hat, and plastic and the processing of bamboo into tampah/nyiru includes cutting bamboo, cleaning, splitting, smoothing bamboo, plaiting, and installing the rim of tampah bamboo. 2) The added value resulting from the processing of bamboo into Tampah/Nyiru and Caping Caps is IDR 18,461/unit of raw material and IDR 62,957/unit of raw material respectively with value added ratios of 76.92% and 94, respectively 43%. Of the two processed products that provide the greatest added value is Caping Caps while the smallest is woven products

Keywords: Woven Bamboo, Added Value

INTRODUCTION

Indonesia is a country with a diverse culture, this is of course the main attraction that Indonesia has, culture that has been passed down from generation to generation can be said to be local wisdom. One of the cultural traditions that has developed from generation to generation is woven crafts (Apriliani, 2018).

One of the creative industry sectors that has been continuously developing in Indonesia is the woven handicraft business. The craft business sector is one of the creative industry sectors that can contribute to the growth of a creative Indonesian society and boost business capabilities. One of the creative businesses that many people are involved in is the business of woven bamboo handicrafts (Syarifuddin, *et al.*, 2022). One of the creative and innovative craft businesses based on local wisdom is woven bamboo. According to Khotimah and Sutisno (2014), bamboo plants are often used by rural communities as materials for handicrafts, namely woven bamboo. Bamboo is a plant that belongs to the Gramineae family which can grow in tropical, subtropical and temperate regions, and lowlands to highlands. It can live wild, cultivated and grow in a wide variety of habitats (Sicily and Junisa, 2022). Bamboo has multifunctional types as a food ingredient for humans (bamboo shoots), household needs and various crafts with various uses ranging from souvenirs, furniture, bags, hats, multipurpose boxes to musical instruments and construction for making bridges, various insulation, house construction includes pillars, walls and roofs (Sulistino, *et al.*, 2016).

Woven handicraft business in the creative industry sector takes advantage of natural resource wealth, especially in the agricultural sector and to utilize the agricultural sector for agro-industrial development can be the right alternative because the added value generated will be even greater. Value-added (*Value added*) is the addition of value to a commodity due to processing, transportation or storage in a production process. In the process of processing added value, it can be interpreted as the difference between the product value and the cost value of other input raw materials, but does not include labor (Billah and Mulyani, 2019).

Bamboo plaiting craft is the art of knitting using bamboo which has been processed first and then woven into various shapes and has a selling value. Traditionally, the process of making woven bamboo crafts still uses simple tools such as cutting knives and thinning knives (Fibriyanti, *et al.*, 2020). Products produced from woven bamboo crafts are the most popular products from various forms of bamboo processing, and really need a touch of added value to improve product quality and competitiveness. The diversity of shapes,

functions and woven motifs makes woven products have their own charm and characteristics. As one of the creative industries, woven crafts have taken root in people's lives. Based on how it is made, woven is divided into three, namely: 1) Flat woven (Sasak), namely woven that is made flat, flat and wide. This type of craft is widely used for mats, traditional house walls, and room dividers. 2) Webbing oblique (oblique), namely webbing which is made oblique, can be in the form of two dimensions or three dimensions. This type of craft is widely used for baskets, tape cases, and so on. 3) Woven square (Truntum), namely plait made with square motifs, can be triangular, rectangular, octagonal, and so on. This matting can be two-dimensional or three-dimensional (Patria and Mutmaniah, 2015). Bamboo crafts are one of the original Indonesian craft works of art which are made using bamboo raw materials to be made into works or products that have added value, function value as decoration and handicraft products from bamboo raw materials which are very popular handicraft works in Indonesia, a touch of fruit hands that create added value and use value in woven bamboo thereby increasing the quality and competitiveness of these products (Widyaningsih, *et al.*, 2020).

South Konawe Regency is an area with a large distribution of bamboo (Zulfikar, *et al.*, 2019). South Konawe Regency ranks second highest with the number of villages/kelurahan with woven industries with a total of 79 villages/kelurahan after Konawe Regency (BPS Prov. Sulawesi Tenggara, 2018). In South Konawe Regency, there is a production business for woven bamboo handicrafts, to be precise, in Punggawukawu Village. Punggawukawu Village is one of the villages in Benua District where some people in Punggawukawu Village have expertise in weaving bamboo, this expertise can be utilized in the development of agroindustry of woven bamboo crafts. According to Marsudi (2013), the development of agro-industry is directed at 3 things, namely the development of integrated industrial clusters, the development of household and small scale agro-industry supported by medium and large scale, the development of agro-industry with global market competitiveness.

The potential for integrated agro-industry development and utilizing local potential can be found in Punggawukawu Village, South Konawe Regency. Some of the existing potential is raw materials, labor and infrastructure. In terms of raw materials, Punggawukawu Village is one of the villages in South Konawe Regency which has quite a large production of bamboo plants, sufficient raw materials is one of the requirements to ensure the sustainability of an agro-industrial activity. In terms of workforce, most of the people in Punggawukawu Village have expertise in weaving bamboo so that this expertise can be utilized in the development of agro-industry of woven bamboo crafts. The

infrastructure in Punggawukawu Village is quite good with paved roads, adequate electricity and water. The Narti Sekar woven bamboo craft business group in Punggawukawu Village is a business group of woven bamboo craftsmen. The products of woven bamboo handicrafts include winnowing/nyiru and caping hats. This woven bamboo craft is quite developed in Punggawukawu Village as a form of livelihood for the people in the village. The development of woven bamboo handicraft products is in line with the government's program to develop agro-industry in Indonesia, especially at the micro, small and medium enterprise (MSMEs) scale (Mesiyan and Suprehatin, 2020). Bamboo processing in Punggawukawu Village was developed to add economic value to bamboo, woven bamboo crafts.

Value added (*Value added*) is the added value of a commodity due to processing, transportation or storage in a production process. In the process of production or processing added value can be defined as the difference between the value of the product and the value of the cost of raw materials and other inputs, excluding labor (Noviyanti, *et al.*, 2018). The purpose of this study was to determine the process and added value of making bamboo into woven bamboo products in Punggawukawu Village, Benua District, South Konawe Regency.

MATERIALS AND METHODS

This research was conducted at the Narti Sekar woven bamboo handicraft business in Punggawukawu Village, Benua District, South Konawe Regency. The time of the research was carried out in November 2022 – March 2023. The research location was determined deliberately (*Purposive*) with the consideration that the Narti Sekar woven bamboo craft business is one of the businesses that produces woven bamboo handicrafts in Punggawukawu Village, Benua District, South Konawe Regency and is still running until now.

The informants in this study were the Narti Sekar handicraft business group in Punggawukawu Village, Benua District, Konawe Selatan Regency, which consisted of business owners and 4 members of the Narti Sekar business group, where 2 members produced woven cap hats and 2 other members produced tampah/ imitate. The process of collecting data in this study used interviews, observation, documentation, and literature studies.

The data analysis used in answering the objectives of this research is descriptive qualitative analysis method and Hayami analysis. Descriptive analysis to find out the process of making bamboo into woven bamboo products in Punggawukawu Village, Benua District,

Konawe Selatan Regency, was carried out using descriptive analysis, namely explaining from the beginning the processing/woven bamboo into woven bamboo products. Added value analysis, in this study added value analysis was used to calculate the added value of bamboo into woven bamboo handicraft products after being processed/woven. To find out the amount of added value obtained from processing/woven bamboo into woven bamboo crafts in Punggawukawu Village, Benua District, South Konawe Regency, the Hayami method added value analysis was used.

RESULTS AND DISCUSSION

Informant Identity

In general, the identity of informants in the Narti Sekar craft business group in Punggawukawu Village, Benua District, Konawe Selatan Regency includes: age, education level, number of family dependents and business experience. In detail, the identity of the informants in the Narti Sekar craft business group can be seen in table 1.

Table 1. Identities of Informants in the Narti Sekar Craft Business Group in Punggawukawu Village, Benua District, South Konawe Regency in 2023

No	Description	Amount	Presentase %
1	Age		
	1-14	0	0
	15-64	5	100
	>64	0	0
2	Level of education		
	SD/Equivalent	1	20
	SMP/Equivalent	1	20
	SMA/ Equivalent	2	40
	SMK/ Equivalent	1	20
3	Jumlah Tanggungan Keluarga		
	<3 Soul	3	60
	4-6 Souls	2	40
	>6 Souls	0	0
4	Business Experience		
	<10 th	4	80

10-20	1	20
>21	0	0

Based on Table 1. It shows that the age of the informants in the Narti Sekar craft business group in Punggawukawu Village, Benua District, Konawe Selatan Regency ranges from 15 years to 64 years with a percentage (100%) so they are classified as productive age, this is in line with Hasan's opinion, *et al.* (2016) who grouped that ages 1-14 years were included in the unproductive category, ages 15-64 years were included in the productive age category, while those aged >64 years were included in the non-productive age.

The education level of the informants in the Narti Sekar craft business group in Punggawukawu Village, Benua District, Konawe Selatan Regency was dominated by informants with the last high school education (SMA/equivalent). The level of education can influence the way one thinks and captures someone to analyze and interpret a knowledge so that it influences in decision making, solving problems and in taking action (Setiyowati, *and hasl.*, 2022).

The number of dependents in the Narti Sekar craft business group in Punggawukawu Village, Benua District, Konawe Selatan Regency was dominated by informants with a total dependent family of <3 people with a percentage (60%) so that it was included in the category of small family dependents. According to Purwanto and Taftazani in 2018, the number of family dependents can be grouped into three groups, namely small family dependents (<3 people), medium family dependents (4-6 dependents) and large family dependents (>6 dependents).

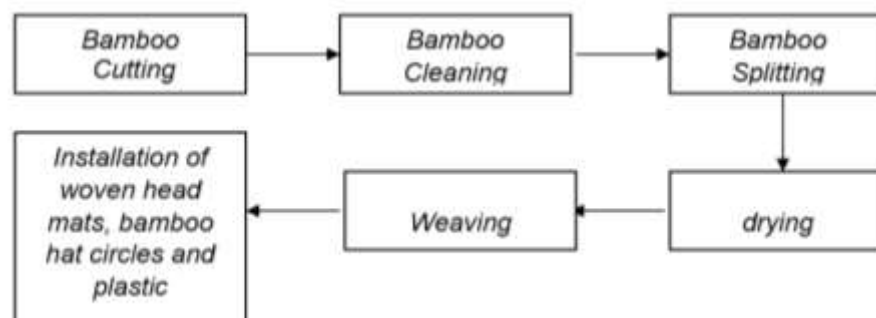
The business experience of informants in the Narti Sekar craft business group in Punggawukawu Village, Benua District, South Konawe Regency is dominated by informants who have experience ranging from <10 years with a percentage (80%) so that they are included in the category of having low experience because it is less than 10 years. This is in accordance with the opinion of Putri, *et al.* (2021) who grouped that farming experience was divided into 3 categories namely low experience (≤ 10 years), moderate experience (11-20 years), and high experience (≥ 21 years). The longer a person tries, the more skilled and trying to improve for his business to be better and more profitable. Likewise, the longer a person's experience in running a business, the more knowledge and new innovations are found.

Process of Making Woven Products

The process of making woven bamboo products in the Narti Sekar craft business group in Punggawukawu Village, Benua District, Konawe Selatan Regency includes the process of making cap and Tampah/nyiru. The product manufacturing process is as follows.

a) The process of making tampah/nyiru product

The process of making tampah/nyiru consists of the process of cutting bamboo, cleaning, splitting, thinning, weaving, and installing blengker. Can be seen in Chart 1 below.

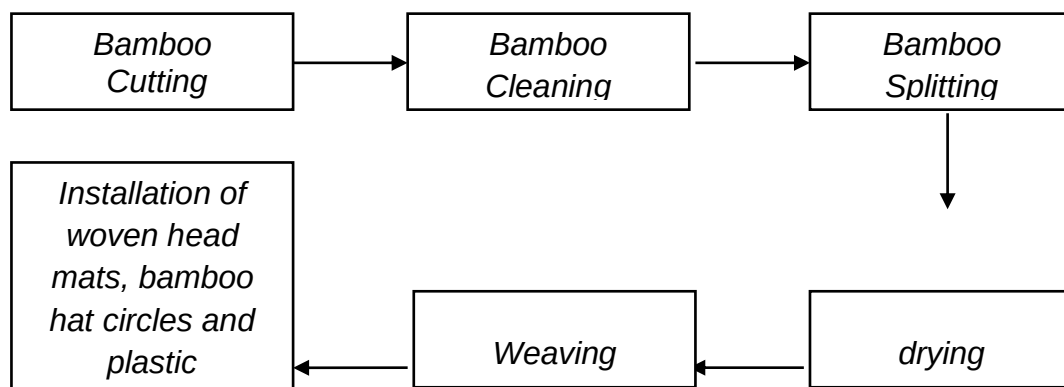


The process of making tampah/nyiru is as follows: (1) Cutting of bamboo is done using a saw, in this process the bamboo is cut into sections of each segment with a size of 50-60 cm. This is in accordance with the opinion of Rosyida,*et al.* (2022) that the ideal length of bamboo for matting is 50-60 cm. (2) at the bamboo cleaning stage, the skin of the bamboo that has been cut for each segment is cleaned so that it is free from the fine bamboo hairs, because only the bamboo skin is used to make winnowing. (3) Splitting the bamboo, in this process the bamboo is initially split into two equal parts, then each part is again split into two, so that each part is a quarter in size. Then each piece of bamboo was split again and the inner layer was removed to use only the skin. Split with a thickness of 1 mm. This is in accordance with the opinion of Fajar,*et al.* (2018) that to make Tampah/Nyiru the thickness of the bamboo used is ± 1.5 mm. (4) Next enter the process of refining the bamboo that has been split or commonly referred to as pengriat. In the weaving process, each piece of bamboo split was cleaned or scraped inside. The purpose of weaving or raking bamboo is to make the bamboo look smoother and not have rough fibers on the surface. According to Asriyati's opinion,*et al.* (2019) that thinning is an activity of smoothing split bamboo to make it thin and flexible when making plaits. (5) before weaving the bamboo sheet we wet it first, by dipping it in water with the aim that the bamboo sheet is flexible when it is about to be woven. Weaving begins with weaving five pieces of bamboo in the

weft and five pieces of bamboo in the warp. In accordance with the opinion of Patria and Mutmainah (2015) that weaving of bamboo is done by overlapping (crossing) the woven materials in the form of warp and weft. This is done in an overlap between the two techniques, this is called the woven sasak technique or commonly called double cross woven. Double cross webbing in question is weaving by inserting and overlapping two flat objects (bamboo sheets), namely the weft and warp that are in different directions. This is in accordance with the opinion of Anandhita (2017) that double cross woven is weaving with the technique of inserting and superimposing two bamboo blades consisting of warp and weft. After plaiting, bamboo is made which is cut rather thick and shaped round or round to be used for the edges of the Nyiru woven (blengker). (6) The installation of the blocker is done by bending the sides of the stick. After that, two blengker are attached to clamp the inside and outside of the nyiru (the plaited nyiru sheet is clamped/clamped by two blengker) then the top of the clamp around the edge (blengker) is closed by a sheet of rattan to make it look beautiful and neat, the binding is done by knot the *ropestrapping* aims to strengthen and keep the nyiru weave so that it does not come off easily.

b) The process of making a cap product

The process of making caps consists of cutting the bamboo, cleaning, splitting, drying, weaving, and installing hemp, selenteng, and plastic. Can be seen in Chart 2. below.



The process for making caps is as follows: (1) Bamboo cutting is done using a saw. In this process, each segment of bamboo is cut with a size of 50-60 cm. According to Rosyida's opinion, *et al.* (2022) that the ideal length of bamboo for matting is 50-60 cm. (2) at the bamboo cleaning stage, the skin of the bamboo that has been cut at each segment is

cleaned so that it is free from the fine bamboo hairs, and the skin of the bamboo is removed. (In the process of making caping hats used is the inside/flesh of the bamboo. (3) Splitting the bamboo, in this process the bamboo is initially split into two equal parts, then each part is again split into two, so that each part is a quarter size. Then each piece of bamboo is split again thinly, the tipi in situ is in the form of a sheet measuring 0.3-0.4 cm. In the process of making caps, the inside/flesh of the bamboo is used. Then the bamboo sheets are mashed. In accordance with the opinion Rainifan (2015) stated that in making caps the inside/bamboo meat is used with a thickness of 0.3-0.4 cm.(4) The bamboo sheet is dried for one or two days if the weather is cloudy.(5) The matting is done with two steps, namely first weaving to form a cone for the outer layer and weaving to form a cone for the inner layer. So in one cap there are two layers of webbing used. This is so that the hat is thick and durable when used. The woven technique used is the same as making tampah. After weaving the hat, it is continued by weaving the hemp (a term for woven bamboo for the head mat in the village) or commonly called the head mat in the shape of *kopiyah*. The halter is used as a placemat when wearing a hat. This is in accordance with the opinion of Rainifan (2015) that *kopiyah* is the term woven around the head or a place to support the hat that is placed on the head. (6) Before the installation of the head mat (hallowed) and the circumference of the hat (selenteng). The outer and inner sheets are stacked together and sewn inside and out using a raffia rope. After being tightly put together, the edges are cut so that the edges of the cone form a circle and the edge of the circle is flanked with bamboo which is split in a circular/elliptical shape (selenteng) which is split in half to flank the edges of the conical hat sheet and tied/wrapped/sewn using a 1 mm rope. The goal is that the hat clamps are firmly attached. After that, the head mat (Pontang) is attached to the conical sheet of the hat using a raffia rope as well as a sash but not halved. For this selenteng you need 3 pieces/hat attached sequentially to the inner circle of the hat. This is so that the conical sheet of the hat is strong. Finally, install the plastic mat that has been cut into a rectangle on the conical end of the hat. This aims to cover the top of the cone hat. In accordance with the opinion of Hujaifan (2015) that the final stage of completing the Caping bamboo woven is to tie the cone woven sheet with the hem/spill and selenteng in the center of the hat using a raffia string sewn with a sack needle and closing the cone on the Caping using a plastic mat.

Raw Material Costs

Raw materials are very important and needed in a process of processing or manufacturing a product, because without raw materials a production process will not

work, which means that no products can be produced in a production process. Raw material costs are costs incurred by a company or business to create and add value to the use obtained from nature as well as from suppliers (Sarwati, *et al.*, 2017). The cost of raw materials needed in the Narti Sekar craft business group can be seen in table 2.

Table 2. Raw material costs in one month of production in the Narti Sekar handicraft business

No	Raw material	Price (IDR)	Amount (bars)	Value (IDR)
1	Hat Cap	2.800	45	126.000
2	Tampah/Nyiru	2.800	100	280.000
	Total		145	406.000

Source: Primary data processed, 2023

Based on Table 2. shows that the amount of raw material for woven bamboo caps and Tampah/nyiru is 145 bamboo sticks for a month with a total raw material cost of the two products of IDR 406,000. The price for bamboo raw materials per stem is IDR 2,800 with a length of ± 1 m. Caping hats are made using 45 bamboo sticks with a total value of IDR 126,000 and 100 bamboo sticks for tampah/nyiru with a total value of IDR 280,000. This shows that the cost of raw materials depends on the large amount of raw materials used and the more raw materials used, the higher the raw material costs incurred by the woven bamboo craftsmen business (Nuraini, 2017).

Cost of auxiliary or supporting materials

The auxiliary or supporting materials referred to are materials other than the raw materials used to make cap and tampah/nyiru products as well as other production factors needed in each production process. The cost of supporting materials for the Narti Sekar craft business can be seen in Table 3.

Table 3. Cost of supporting materials for the production of bamboo into woven bamboo products in the Narti Sekar handicraft business

No.	Auxiliary Materials	Price (IDR)	Amount	Value (IDR)
1	Hat Cap			
	Raffia rope	15.000	1	15.000

	Plastic Mining Rope uk. 1mm	16.000	1	16.000
	Plastic Mat	6.000	1	6.000
	Total	37.000		37.000
2	Tampah/Nyiru			
	Rattan	4.000	30	120.000
	Strapping Rope	150.000	1	150.000
	Total	154.000		270.000

Source: Primary data processed, 2023

Based on Table 3. shows that the Narti Sekar handicraft business uses several supporting materials such as raffiah rope, 1 mm rope, plastic mats, rattan, and strapping rope. Of all the supporting materials used, the most expensive cost is the strapping/roll rope of IDR 150,000 and the lowest cost is the plastic mat of IDR 6000. The total supporting cost is IDR 307,000.

Wages and Labor

Labor force is the population who have entered working age and have a job, who are looking for work, and who are currently attending school, college, or taking care of the household. Wages are compensation received by workers from employers for services provided to a company/a business based on the length of working hours, the number of products produced, and the existence of an agreement between workers and employers in determining the amount of wages to be given (Daniel, 2020). Labor wages in the Narti Sekar craft business group can be seen in table 4.

Table 4. Labor Costs and Wages in one month in the Narti Sekar Craft Business

No.	Activity Production	Total Workforce	Total working days (Days)	Working hours/day	H O K	Wages per worker (IDR/mont h)	Total Worker Wages (IDR/month)
1	Tampah/ Nyiru	2	30	4	2	500.000	1.000.000
2	Hat Cap	2	30	4		600.000	1.200.000

					2		
	Total					1.100.000	2.200.000

Source: Primary data processed, 2023

Based on Table 3. it shows that the Narti Sekar craft business has a workforce of 4 people. Workers need ± 30 days to process bamboo into hats and tampah/nyiru in one production process. The results showed that the range of work in one month of production is 120 hours. The results showed that the wages for tampah/nyiru workers were IDR 500,000/person with a total worker's wage in a month of IDR 1,000,000 and wages for hat workers of IDR 600,000/person with a total worker's wage in a month of IDR 1,200,000. Narti Sekar handicraft business workers only work ± 5 days per week. The wages given are a source of income for workers, if the source of income decreases or remains constant it will affect the level of welfare and the level of poverty.

Total Revenue

Revenue is all income earned from a business during a production period by calculating the multiplication of the total product produced by the price of a product unit (Taru, *et al.*, 2017). The total revenue generated by the Narti Sekar craft business in Punggawukawu Village, Benua District, Konawe Selatan Regency can be seen in table 4.

Table 5. Total Revenue generated by the Narti Sekar Craft Business

No	Types of products	Price (IDR/unit)	Quantity (Unit)	Revenue (IDR/unit)
1	Hat Cap	25.000	120	3.000.000
2	Tampah/Nyiru	20.000	120	2.400.000
	Total		240	5.400.000

Source: Primary data processed, 2023

Based on Table 5. it shows that the total revenue earned by the Narti Sekar craft business in one month of producing bamboo into hats and tampah/nyiru in Punggawukawu Village, Benua District, South Konawe Regency is IDR 5,400,000. Each revenue product obtained is a cap of IDR 3,000,000 and Tampah/nyiru of IDR 2,400,000. This amount is obtained by multiplying the product price per unit multiplied by the amount of production.

Value Added Analysis

Added value is needed to find out how much value added from raw materials that undergo a processing process. The value-added processing process is defined as the difference between the value of the product and the cost of raw materials and inputs other than labor (Hartin and Santoso, 2020). The added value obtained in the manufacture of woven bamboo products in Punggawukawu Village, Benua District, Konawe Selatan Regency can be seen in Table 6.

Table 6 Calculation of the Added Value of Bamboo into Tampah/Nyiru and Hat cap in the Narti Sekar Craft Business in Punggawukawu Village, Benua District, South Konawe Regency.

No.	Variables (Output, Input, Price)	Product Type (Value)	
		Tampah/ Nyiru	Hat Cap
1	Output (Unit/month)	120	120
2	Input (m/month)	100	45
3	Workforce (HOK)	2	2
4	Conversion Factor = (1)/(2)	1,2	2,6666
5	Labor Coefficient= (3)/(2)	0,02	0,0444
6	Product Price IDR/unit)	20.000	25.000
7	Labor Average Wages (IDR/HOK)	500.000	600.000
	Income and Profits		
8	Raw Material Prices (IDR/unit)	2.800	2.800
9	Contribution of Other Inputs= (IDR/unit)	2.739	909
10	Product Value= (4) × (6) (IDR/unit)	24.000	66.667
11	a. Value Added= (10)-(8)-(9) (IDR/unit)	18.461	62.957
	b. Value Added Ratio = (11a)/(10) (%)	76,92	94,43
12	a. Labor Benefits= (5) × (7)(IDR/Unit)	10.000	26.640
	b. Employment Ratio= (12a)/(11a) (%)	54,16	42,31
13	a. Profit= (11a)-(12a) (IDR/unit)	8.461	36.291
	b. Profit Level= (13a)/(11a) (%)	45,83	57,64

Source: Primary data processed, 2023

Based on Table 5, it shows that the Narti Sekar handicraft business in processing bamboo into Tampah/Nyiru uses 100 bamboo sticks and Caping Caps uses 45 bamboo sticks/month with a size of ±1 meter/stick, producing a total of Tmpah/woven woven

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products. Nyiru as many as 120 units/month and Cap 120 units/month in 1 production process. The workforce counted in this study is all workers who play a role in the processing of bamboo into woven products. The range of working days lasts for 4 hours per day. The workforce counted in this study is all workers who play a role in the production process of hat caping 2 people and production of tampah/nyiru 2 people a total of 4 workers in one production process originating from outside the family with a total working day range of $\pm$ 30 days in a month.

The conversion factor is a comparison between the results obtained (production) with the amount of raw materials used. The value of the conversion factor in the business of processing bamboo into Tampah/Nyiru is 1.2 and cap is 2.6666. This means that for every 1 stick ($\pm$ 1 meter) processed bamboo raw material will produce 1.2 and 2.6666 units of processed bamboo products. The labor coefficient for processing bamboo into Tampah/Nyiru products is 0.02 and Topi Caping is 0.0444 which shows that each worker in 1 working day is able to process 0.02 and 0.04440 m of raw materials with an average wage IDR 500,000/HOK for Tampah/Nyiru and IDR 600,000/HOK for Caping Hats. The average price of products from bamboo processing is IDR 20,000 for Tampah/Nyiru and IDR 25,000 for Caps.

The average price of raw materials for the production of woven bamboo is IDR 2,800/stem ($\pm$ 1 m). The contribution of other inputs is a comparison between the total costs incurred for purchasing other inputs and the raw materials used during the production process. The components in calculating the contribution of other inputs to bamboo processing include the cost of supporting materials and depreciation of equipment where the result is IDR 273,917/unit for Tampah/Nyiru and IDR 909/unit for Caping hats. The input amount of raw materials used is 100 sticks for Tampah/Nyiru and Based on the comparison of these values, the 45 profit rods for Caping Hats obtained a value for other input contributions of IDR 2,739/unit for Tampah/Nyiru and IDR 909 for Caping Hats. The value of the product is obtained by multiplying the conversion factor and the price of the product to obtain a Tampah/Nyiru product value of IDR 24,000/unit and Caping hats of IDR 66,667.

The added value of processing bamboo into Tampah/Nyiru is IDR 18,461/unit and Caping Hats is IDR 62,957/unit. This figure is the difference between the value of the product and the price of raw materials and the contribution of other inputs. Based on the added value criteria according to Sixtiara, et al. (2021) if the added value is > 0 it means that the business is processing bamboo into woven bamboo products. Narti Sekar crafts provide added (positive) value. From the calculation of added value, it can be seen that the added

value ratio of Tampah/Nyiru is 76.92% and that of Caps is 94.43%. According to Sipayung, et al. (2021) if the value added ratio has a percentage of > 40%, it means the value added ratio is high. Based on testing the added value of processing bamboo into woven products in the Narti Sekar handicraft business, it has a high value added ratio because the value added ratio obtained is 76.92% and 94.43%, respectively, which fall into the value added ratio category which has a percentage of > 40%. Labor benefits are the product of the multiplication of the labor coefficient and the average wage, the values for Tampah/Nyiru and Caps are IDR 10,000/unit and IDR 26,640/unit, respectively. Allocation for the labor share can be obtained from the division between labor compensation and added value. The ratio of labor obtained in processing bamboo into woven products from Tampah/Nyiru and Cap Caping is 54.16% and 42.31%, respectively.

The calculation of added value aims to determine the amount of added value given by 1 unit of woven product to the bamboo raw material used. While the results from Yolanda's research, et al. (2020) the results of his research show that the added value ratio obtained is >40% with the resulting added value ratio of 68% included in the high value added ratio category, in line with this study which gives the added value ratio of Tampah/Nyiru and caping hats respectively 76.92% and 94.43%, respectively, with profit levels for Tampah/Nyiru and Cap Caping respectively for 45.83% and 57.64%. The amount of profit earned by the Narti Sekar craft business is influenced by the price of the raw materials used, the cost of contributing other inputs used in the production process. So that the business is feasible to be developed.

Profits derived from the processing of bamboo into Tampah/Nyiru and Caping hats products amount to IDR 8,461/unit and IDR 36,291/unit, respectively. This figure is obtained from the added value minus the compensation for manpower. If you look at the biggest profits obtained from the production of Caping Hats because the selling price is quite high compared to Tampah/Nyiru with a difference of IDR 5,000/unit and the amount of bamboo raw material needed in the processing of Caping Hats is less than Tampah/Nyiru. So by knowing the above, processors can find out the benefits obtained from processing bamboo into woven bamboo products.

CONCLUSION

The process of making woven bamboo handicraft products in Punggawukawu Village, Benua District consists of processing bamboo into caps covering the process of cutting bamboo, cleaning, splitting, drying, weaving, and installing woven head mats,

bamboo around hats, and plastic and processing of bamboo into tampah/nyiru includes the process of cutting bamboo, cleaning, splitting, refining bamboo, plaiting, and installing a rim of tampah bamboo. The added value generated from processing bamboo into Tampah/Nyiru and Caping hats is IDR 18,461/unit of raw material and IDR 62,957/unit of raw material, respectively, with added value ratios of 76.92% and 94.43% respectively. Of the two processed products that provide the greatest added value is Caping hats while the smallest is Tampah/Nyiru woven products.

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