



ABACA

SUSTAINABILITY

MANUAL





ACKNOWLEDGEMENTS

This guidebook was developed within the framework of Abaca Sustainability Initiative (ASI), with technical support from PhilFIDA, Deutsche Gesellschaft für International Zusammenarbeit (GIZ) GmbH and Glatfelter GmbH.



Special thanks to the Rainforest Alliance and the Sustainable Agriculture Network (SAN) for allowing the project team to include in this manual the SAN principles and criteria for Rainforest Alliance certification.



Editing and Technical Inputs

PhilFIDA

Petronilo Jabay
Evelyn Cagasan
Jose Catalla
Lea Fernandez
Leny Galvez
Orlando Cocal
Maria Lucia Javellana
Antonio Castronuevo
Marian Joy Gray

GIZ

Matthias Radek
Arce Chua
Victor Prodigio
Carlos Peñera
Erlinda Dolatre
Gladys Gopez

FOREWORD

For the regular Juan whose family belongs to succeeding generations of abaca farmers, there does not seem to be a need to change abaca farming practices that have been passed on from their forefathers. But with the rising demand for certified abaca fiber all over the world, our abaca farmers will only be able to benefit from this opportunity if they can improve their fiber production in **quantity** and in **quality**. Achieving this will allow them to earn higher incomes, improve access to basic needs such as food or school expenses for their kids, and thereby improve their families' quality of life. At the same time, the abaca processing companies will benefit from a reliable and sustainable supply of quality raw materials. From this, the whole abaca industry sector may benefit. This Abaca Sustainability Manual shall be one contribution of the partners to achieve the aforementioned goals.

There is a need to monitor the long-term sustainability of the sector for several reasons:

- To secure **long-term** regular cash inflow
- To ensure **minimal negative effects** to the environment
- To look after the **welfare of the community**

Suitable for abaca farmers regardless of where they are located in the Philippines, this manual provides the necessary recommendations to successfully grow abaca in a better and sustainable way. Since abaca is often being grown in sensitive ecosystems in the uplands, special care during cultivation is indispensable. Simplified into four phases, **Maximizing the Potential of Your Farm, Minimizing Risks, Improving and Sustaining Quality of Abaca Fiber** and **Improving Market Linkage**, the manual is a compilation of research results, matured technologies and selected information based on the experiences of the Abaca Sustainability Initiative, a project of the the Department of Agriculture Philippine Fiber Industry Development Authority (PhilFIDA), Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH and Glatfelter Gernsbach GmbH from September 2013 to August 2016.

From site selection to storage tips, following this manual shall give better chances for farmers to produce high quality fibers that would eventually qualify for sustainability certification.

TABLE OF CONTENTS

3

INTRODUCTION

4

ALL ABOUT ABACA

FACTS ABOUT ABACA

OVERVIEW OF THE ABACA VALUE CHAIN AND CHALLENGES

TYPICAL FARM VS GOOD FARM

7

PHASE 1: MAXIMIZING THE POTENTIAL OF YOUR ABACA FARM

PLANTING

SHADING

INTERCROPPING

FERTILIZER APPLICATION

WATERING

15

PHASE 2: MINIMIZING RISKS

TAKING PROPER CARE OF YOUR FARM

INSECT PESTS AND HOW TO CONTROL THEM

PLANT DISEASES AND HOW TO CONTROL THEM

17

PHASE 3: IMPROVING AND SUSTAINING THE QUALITY OF ABACA FIBER

EXTRACTING THE FIBER FROM THE ABACA

DRYING

BUNDLING AND STORAGE

22

PHASE 4: IMPROVING MARKET LINKAGE

FIBER TRADE FLOW

23

RAINFOREST ALLIANCE CERTIFICATION

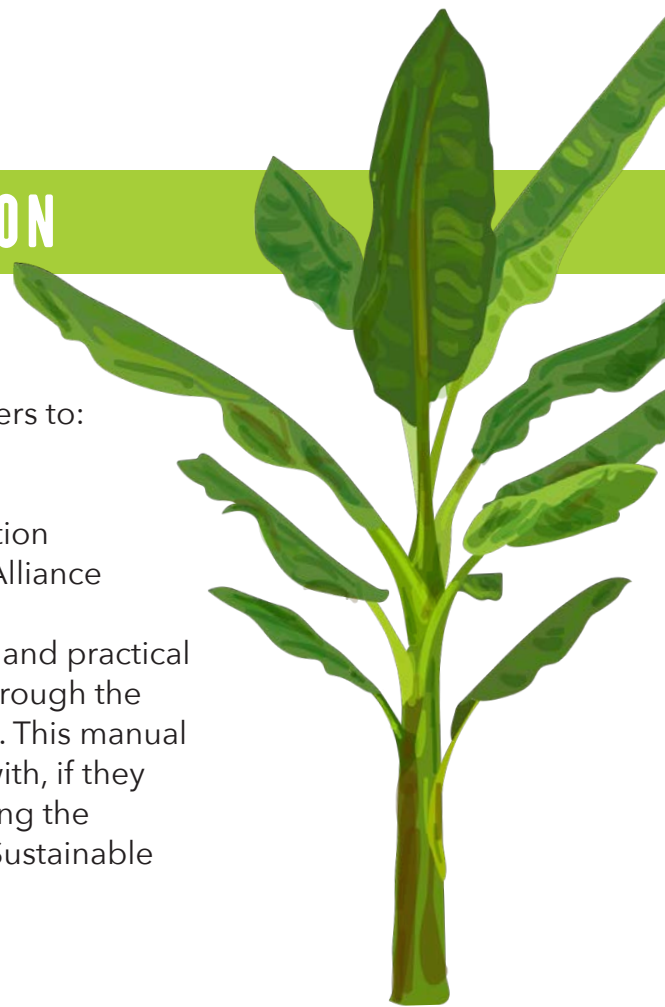
INTRODUCTION

WHAT IS THIS MANUAL FOR?

This manual serves as a tool to help abaca producers to:

- Increase the productivity of their abaca farms and their incomes
- Learn about and implement sustainable production practices which allow certification with Rainforest Alliance

The Abaca Sustainability Manual describes simple and practical techniques to establish or enhance abaca farms through the introduction of better farm management practices. This manual also defines what abaca farmers need to comply with, if they opt for Rainforest Alliance certification, by explaining the most important criteria by the Rainforest Alliance Sustainable Agricultural Network (SAN) Standard.



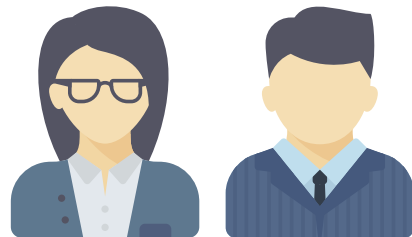
WHO WILL USE THIS MANUAL?



Existing Farmers who intend to improve farm production and would like to be certified

New Farmers who intend to engage in abaca production

Farmer group leaders and administrators involved in abaca growing or trade



Municipal Agriculture Officers and Agricultural Extension Workers (from LGUs, NGO, and other stakeholders) who will render technical extension services to new and existing farmers

HOW TO USE THIS MANUAL:

- Follow the recommendations on step-by-step abaca farming and maintenance.
- Use the brown boxes with the Rainforest Alliance frog as a checklist to assess whether your farm could potentially qualify for Rainforest Alliance certification.



ALL ABOUT ABACA

SCIENTIFIC NAME

Musa textilis Nee

MATURITY PERIOD

16-24 months after planting

PLANTING MATERIALS

Suckers, Corms, Eyebuds, Tissue-cultured plantlets

MAIN ABACA PRODUCING COUNTRIES*

Philippines – 87.17%

Ecuador – 12.77%

Costa Rica – 0.06%

TOP ABACA PRODUCING PROVINCES

IN THE PHILIPPINES*

Catanduanes – 34.96%

Davao Oriental – 8.48%

Northern Samar – 7.73%

Lanao del Sur – 6.70%

Davao del Sur – 6.10%

TOP ABACA PRODUCING REGIONS

IN THE PHILIPPINES*

Bicol – 37.33%

Davao – 16.72%

Eastern Visayas – 12.50%

Caraga – 10.08%

ARMM – 10.07%

USES

ROPES



TEXTILES



SPECIALTY PAPERS

Currency notes



Meat casing



Cigarette filter paper



Tea bags



OVERVIEW OF THE ABACA VALUE CHAIN

PRODUCTION



Challenges

- Very low crop productivity due to:
 - Limited access to agricultural advisory services
 - Farmers traditional practice
- Pest and diseases outbreak
- Partly unsustainable production in sensitive ecosystems

Opportunity

Introduction of Sustainability Standard

PROCESSING



Challenge

Lack of equipment

Opportunity

Improved fiber extraction and drying through technical innovations

MARKETING AND TRADING



Challenge

Lack of marketing structure



Opportunity

Better market linkage

*Source: PhilFIDA Stat Bulletin 2015

WHAT IS OUR GOAL?

To increase income of farmers through better management of abaca farms and adoption of sustainability standards

TYPICAL FARM		GOOD FARM	
			
FARMING PRACTICES			
< 1600 AT 2.5X2.5M DISTANCE	Planting Density (hills per hectare)	1600 AT 2.5X2.5M DISTANCE AND 4000 AT 1.5X1.5M DISTANCE	
SUCKERS AT PHP 10 PER PIECE	Plant Propagation Practice	TISSUE-CULTURED PLANTLETS AT PHP 15 PER PIECE	
HAND STRIPPED	Fiber Extraction Method	MACHINE STRIPPED/ DECORTICATED	
1.5%	Fiber Recovery	1.5%-3.34%	
OCCASIONAL	Weeding and Underbrushing	REGULARLY DONE EVERY HARVESTING	

TYPICAL FARM	VS	GOOD FARM
YEAR 2	First Harvest	YEAR 2
2 TIMES PER YEAR	Harvesting Frequency at peak	4 TIMES PER YEAR
1,067	Average yield per hectare*	2,560-4,267 KG
PHP 45	Average price per kilogram (farmer's selling price on 2015)	PHP 45
COST AND RETURNS		
PHP 48,000	AVERAGE GROSS INCOME PER HECTARE PER YEAR*	PHP 115,200-192,000
PHP 33,695	Average establishment cost per hectare** (year 1)	PHP 82,995-147,050

Source of basic data: Actual farmer's field and abaca Technoguide, The Philippine Abaca Industry Roadmap 2014-2020, PhilFIDA

*At years 7 and 8 after planting are considered in the average values

**Establishment costs include planting materials, fertilizers, stakings, labor costs, and logistic costs

Note: Income from intercrops is not included in the computation

PHASE 1: MAXIMIZING THE POTENTIAL OF YOUR ABACA FARM

PLANTING

WHERE SHOULD YOU PLANT ABACA?

✓ Soil:

- Ideal soils for abaca plants are clay loam and sandy clay loam
- Loose, friable, and well-drained

Rainfall:

- Distributed rainfall all throughout the year, preferably Type 4 climate

Topography:

- Terraces and plains with fair to good drainage conditions
- Plain to slightly rolling to hilly or mountainous areas not more than 500 meters above sea level

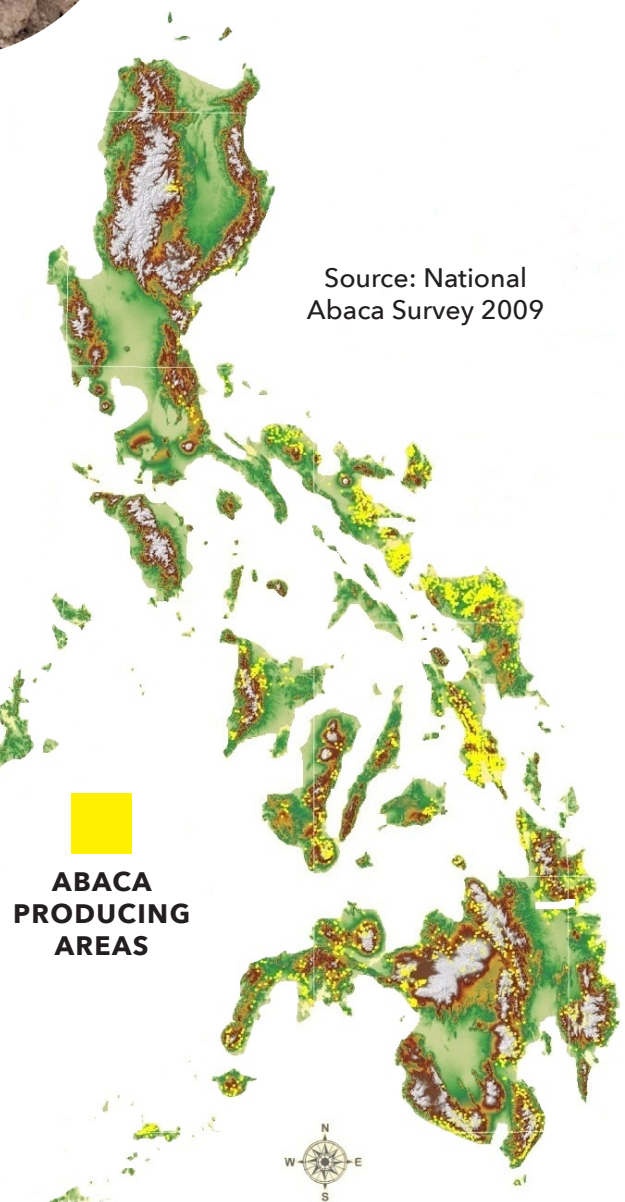


- Do not plant abaca near corn and legume farms because they host aphids. If unavoidable, abaca should be planted not less than 500 meters away from the plants.
- Do not plant abaca on water-logged areas where the soil is wet.






USEFUL INFO!

A bundled group of abaca plants is called a HILL or MAT. Once abaca plants are established, it would be very difficult to remove them, that's why adequate preparation is a must when planting abaca.



WHAT ARE THE PLANTING MATERIALS OF ABACA?

There are five kinds of planting materials of abaca. Tissue-cultured plantlets, seedpieces, eyebuds and suckers should always come from healthy plants.

PLANTING MATERIALS	SOURCE	PRODUCING THE PLANTING MATERIAL
Tissue-Cultured Plantlets 	Accredited tissue culture labs c/o nearest PhilFIDA regional offices	<ul style="list-style-type: none"> • Production of tissue cultures plantlets are done in the laboratories and transferred to nurseries for hardening for 3 months.
Seeds 	PhilFIDA gene banks and accredited nurseries	<ul style="list-style-type: none"> • Germinate collected seeds. • Transplant seedlings into bags. • After two months from bagging, the seedlings are ready for planting in the field.
Seedpiece 	Can be produced by farmers	<ul style="list-style-type: none"> • Cut the corn into 2 to 4 seedpieces depending on the size. One seedpiece should contain at least three viable eyebuds.
Eyebud 	Can be produced by farmers	<ul style="list-style-type: none"> • Cut the seedpiece into 3 pieces measuring 2 x 2 to 3 x 3 inches. Each piece should have one prominent eyebud. • Soak eyebuds in organic liquid fertilizer for 10-30 minutes. Cover the eyebuds with plastic for 2 - 3 nights. Remove plastic cover when eyebuds are already germinating.
Suckers 	Can be produced by farmers	<ul style="list-style-type: none"> • Uproot the immature suckers found around the hill and plant as a separate hill. 

Source: Farmer's Manual on Abaca Production

Before establishing a new plantation, the farm management MUST:

- ☐ consider the interests of the local communities regarding farm activities or changes that could have an impact on their health, employment or local natural resources
- ☐ make sure the new production areas are suitable for the long-term agricultural production planned
- ☐ NOT introduce, cultivate or process transgenic crops (GMO's)



WHEN IS THE BEST TIME TO PLANT ABACA?

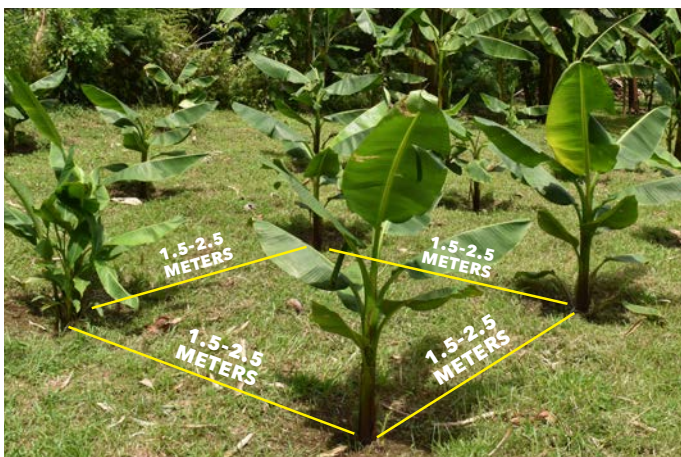
It is recommended to start planting at the onset of the rainy season.

HOW TO CLEAR THE PLANTING GROUNDS

- Cut shrubs, bushes, and grasses close to the ground preferably during the dry season. Burning to prepare new production areas is not permitted.
- In open or coconut areas where plowing can be undertaken, deeply plow once or twice to loosen the soil and break the densely matted coconut roots.



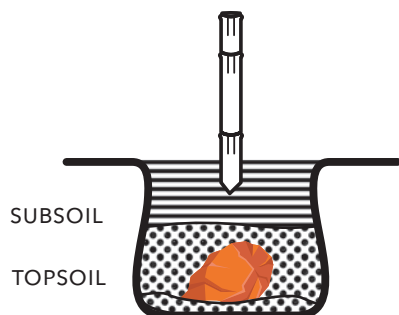
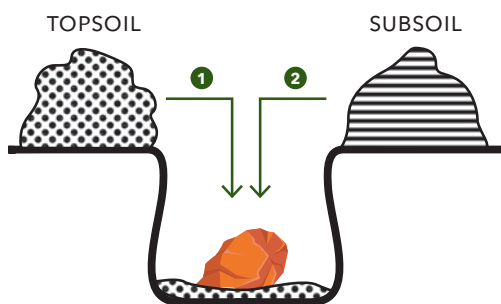
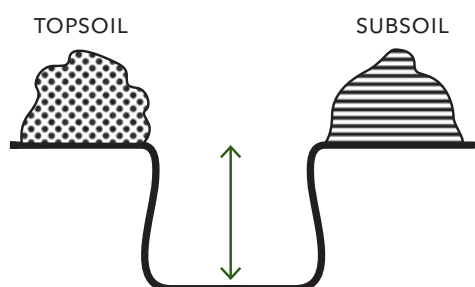
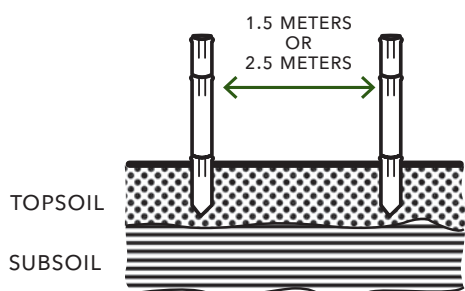
- ☐ All existing natural ecosystems, both aquatic and terrestrial, must be identified, protected and restored through a conservation program.
- ☐ The farm must not destroy any natural ecosystem.



STEP-BY-STEP GUIDE TO PLANTING ABACA

A. FOR NEW FARMS

- It is recommended that planting be done using the **square method** with a distance of **2.5 meters by 2.5 meters** or **1.5 meters by 1.5 meters** for varieties that are poor producers of suckers.



- Prepare a planting lay-out with a straight line and east to west orientation. Put sticks about 1 meter long each in places where the abaca planting materials are to be planted.

- When digging a hole separate the **topsoil** from the **subsoil**. Dig a deep hole to accommodate the planting material.

- During planting, put 10-20 grams of commercial fertilizers in combination with organic fertilizers (optional) then cover with an inch of topsoil. Put the planting material and cover it with the topsoil first and then with the subsoil. Compress the soil on the side of the planting material to ensure that water will not accumulate in the hole.

- Use a stick to indicate the location of the seedling planted especially when using corm or eyebud.

B. FOR EXISTING ABACA FARMS



Maximize unused space by filling up the missing hills

C. GOOD MANAGEMENT PRACTICES FOR NEW AND EXISTING FARMS

SHADING

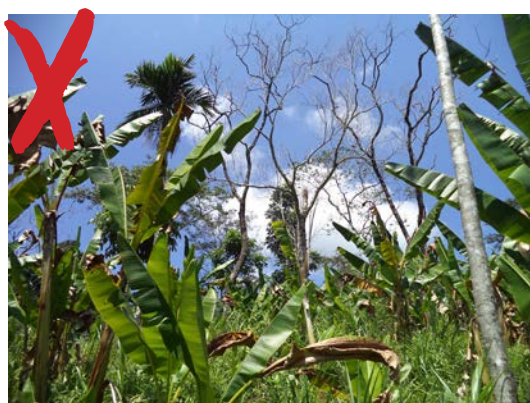
WHY IS SHADING IMPORTANT?

- Protects the plants from winds and strong rains.
- Diffuses sunlight during the dry season, therefore conserving the soil moisture and reducing the temperature which is favorable to abaca.
- Helps control weeds.

USEFUL TIP!

There is no need for additional shade trees if planting within a coconut farm.


Abaca needs 40-50% shade, preferably leguminous trees. When planting on a coconut farm, the distance from coconut to coconut should be at least 10 meters. A closer distance will cause overshadowing.



Minimal Shading



Proper Shading

RECOMMENDED SHADE TREES	NOT RECOMMENDED
<p>KATURAY (<i>Sesbania grandiflora</i>)</p> <p>ANII (<i>Erythrina fusca</i>)</p> <p>DAPDAP (<i>Erythrina sp.</i>)</p> <p>FRUIT TREES: COCONUT, LANZONES, ETC.</p> <p>CAMACHILE</p> <p>IPIL-IPIL</p> <p>NARRA (<i>Pterocarpus indicus</i>)</p> <p>MAGANHOP (<i>Albizzia lebbek</i>)</p>	 <p>GMELINA</p> <p>MAHOGANY</p> <p>EUCALYPTUS</p>



INTERCROPPING

WHY INTERCROP?

Growing crops among plants of different kinds usually in spaces between rows improves micro-climatic condition and increases crop diversity production and income.



Plants recommended to be intercropped with abaca:

Camote, Cassava, Peanut, Squash, Ginger, Coffee, Cacao and Turmeric



- ☐ The farm management must not hire based on race, color, gender, age, religion, social class, political tendencies, nationality, union membership, sexual orientation, civil status or any other motive.



All employees and farmers working on certified farms should:

- ☐ have their workers' rights implemented and protected
- ☐ be able to negotiate their working conditions
- ☐ be paid at least minimum wage
- ☐ be above 15 years old
- ☐ not be forced to work
- ☐ have access to safe drinking water
- ☐ not be subject to any form of child labor
- ☐ When housing is provided by farm management to workers and their families, it is disease-free, hygienic and safe.

FERTILIZER APPLICATION

Organic and liquid fertilizers are recommended to increase the soil fertility and yield.

When fertilizing using combined commercial and organic fertilizers, apply 3-4 inches from the plant 1-3 months after planting. Dried leaves and twigs, among others, can be left out in the surroundings of abaca farm as they will serve as organic fertilizer of the abaca plants

ADVANCED FERTILIZER

- Have your soil analyzed by the Bureau of Soil and Water Management.
- Undertake ring weeding.
- Apply the recommended fertilizer (organic, commercial, or combined) 1 to 2 feet away from the plants after 6 months.
- Apply the fertilizer at the start of the rainy season and every month for 5 months and the other half before the end of the rainy season. One application is approximately 100-250 grams of the recommended fertilizer per hill and must be done twice a year.
- Do not apply fertilizer when soil is dry.

WATERING

It is advisable to water plants once or twice a month during summer.

When spraying fertilizer and/or pesticide, applicator must:

- ☐ undergo training in interpretation, techniques, correct use of equipment, handling, and transportation of pesticides
- ☐ use appropriate personal protection equipment
- ☐ shower and change clothes immediately after finishing application
- ☐ not use chemicals or substances not allowed by the SAN standard



PHASE 2: MINIMIZING RISKS

TAKING CARE OF YOUR FARM

Abaca farms should be properly managed to retain their productivity. Monthly or bi-monthly cleaning promotes good growth, good preventive action against pests and diseases, and forest fires. Losses due to weeds include:

- Lower crop yield and
- A home for insect pests that sometimes cause diseases

CULTIVATION

- Established plantations on fairly level and slightly rolling lands are given shallow cultivation by plow up to one year of age, if applicable.
- Hilling up is recommended to produce more suckers with the use of spade or hoe.

CLEANING/WEEDING

Two methods of weeding:

- **Strip weeding**

The whole length of the row and in between hills on both sides of the plants are weeded. The cut weeds are left to rot to add to the organic matter content of the soil.

- **Ring weeding**

Usually practiced for newly germinated plants, this will also help you locate vacant hills. In the established farms, this is done half a meter around the hill and the exterior





TYPICAL FARM






GOOD FARM

INSECT PESTS AND HOW TO CONTROL THEM

NAME	PHOTO	CONTROL MEASURES
ROOT OR CORM WEEVIL (COSMOPOLITES SORDIDUS GERMAR)		<ul style="list-style-type: none"> • Soak the abaca seedpiece in a green labeled insecticide solution before planting. • Use the existing grasses along the boundaries about 11 meters wide as barriers.
APHIDS OR PLANT LICE Aphids or plant lice do not cause damage by direct feeding but they are carriers of viral disease in abaca plants.		<ul style="list-style-type: none"> • Do not intercrop or plant together with alternate hosts to aphids such as corn and legumes.

PLANT DISEASES AND HOW TO CONTROL THEM

NAME	PHOTO	CAUSES	CONTROL MEASURES
ABACA MOSAIC		<ul style="list-style-type: none"> • Easily acquired from a non-persistent type of aphids • Acquired through mechanical transmission 	Early symptoms (monthly monitoring) should be identified followed by destruction of every infected plant: <ul style="list-style-type: none"> • Spray the surroundings of the infected plant with a green labeled insecticide solution at a radius of at least 5 meters from the outside in a circular motion going inward to the diseased hill to kill insect pests.
BUNCHY TOP DISEASE		Acquired from a persistent type of virus that thrives in abaca	<ul style="list-style-type: none"> • Cut all the stalks, leaves, and suckers into small pieces. • Uproot everything including the corms of the diseased plant.
BRACT MOSAIC DISEASE		<ul style="list-style-type: none"> • Banana Bract Mosaic Virus (BBBrMV) is the causal agent of the bract mosaic in abaca • Acquired through mechanical transmission 	<ul style="list-style-type: none"> • Cut off the corm and chop it into small pieces. • If no chemicals are available, manual roguing can be done.

PHASE 3: IMPROVING THE QUALITY OF ABACA FIBER

WHEN IS THE BEST TIME TO HARVEST?

Under normal conditions, the first harvest can be done between **16 to 24 months from planting**, depending on the type of planting material used, variety, climate, and cultural methods, and elevation. Harvest **mature stalks only** (showing indices of maturity) to avoid having bad quality fiber and producing low fiber yield. Harvested stalks should be stripped within the day.



■ The farm must avoid the mixing of certified products with non-certified products in its facilities, from harvesting up until bundling. All transactions involving certified products must be recorded.

USEFUL INFO!

When the flag leaf appears, the stalk is considered mature.



The next harvests should be done at an interval of 3-4 months for the following reasons:

- To give the stalks sufficient time to mature
- To avoid gaps in which weeds can proliferate and
- To avoid overmature stalks.

WHICH ONES SHOULD YOU NOT HARVEST?

• Overmature stalks

Stalks are considered overmature when the fruits have appeared, usually after an average of 33 days following the appearance of the flagleaf.



• Immature stalks

Fiber from immature stalks deteriorates faster, and hence cannot be stored for long periods of time.



EXTRACTING THE FIBER FROM ABACA

STRIPPING

1 1



TOPPING

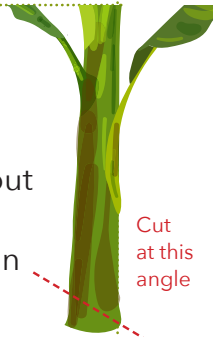
The leaves of the stalk to be harvested are cut with the use of a sickle fastened to the top of a bamboo pole called *sungkit*.

2 2



TUMBLING

- The topped stalk is tumbled down with the use of a *bolo*.
- Cut the stalks at an angle, about 3 inches above the ground to keep water from accumulating in the cut portion.



3



USEFUL INFO!

Segregate the different layers until bundling as it will classify the fiber grade later.

TUXYING

This is the method of separating the outer layer of the leafsheath called the **tuxy** from the inner layer.

The tuxy contains the primary fibers, and the inner layer contains the secondary fibers and the pulpy material. *(More about tuxying on page 20.)*

3



DECORTICATION

- Uses a decortication machine wherein abaca leafsheaths are scraped by means of rotating cylinder with blades
- Recovery rate: 3.34%

4

STRIPPING

Stripping is recommended within a day after tuxying.



HAND-STRIPPING

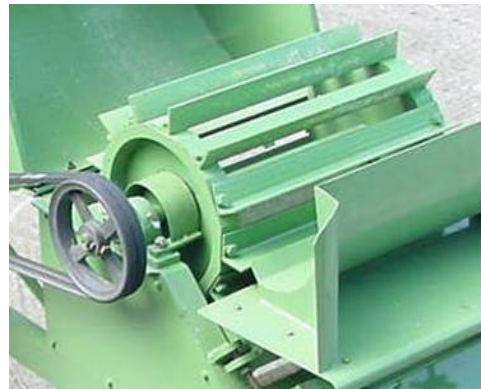
- Use of a 0, 24, or 17 serration stripping knife
- The tuxies are placed under the stripping knife with pressure and extraction is done by pulling the tuxies manually with a pulling aide.
- Output: 15-25 kg of fiber per day
- Recovery rate: 1.5%



SPINDLE-STRIPPING

- Semi-mechanized process of extraction
- The tuxies are fed into the stripping knife of the machine and the extraction is done with a spindle rotated by a motor.
- Output: 80-120 kg of fiber per day
- Recovery rate: 1.5%-2.5%

Decorticating Machine

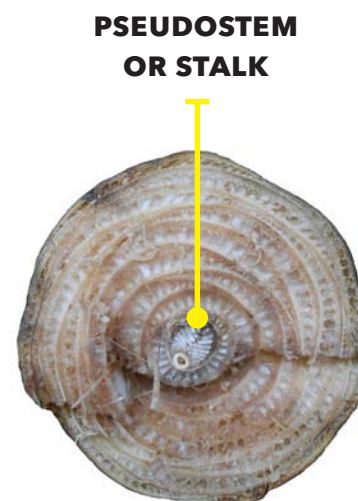
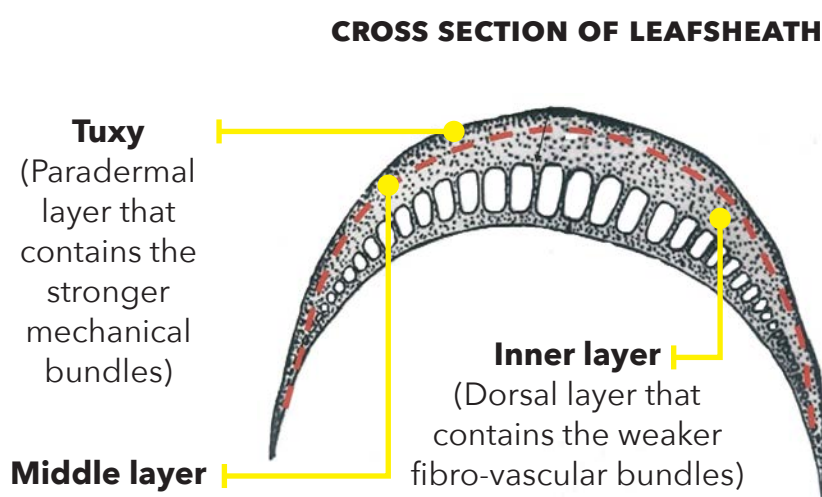


5 4



DRYING AND BUNDLING

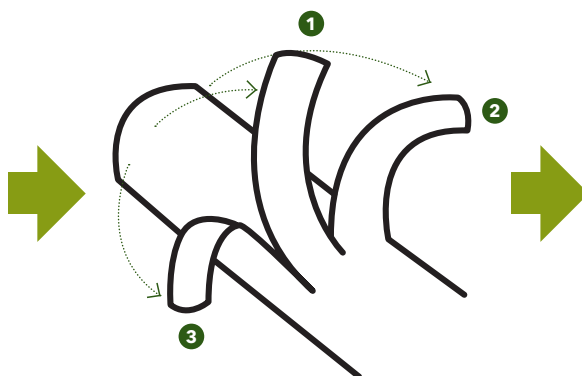
- All fibers must undergo drying before storing.
- Drying of stripped fibers is the same in all types: either sun-dried, air-dried, or mechanically-dried.
- In drying, the tips of the fresh fibers must neither touch the soil nor mixed with foreign matters such as cigarette butts, twigs, etc. *(More about drying, bundling, and storage on page 21.)*



WHAT ARE THE TWO KINDS OF TUXYING?

LOCNIT

- The tuxying knife is inserted between the outer and middle layer at the bottom end of the leafsheath.
- The tuxy is pulled off into 2 to 3 sections; 2 to 3 inches wide, depending on the curvature of the sheath.
- The remaining layers of the leafsheath are then pulled off and discarded to expose the next sheath for a similar process.



BACNIS

The leafsheath is first separated from the stalk by using a specially made tuxying knife, after which a slanting incision is made through the middle-inner layer of the leafsheath about 2 feet from the butt end. Then holding the cut portion of the inner layer, a hand pull is applied to separate it from the tuxy. This is not commonly practiced in the Philippines.

DRYING

- Fibers may be sun-dried, air-dried or mechanically dried before they are to be stored
- The fibers should be thoroughly dried, at least a day of sunlight or air dried 2-3 days (12% to 14% moisture content to avoid the growth of mold and bacteria which affects fiber quality).



BUNDLING AND STORAGE

The hanks of fibers are bundled manually at size and weight according to the capability of the farmer to carry them on his/her shoulder for hauling or transporting.

How to bundle:

- Hand twisted abaca twine is used for ropes. Lay down 2 to 3 of these ropes on a clean pavement next to each other at equal distances.
- After, the fibers are arranged in such a way that all their butt ends are in the same position. Once they are laid down across the ropes, fold them until the desired size of the bundle is met and tie them together securely.

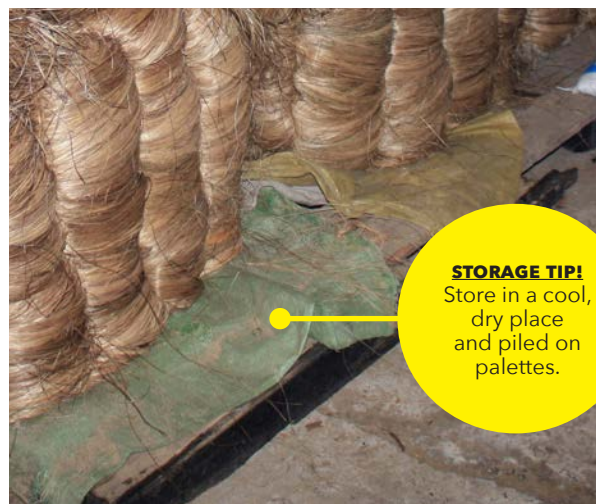


When it comes to waste management, the farm must make sure that:



the characteristics of the discharged wastewater do not degrade the receiving body of water.

they do not throw away any organic or inorganic solids, such as domestic or industrial waste, rejected products, construction debris or rubble, soil and stones from excavations, rubbish from cleaning land, or other materials into natural bodies of water.



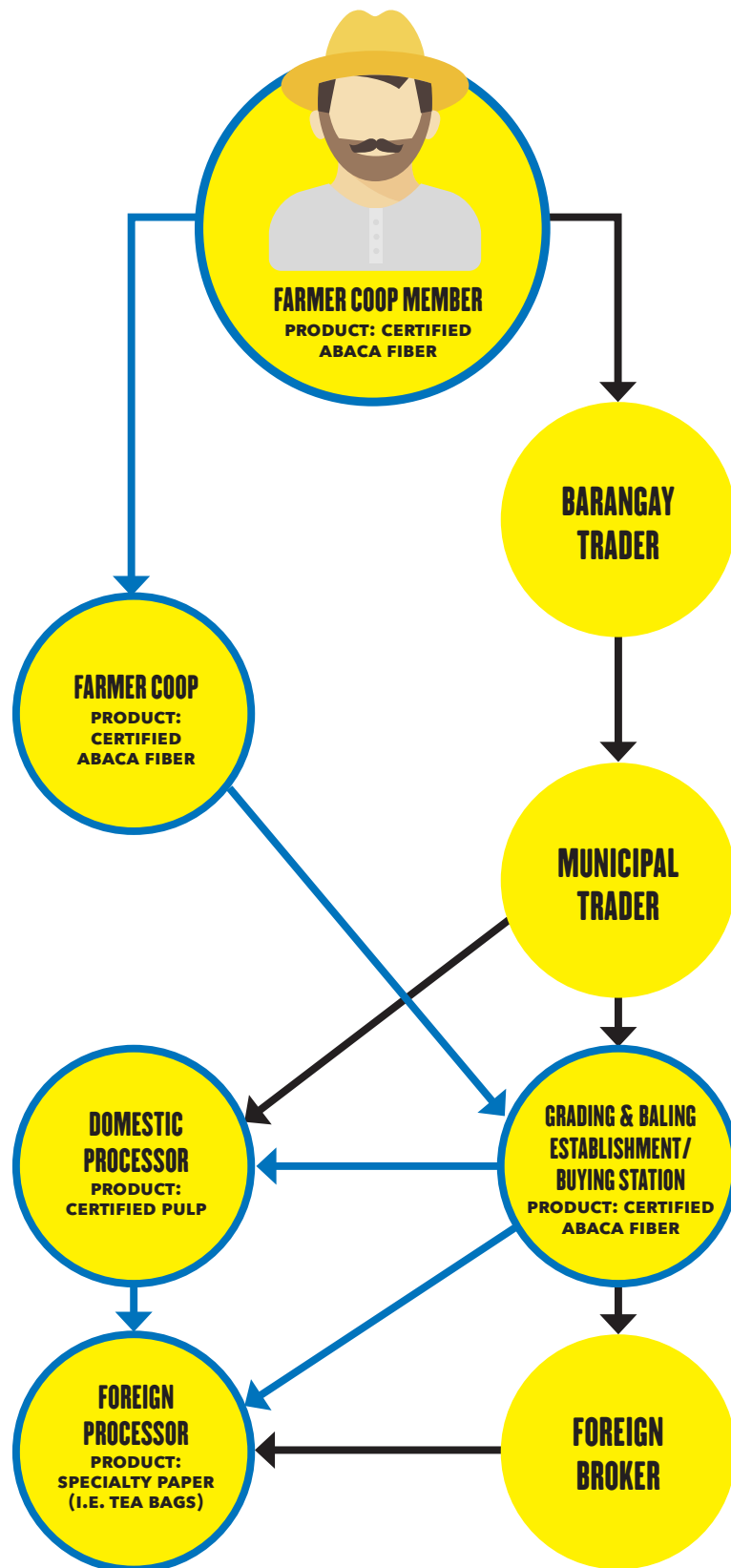
IMPROVING MARKET LINKAGE

FIBER TRADE FLOW



Creating a more efficient marketing system where farmers and their cooperative sell their products directly to local processors according to the quality and grades demanded, thus,

- able to negotiate marketing agreements for better prices
- reduce marketing cost
- eliminating unnecessary "middle-agents"



CERTIFICATION AND ADOPTION OF SUSTAINABILITY STANDARDS

The trend of certification emerged as consumers are becoming more selective and are looking for certified products. Through a certification logo, the consumers know that a certain products was produced in a sustainable way. While there are many kinds of certification that a farm can undergo, the European market of abaca fibers prefers Rainforest Alliance Certification.

WHY IS CERTIFICATION IMPORTANT?

Certification helps to ensure that the farm is conserving natural resources and the long-term economic health


of the community while increasing demand. Certification will provide added value to the product while providing farms the opportunity to:

- Receive better prices and increased income.
- Receive trainings about sustainable production.
- Receive trainings around social and environmental management practices.
- Participate in programs that uplift the conditions of the farmers and workers.

THE SUSTAINABLE AGRICULTURE NETWORK (SAN) AND RAINFOREST ALLIANCE

The **Sustainable Agriculture Network (SAN)** is a coalition of non-profit conservation and rural development organizations in the Americas, Africa, Europe and Asia promoting the environmental and social sustainability of agricultural and cattle activities through the development of good practice standards,

certification, and training of rural producers throughout the world. Compliance with the SAN standards is required for certification and the right to use the

- 
- ☐ The farm's upper management must demonstrate a commitment to certification and to complying with the requirements specified. They must also be familiar with and endorse the system and its programs and support its execution by providing the necessary resources.
 - ☐ Hunting, capturing, extracting, and trafficking wild animals must be prohibited on the farm.



Rainforest Alliance Certified™ trademark seal on agricultural and cattle products. All packaging and materials that use the Rainforest Alliance name or bear the Rainforest Alliance Certified™ seal must be submitted for review to the Rainforest Alliance.

Selected key requirements of the Rainforest Alliance SAN standard:

- Strict segregation of certified and non-certified abaca fibers along the whole trading process from farm to factory (no mixing of certified and not-certified fibers)
- Visible tagging of certified fibers for visible distinction
- Traceability and full transparency of the trade flow with certified fibers must be guaranteed through proper record keeping and internal control
- Certification audits by Rainforest Alliance are conducted every year
- To comply with the standards, farmer members have to adhere to 80% of all criteria, 50% of each principles and all the critical criteria.

The ten (10) principles of the Sustainable Agriculture Network standard:

1. Social and Environmental Management System
2. Ecosystem Conservation
3. Wildlife Conservation
4. Water Conservation
5. Fair Treatment and Good Working Condition for Workers
6. Occupational Health and Safety
7. Community Relations
8. Integrated Crop Management
9. Soil Management and Conservation
10. Integrated Waste Management

The SAN will issue a new standard on the 19th of September 2016, and this standard will be binding for audit from July 2017. In the new standard, the number of critical criteria and their content will be different. Visit the SAN website (<http://san.ag/web/>) to access the latest SAN documents once they are available.

HOW DO YOU GET CERTIFIED?

Rainforest Alliance certification can be obtained in two ways:

- A. Farm certification**
- B. Group certification**

Farm certification is designed for big farms which are capable of undertaking the certification without the help of outside groups.

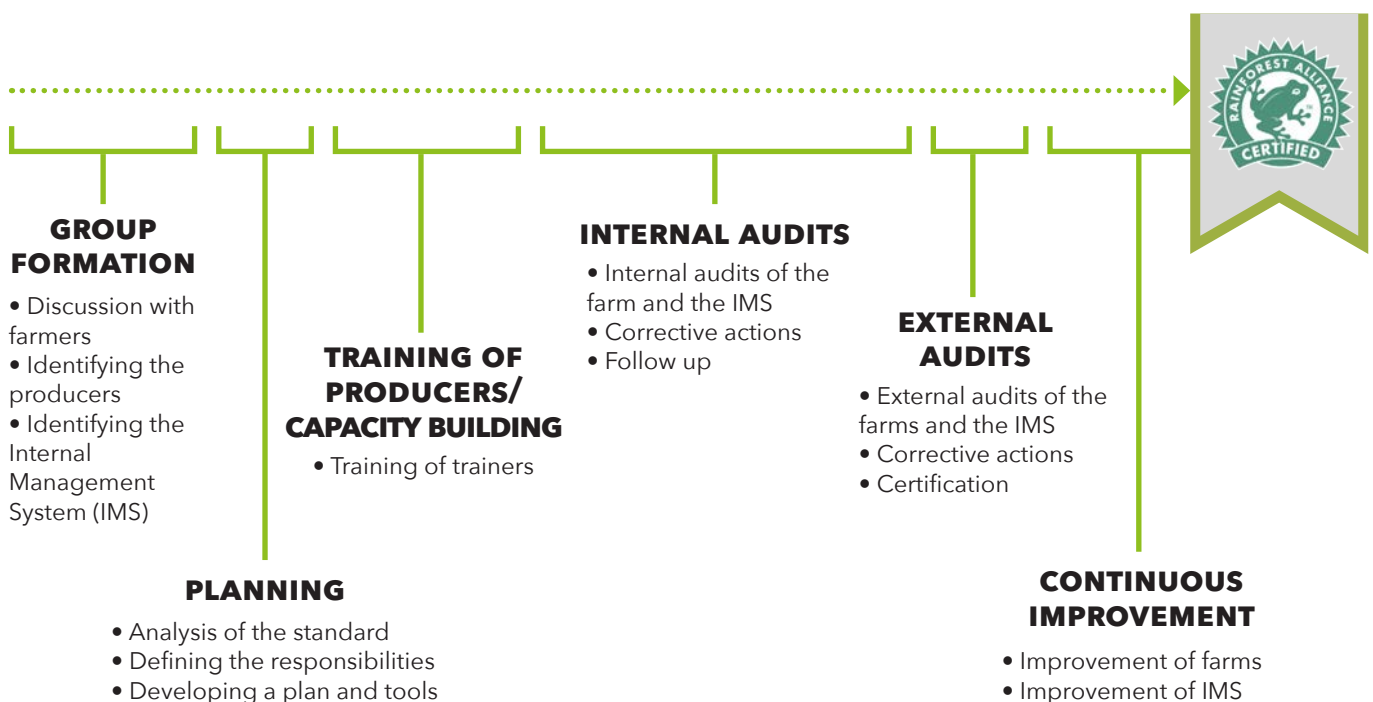
Group certification is the mode for small farmers who want to participate in the program but cannot do it on their own. A group administrator (GA) organizes the small farmers, forms the internal management system, and formulates the social and environmental programs which the group shall follow. It usually takes around

6 months to 1 year from the formation of the group up to the first external audit, depending on the pace of the organizer. A GA must be engaged in trading for at least 6 months before they can apply for certification.

HOW CAN A FARM APPLY FOR CERTIFICATION?

A farmer or a group administrator can directly contact or email Rainforest Alliance for certification. For more information, visit <http://www.rainforest-alliance.org/business/marketing/marks/certified>.

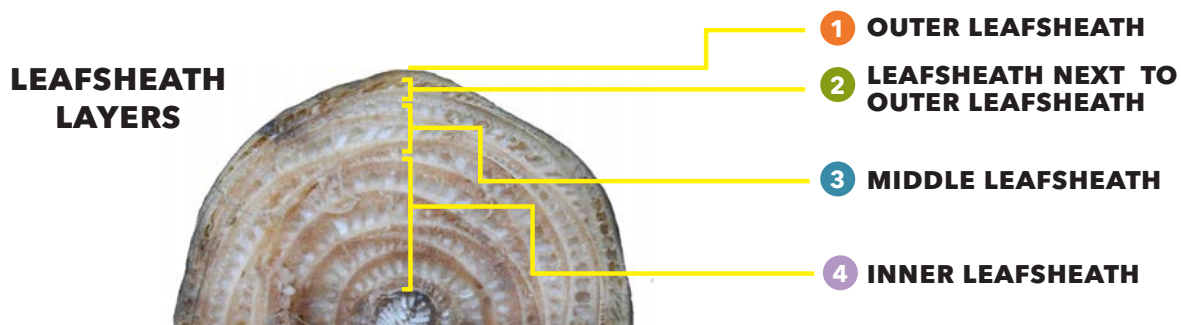
STEPS TO ORGANIZE A GROUP TOWARDS RAINFOREST ALLIANCE CERTIFICATION



APPENDICES

FIBER QUALITIES, CLASSIFICATION, AND GRADING

Abaca fibers are classified according to standard NORMAL grade as follows:



DECORTICATED FIBER

PROCESS	GRADE	COLOR	SOURCE	STRAND THICKNESS (MM)	LENGTH (CM)
GOOD	AD-1	White to ivory white	3 4	Not greater than 1/2mm	Not less than 60cm
	AD-2	Light brown to white	3 4		
	AD-3	Streaks of purple, green, and brown	1 2		
IRREGULAR	AD-4	Regardless of color with some admixture of fiber of good cleaning/stripping Dark colored streaks but of good cleaning/stripping	1 2 3 4		

Source: PNS/BAFS 181:2016

Tensile strength ranges from 19.5 to 32.6 kilogram force per gram meter (kgf/g.m.)

HAND-STRIPPED AND SPINDLE-STRIPPED FIBER

STRIPPING	GRADE	COLOR	SOURCE	STRAND THICKNESS (MM)	TEXTURE
EXCELLENT	EF	Light ivory to a hue of very light brown to very light ochre	4	0.20-0.50	Soft
	S-EF	Frequently intermixed with ivory white			
	S2	Ivory white, slightly tinged with very light brown to red or purple streak	2 3		
	S-S2	Light ivory to very pale brown with very red or very light purple streaks			
	S3	Predominant color - light to dark red or purple or a shade of dull to dark brown	1		
	S-S3	Light brown to dark red or light purple with occasional streak of very light green			
GOOD	I	Very light brown to light brown	3 4	0.51-0.99	Medium soft
	S-I	Light to very light brown			
	G	Dingy white, light green and dull brown	2 3		
	S-G	Light brown with occasional streaks of very light green			
	H	Dark brown	1		
	S-H	Brown to dark brown Intermixed with substantial portion of fiber with lighter colors In some, color approaches black	1		

HAND-STRIPPED AND SPINDLE-STRIPPED FIBER

STRIPPING	GRADE	COLOR	SOURCE	STRAND THICKNESS (MM)	TEXTURE
FAIR	JK	Dull brown to dingy light brown or dingy light yellow, frequently streaked with light green	2 3	1.00-1.50	
	S-JK	Light dull brown to dingy light brown or dingy light yellow with occasional streaks light green	4		
	M1	Dark brown to almost black	1		
	S-M1	Brown or nearly black	1		

Tensile strength ranges from 35 to 55 kilogram force per gram meter (kgf/g.m.)
Length of fiber not less than 60 centimeters



Imprint

Published by

Philippine Fiber Industry
Development Authority

3rd Floor, PCAF Building
Department of Agriculture
Diliman, Quezon City

Contact:
The Executive Director
PhilFIDA
philfidaod@yahoo.com
273-2474 local 2650

Deutsche Gesellschaft für Internationale
Zusammenarbeit (GIZ) GmbH

Abaca Sustainability Initiative
Unit 2B, PDCP Center, corners
V.A. Rufino & L.P. Leviste Streets
Salcedo Village, Makati City

Contact:
Matthias Radek
Chief Advisor for Partnerships Project
for Agriculture
matthias.radek@giz.de

As at

August 2016

Design and layout

Yam Otarra
Makati City

Photo credits

Philippine Fiber Development Authority
GIZ/Matthias Radek
Wikimedia Commons

