INNSPUB

Journal of Biodiversity and Environmental Sciences (JBES)
ISSN: 2220-6663 (Print) 2222-3045 (Online)
Vol. 22, No. 6, p. 72-79, 2023
http://www.innspub.net

RESEARCH PAPER OPEN ACCESS

Farmers practices in marketing Abaca fiber in Caraga Region

Rosalina A. Sagocsoc*

College of Agriculture and Agri-Industries, Caraga State University, Ampayon, Butuan City, Philippines

Article published on June 10, 2023

Key words: Consolidator, Marketing, Profitability, Traders, Baling, Grading

Abstract

The study was conducted to determine the marketing practices and the profitability of establishing Abaca in the Caraga Region. A total of One Thousand Two Hundred Fifty-Six (1256) farmers, Seventy-Seven (77) traders, and three (3) processors were interviewed as the respondents of the study. Their names were obtained from the Philippine Fiber Development Authority (PhilFIDA) and the Municipal Agriculture Office (MAO) of the concerned municipalities of the Region. Data gathering activities included interviews and focus group discussions (FGDs), and stakeholder forums were conducted to validate and gather additional information. The said Focus Group Discussion and Stakeholders' Forum were attended by the farmers, officers in various cooperatives, traders, representatives from the regional line offices, the Department of Trade and Industry (DTI), Department of Agriculture (DA), Department of Agrarian Reform (DAR) Municipal Agriculture Offices (MAO), Academe, Provincial Agriculture Officer. In the Caraga Region, abaca traders are situated in Agusan del Norte 28 or 36.36%, Agusan del Sur 25 or 32.47%, Surigao del Sur 24 or 31.17% and no traders in the province of Surigao del Norte. The one who sets the price for abaca fiber is the trader/buyer 99.28 % and only 0.71% sets by the farmer. The means of contacting buyers are referrals by the farmers 32.96%; traders will come to the farmers 27.46%, recommended by the Local Government Unit (LGU) 23.88%, and traders who are known by the cooperatives 15.68%. The buyers' requirements in buying abaca fibers are quality 63.69% and volume 36.30%. Traders engage in buying Abaca for more than 15 years or 38.5%; 1-5 years, 30.12%; 11-15 years, 18.07% and 6-10 years, 13.25%. The means of transporting abaca fiber is through motorcycles 43.37% and hired trucks 56.61%. The estimated monthly volume sold is 1- 5 metric tons or 92.77% and 6 – 10 metric tons. The farmer's Abaca fibers through Barangay or Municipal Traders, Cooperatives/Consolidators, Baling and Grading Establishment, Processors, and exporters. The issues and concerns for the traders are the following: classification and grading of fiber, cheating abaca bundles where stones inserted to increase weights, abaca fiber not adequately dried, and piles of Abaca are mixed with other fibers. The profitability of abaca farming for 1 hectare /year is the average of P48,000 for a typical farm, while for a good farm is P115,200 – 192,000.

***Corresponding Author:** A. Sagocsoc ✉ sagocsocr@yahoo.com

Introduction

The "Manila hemp," known internationally for its world-class fiber, continues to be one of the priority agricultural commodities of the Department of Agriculture (DA). The Philippines supplies more than 87.4 percent of the total abaca fiber market and earns more than $111.33 million in global abaca trade annually (PCA, 2017).

In 2022, as per PhilFIDA data, Caraga ranked third among the top abaca-producing regions in the country with an estimated 10,000 metric tons (MT) of fiber production, next to Bicol Region (1st) and Davao Region (2nd).

Abaca is in great demand in the world market today because of its lucrative value in industries such as making security papers, paper money, ropes, insulators, and other handicrafts. The most important part of the Abaca is the stalk which is the source of the fiber. Abaca fiber is superior to all other natural fibers because of its great strength and its resistance to the action of water. It is three times stronger than cotton, the most potent natural fiber.

The country's overall fiber production is estimated at 62,640.63MT, remaining the top abaca-producing country, supplying 85% of the fiber demand in the world.

Pulp, which accounts for 69.2 percent market share of the abaca exports, has reported earnings of $ 79.4 million or an increase of 11.7 percent. Abaca cordage, which grabbed a market share of 10 percent, fell to $ 11.4 million. Fiber crafts exports also fell 67.3% to $3.7 million (The Philippine Star, 2016). The pulp manufacturing industry is the leading end-user of abaca fiber, followed by cordage manufacturing and fiber craft industry. It was reported that due to the increasing use of abaca fiber in specialty paper manufacturing, the demand for fiber among pulp manufacturers is constantly surging, and the trend is expected to prevail in 2014-2019. Among the leading abaca fiber suppliers, Ching Bee Trading Corporation dominates the market in the Philippines, followed by Tag Fibers, Inc. and Selinrail International.

For the past half-decade, the Abaca industry helped boost the country's economy from its export earnings with an annual average of P4.7 billion, mainly in the Visayas and Mindanao Islands. Abaca fibers are cultivated across 176,549 hectares of farmlands by over 122,758 farmers. Moreover, in recent years, it has been perceived that aside from the substantial contributions of Abaca to the economy, its utilization can also provide numerous ecological advantages (www.philfida.da.gov.ph, 2019).

With the continuing development of the fiber craft industry in the Philippines, the abaca fiber market has been witnessing a boost due to the growing demand for gifts, toys, and housewares. Moreover, increasing consumer inclination for lifestyle products is further expected to strengthen the growth trend for abaca crafts in the coming years. There are only two significant exporters of abaca fiber in the world – the Philippines and Ecuador, with the Philippines accounting for over 80% of the global production of abaca fiber. In the Philippines, the abaca plant is cultivated across 130 thousand hectares of land by over 90 thousand farmers.

Asia Pacific was the largest market for abaca fiber in terms of production and consumption over the past few years, and the trend is expected to continue over the forecast period. The Philippines, the world's largest abaca producer, hold a significant market share in Asia Pacific. A considerable portion of produced abaca fiber in the Philippines is internally consumed, while a substantial amount is exported to various countries, including U.S., Japan, and other European countries. The Philippine government supports initiatives to increase high-quality abaca fiber production levels for domestic consumption and export. This is expected to strengthen its market positioning further and open market opportunities for new players over the next seven years (Erie News, 2019).

Thus, this undertaking is critical to fill the data gaps of the recently conducted Value Chain Analysis of the Commodity in the Region. Profiling tells us the actual scenario of how many abaca farmers engaged in this commodity, what support programs they availed in our present administration, what they need, and what other issues and concerns so that our government can also make some intervention programs for our abaca industry.

Major end-user industries of abaca fiber include paper and pulp, fibercraft, and cordage. The paper and pulp industry is the largest end-user industry for abaca fiber, followed by cordage manufacturing and fiber craft industry. Increasing the application scope of abaca fiber in specialty paper manufacturing is likely a critical factor driving demand for abaca fibers in the paper & pulp industry. The rising market for cordage in industrial applications, including the production of ropes for ships, is expected to boost its demand over the next seven years.

Material and methods

The study started with listing Abaca traders and processors given by the Philippine Fiber Industry Development Authority (PhilFIDA) and validated with the help of the Municipal Agricultural Officers (MAOs) in the Region last 2018 and this year, 2023. Focus group discussions (FGDs) were conducted with farmers and traders to gather more data. Finally, a Stakeholder's Forum attended by the farmers, traders, representatives from the Department of Trade and Industry (DTI), DA, the PLGUs, the Provincial Agriculture Offices (PAOs), and the PhilFIDA in the Region was conducted for data validation.

Identification of study areas

The study area covers all provinces in the Caraga region where abaca traders and processors are situated.

Selection of Respondents

Based on the given listing available by the Philippine Fiber Industry Development Authority, the researcher conducted a preliminary validation of whether the names of the traders and processors are still exist and active. All of those listed were interviewed.

Data collection

Primary and secondary data were collected. The preliminary data were obtained from the different line agencies such as PhilFIDA, the Provincial Agriculture Office, the Department of Agriculture, and the Department of Trade and Industry, and the secondary data were obtained from the farmers, traders, and processors. The prepared questionnaires guided the discussions and interviews.

Fig. 1. Primary and secondary data were collected

Data analysis

The survey data were analyzed with descriptive statistics using frequency counts.

Fig. 2. The stakeholder forum

Interview with Abaca Traders in SIUFMULCO at Santiago, Agusan del Norte, Farmers Alternative for Self-Reliance Multipurpose Cooperative (FAMSCO) at San Vicente Prosperidad, Agusan del Sur and WTS Abaca Trading, at Purok 2, Taguibo, Butuan City.

Results and discussion

Most abaca traders are situated in Agusan del Norte 28 or 36.36% of them, followed by Agusan del Sur 25 or 32.47%, Surigao del Sur 24 traders or 31.17 %, and no traders in Surigao del Norte. The traders of abaca fiber are the following, San Isidro Upland Farmers Multipurpose Cooperative (SIUFMULCO) in Santiago, Agusan del Norte, Farmers Alternative for Self-Reliance Multipurpose Cooperative (FAMSCO) at San Vicente Prosperidad, Agusan del Sur and WTS Abaca Trading, at Purok 2, Taguibo, Butuan City, San Isidro Farmers' Cooperative (SIFAMCO) San Isidro Farmers' Cooperative of Lianga, Surigao del Sur Farmers.

Table 1. Abaca Traders location

Number of Abaca Traders		Percent Share
Agusan del Norte	28	36.36
Agusan del Sur	25	32.47
Surigao del Norte	0	0
Surigao del Sur	24	31.17
Total	77	100

Most abaca farmers (99.28%) sell their abaca fibers directly to their traders. The traders set the price per kilogram of fiber. This applies to the small volume of abaca fiber only, while 0.71% of the respondents or 9 of the farmers said they set the price in trading. This applies also to the bulk of the supply of abaca fibers.

Table 2. Who sets the abaca price?

	Respondents	Percentage (%)
Farmer	9	0.71
Trader/ Buyer	1247	99.28
Total	1256	100

Source: From the Survey (2019).

There are various means by which the farmer may be able to contact the trader. Among these are referrals, personal knowledge of the farmer, and recommendations from the LGU or cooperatives.

Table 3. Means of contacting buyers

	Respondents	Percentage (%)
Co-abaca farmers' referral	414	32.96
Traders will come to the farmers	345	27.46
Recommended by the LGU	300	23.88
Traders are already known by the farmers / Cooperatives	197	15.68
Total	1256	100

Source: From the Survey (2019).

The requirements for the sale of the Abaca produce depend on the buyer. Most buyers (about 63.69%) require the farmers to sell Abaca of good quality. Otherwise, other buyers would consider the volume of the produce. All transactions between the buyer and the farmer are done on a cash basis. This indicates that the farmer has to satisfy the buyer's requirements to bring home the cash equivalent of his Abaca. While most buyers seek quality, this requirement is easy for the farmers to comply with. This had been their marketing practice for many years.

Table 4. Requirements for the buyers

	Respondents	Percentage (%)
Volume	456	36.30
Quality	800	63.69
Total	1256	100

Source: From the Survey (2019).

This had been their marketing practice for many years. As regards their mode of transportation, only 14 traders (16.86%) can transport their products using hired trucks. Others would use Forward vehicles or motorized vehicles. Otherwise, farmers bring their produce to market on foot. The same groups of farmers have direct contact with the buyers and underwent the steps in abaca trading, such as hauling, classifying, mixing, bundling, and transporting.

Table 5. Years in trading, mode of transportation, mode of contacting the buyers and the steps in Abaca trading.

		Respondents	Percentage (%)
Number of years in Abaca trading	1-5 years	25	30.12
	6-10 years	11	13.25
	11 – 15 years	15	18.07
	More than 15 years	32	38.5
	Total	83	100%
Mode of Transportation	Motorcycle	36	43.37
	Hired truck	14	16.86
	Forward	33	39.75
	Total	83	100%
Mode of contacting the buyer	Direct Contact with the buyer	50	60.24
	Referral	33	39.75
	Total	83	100%
Steps in Abaca Trading	Hauling	83	100
	Classifying	83	100
	Mixing	83	100
	Bundling	83	100
	Transporting	83	100%

Source: From the Survey (2019).

Table 6. shows the type of abaca buyer, the buyer, and the monthly volume sold in the Caraga Region. It can be noted that cooperatives (83.13%) are dominant among the buyers of Abaca in the Region. Other players in abaca trading are individuals (9.63%) and processors (7.22%). This indicates that the farmers are assured of fair market prices since government rules and regulations bind the cooperatives. Among these cooperatives, SIUFMULCO tops the number of farmer-partners (42.16%). This is followed by Chingbee (13.25%). Other buyers come from different places in the country: Leyte (14.45%), Iligan (12.04%), and Manila (18.07%). Every month, 92.77% of the farmers can sell at most 5 mt of abaca fiber; the rest at most 10 mt of abaca fiber. The Philippines' overall fiber production is estimated at 62,640.63 MT, remaining the top abaca-producing country, supplying 85% of the fiber demand in the world. Standard abaca products include pulps, cordage and twines, fibrecrafts, fabrics, yarns, and raw fiber.

Table 6. The type and the Abaca buyers

		Respondents	Percentage (%)
Type of Buyer	Cooperative	69	83.13
	Individual	8	9.63
	Processor	6	7.22
	Total	83	100
Buyer of abaca fiber	SIUFMULCO	35	42.16
	Chingbee	11	13.25
	Leyte	12	14.45
	Iligan	10	12.04
	Manila/Bicol	15	18.07
	Total	83	100
Volume sold per month	1mt – 5mt	77	92.77
	6mt – 10mt	6	7.23
	Total	83	100

Source: From the Survey (2019).

Table 7. Number of Abaca processors

Number of Abaca Processors		Percent Share
Agusan del Norte	2	50
Agusan del Sur	2	50
Surigao del Norte	0	0
Surigao del Sur	0	0
Total	4	100

Source: FGD and Interview Conducted (2019).

Table 8. Grading/Classification

	Respondents	Percentage (%)
S-I	1227	36.71
S2	967	28.93
JK	1148	34.35
Total	3342	100

Source: From the Survey (2019).

Farmers classify the abaca fiber into S-I, 36.71%, which is good; JK, 34.35% fair; and S2, 28.93% means Excellent. S2Ivory white, slightly tinged with very light brown to red or purple streak; s-1, Light to very golden brown; JK, Dull brown to dingy light brown or dingy light yellow, frequently streaked with pale green. The price of fiber per kilo is based on grading and classification.

At the farmer's level, they classify the fiber. Planting materials determine the abaca fiber's quality when it is harvested.

Table 9. Additional services needed

	Respondents	Percentage (%)
Financial Assistance	500	29.85
Stripping Machine	600	35.82
Planting materials	400	23.88
Training/Seminars	50	2.98
Farm-to-market road	125	7.46
Total	1675	100

Source: From the Survey (2019)

The data show that the farmers need additional services to improve the industry. The topmost needs are installing a stripping machine, financial assistance, planting materials, farm-to-market roads, and training/seminars on abaca production and marketing.

Table 10. Own storage facilities

	Respondents	Percentage (%)
Yes	600	47.78
No	656	52.22
Total	1256	100

Source: From the Survey (2019)

There 52.22% of the farmers need warehouse facilities. This is another input for any government intervention if there is a determination to raise the bar for the abaca industry.

The projected cost and return analysis of producing 1-hectare abaca farm in the region.

Project cost summary

Table 11. Cost and return analysis: 1 hectare. Spacing 4x4m (687)

	Year 1	Year 2	Year 3	Year 4	Year 5
Sales		855	1, 639	2, 375	2, 969
Price/kg		60	60	60	60
Gross Income		51, 300	98, 340	142, 500	178, 140
Less: Cost of Producti					
Abaca Seedlings (687)	17,175				
Fertilizer (5 bags)	6,250	8, 470	8, 470	8, 470	8, 470
Pesticide (5 gallon)	6,000				
Insecticide (2 gallons)	1,400				
Contingency Cost	3,082				
Labor Cost	17,710	18, 480	18, 480	18, 480	18, 480
Total Cost of Production	51,617	26, 950	26, 950	26, 950	26, 950
Net Income	-51,617.00	24, 350	71, 390	115, 550	151, 190

Source: FGD (2019).

Table 12. Cost and return a comparative study

Farming Practices	Typical Farm	Good Farm
Planting Density (hills per hectare)	1, 600 at 2.5 x 2.5m distance	1, 600 at 2.5 x 2.5m distance and 4, 000 at 1.5 x 1.5m distance
Plant Propagation Practice	Suckers at Php 10 per piece	Tissue Cultured plantlets at Php 15 per piece
Fiber Extraction Method	Hand Stripped	Machine Stripped/Decorticated
Fiber Recovery	1.5%	1.5 – 3.34%
Weeding and Underbrushing	Occasional	Regularly done every harvesting
First Harvest	Year 2	Year 2
Harvesting Frequency at peak	2 times per year	4 times per year
Average yield per hectare	1, 067	2, 560, 267 kg
Average price per kilogram (farmer's selling price on 2015	Php 45	Php 45
Cost and Return		
Average Gross Income per hectare per year	Php 48, 000	Php 115, 200 – 192, 000
Average establishment cost per hectare (year 1)	Php 33, 695	Php 82, 995 – 147, 050

Source: Abaca sustainability manual (2016 and FGD 2019).

Problems in trading

The issues and concerns for the traders are the following: classification and grading of fiber, cheating- abaca bundles were inserted with stones to increase the weight, not properly dried, and bundles mixed with other fibers.

The data show that the farmers need additional services to improve the industry. The topmost needs are installing a stripping machine, financial assistance, planting materials, farm-to-market roads, and training/seminars on abaca production and marketing.

Table 13. Additional services needed.

	Respondents	Percentage (%)
Financial Assistance	500	29.85
Stripping Machine	600	35.82
Planting materials	400	23.88
Training/ Seminars	50	2.98
Farm-to-market road	125	7.46
Total	1675	100

Table 14. Own storage facilities

	Respondents	Percentage (%)
Yes	600	47.78
No	656	52.22
Total	1256	100

There 52.22% of the farmers need warehouse facilities. This is another input for any government

intervention if there is a determination to raise the bar for the abaca industry.

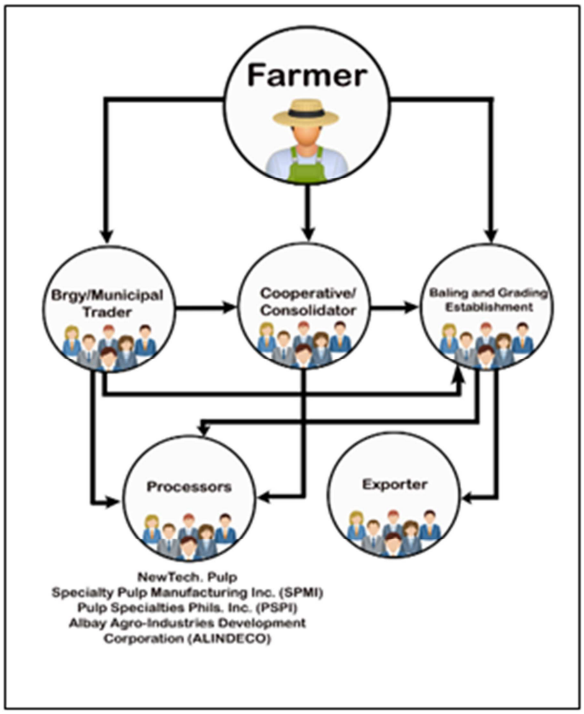

Fig. 3. Abaca supply chain (FGD & Stakeholders Forum, 2019).

The supply chain of Abaca starts with a farmer/producer. After stripping and drying processes, farmers sell their fiber to barangay /municipal traders depending on its volume. In some instances, buyers in their respective barangays sell directly to the different distribution channels like SIUFMULCO and other existing cooperatives in the Region, to the GBEs, and the various processors such as New Tech. Pulp, Specialty Pulp Manufacturing Incorporated (SPMI), Pulp Specialties Incorporated (PSPI), and Albay Agro-Industries Development (Alindeco) and a farmer produce exported to China.

Conclusion

Abaca fiber produced by the farmers was sold either to barangay/municipal traders, cooperatives/consolidators or baling and grading establishments, depending upon the volume produced by the farmers. Moreover, the municipal trader, cooperative and baling and grading establishment can sell the fiber directly to the processors or exporters.

Engaging in abaca production is profitable. After a 5-year presentation after farm establishment, the farmers may have a net profit income of 151,190.

Acknowledgment

I want to thank PRDP-DA for this partnership.

References

Abaca Sustainability Manual Published by Philippine Fiber Industry Development Authority, 2016

Department of Agriculture, Philippine Fiber Industry Development Authority. 2016-2019, www.philfida.da.gov.ph

Edwin R. Celestino, Gregorio O. Sarmiento, Jinky T. Benicio, 2016. Value Chain Analysis of Abaca (*Musa* textiles) Fiber in Northern Samar, Philippines, IJISET- International Journal of Innovative Science & Technology, **Vol.3**, Issue 8.

Enhanced Provincial Commodity Investment Plan, Province of Agusan del Norte. http://www.philstar.com/agriculture/2016

Philippine Abaca helps in global environment conservation. 2016-2019. Department of Agriculture, Philippine Fiber Industry Development Authority. www.philfida.da.gov.ph.

Philippine Rural Development Project (PRDP). 2014. I-PLAN Component Mindanao Cluster, Value Chain Analysis and Competitiveness Strategy: *Abaca* fiber Mindanao, Department of Agriculture Mindanao Regions.

The Philippine Star, 2016, Louise Maureen Simeon www.philfida.da.gov.ph2016.