NATIONAL COLLEGE
OF ART AND DESIGN

Faculty of Design

Department of Fashion & Textiles

FIBERS OF THE PHILIPPINES

A Current Fiber Project in the Philippines Aimed at Economic Renewal Based on Socially and Ecologically Aware Principles

prepared by

CARMEN HIJOSA

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CONTENTS

Introduction

In 1993 I was asked by the Product Development & Design Center of the Philippines to upgrade the non-apparel leather industry in the country. This is when my love and respect for the Philippines, it's people and their fibers and textiles started.
This offer had come about because of my experience in the designing, manufacturing and marketing of leather goods through my own company in Ireland, and various work I had done in different countries of a similar nature.

After about a week of research, I realised, (to my horror at the time!) that the quality of the local leather would never give us the standard required to upgrade the product.
Luckily during that week I also had time to become acquainted with what to me, is the real treasure of the Philippines; their indigenous fibers, their rich and diverse cultures and traditions, and the extraordinary craftsmanship of the people in the utilisation of their indigenous materials.

When I proposed to the Design Center to try to do the Project using indigenous fibers they readily accepted, and that decision led, that year, to the development of a collection of *Buntal* bags created using traditional methods for which local weavers had to learn and revive some weaving techniques that had all but disappeared.

This developed into "a fiber development project", and it became clear that in order to go on developing textiles I had to learn more about them; become familiar and fluid myself with weaving skills and techniques in order to help understand and carry on working with what had become the passion of my life: the development of fibers and textiles based on social and ecological principles.
This brought me into college to do a degree in textiles.
It is my strongest desire that the skills and knowledge that are being given me, can in turn pass on to others to improve their quality of life and dignity.

The Project goes on; sometimes just ticking over in a sleepy way, mainly due to lack of funds, but slowly more and more people are realising it's potential and taking it more seriously. For my part I hope that once I finish with my studies I can continue doing my part in order to make it grow .

My sources for this thesis come mainly from my own experience working in the Philippines.I also read general books that have been written on the history of the Philippines past and present, ethnological books about tribal communities and their textile history, books on fibers and fiber development.
In addition, I consulted books about social and ecological responsibilities. Papaneck in particular has been a great source of inspiration.

There are two forms of illustrations in the thesis. One in photographs which are labelled as illustrations (ill), the other are textile samples and fibers which are labelled as (fig.) and are filed at the end of the thesis.

Map of the Philippines

Part I The Philippines, General History

General view of the Philippines

The Philippines is a country of deep contrasts, with over 7,000 islands scattered in the Philippine Sea.It has a rich and varied culture, from the animist Hill Tribes in the rice mountains of Northern Luzon, to the never converted nor conquered Muslim communities in the southern island of Mindanao and Sulu Archipelago.

It's climate is tropical, hot and humid year round, and is as dramatic and diverse as it's people or geography. It is made even more so by it's geographic situation, with the archipelago located along a sea belt where erupting volcanoes, typhoons and floods are the norm of the day, especially during the rainy season, which adds to the intricacy of this fascinating country.

The Philippines has a population of about 70 million people and it is growing fast. The people are mainly of the Malay race although there is the usual Chinese minority and a fair number of *mestizos – Filipino* Spanish or *Filipino* American.
There are also some remote pockets of Pre-Malay people living in the hills.

Current political & economic situation of the country.

In the recent turmoil in S.E. Asia, the Philippines escaped the worst of the ravages wrought on some of its neighbours. That is not to say it has remained unscathed, but the crisis has been less intense.
This can be put down to two factors. First the Philippines do not have the level of foreign debt of Thailand, Indonesia and Korea; second the International Monetary Fund (IMF), has imposed over the last 30 years a certain degree of monetary discipline not experienced in some other countries.

Also,the Philippines has a renewed commitment to democracy amid a neighbourhood of authoritarian regimes presiding over collapsing economies devastated by the Asian financial turmoil. The Philippines among tiger and near-tiger economies in the region, has coped relatively well with the crisis and stands a good chance of being among the first to recover from it.

"As a democracy that has withstood the seismic shock
of the Asian turmoil with more resilience than it's

> previously high growth neighbours, the Philippines has been held out by international financial institutions as a model of a democracy being able to cope with economic crisis more effectively than exclusionary political systems. 1

In spite of government efforts, in particular by the last *Filipino* president Fidel Ramos, endemic corruption and inefficiency still plague the country and with it a glaring disparity between rich and poor.Today the country has a multiparty system with presidential elections held every six years.

Arts & Culture

The Philippines had been under Spanish rule for 300 years from the 16th century, but was taken over by the Americans in 1898, when the Spanish – American war of 1898 spread from Cuba to the Philippines and Spanish power was no match for the US. The American colonial period was abruptly ended by W.W. II when the Japanese military occupied the islands. At the close of the war, independence was granted.

This convergence of diametrically opposite traditions with indigenous elements has been the main influence in the development of today's cultural trends and traditions.Today the Muslims and some of the isolated tribes, are the only people whose culture remains unadulterated by Spanish or American influences.
The ability of the *Filipinos* to improvise and copy is very apparent. You need only see how the army jeeps left by the Americans were converted into colourful taxis before they began to produce these vehicles themselves. In ill. 1 you can see a contemporary Filipino taxi (Jeepney) imitating an original American army jeep.

Ill. 1

Jeepney, true Filipino local transport, 1995

The idea of national consciousness became apparent with the *Filipinos* during Marcos' time in the 1970s, when people began to care about their traditional arts & crafts. Ever since it has kept it's momentum , being channelled by different government bodies such as the Design Center of the Philippines, whose role is to foster – *"The creation of new designs that make use of local indigenous materials and cultures is part of their core strategy for development"*. 2

Natural Resources

Natural resources in the Philippines have been the main source of income and export since the 19th C, when the Philippines become the first world exporter of *"Manila Hemp"* or *Sinamay* . *Sinamay* was made in the Philippines into cord and most of the national output was exported to the US.
Along with *sinamay, copra* and sugar were the main exports of the country, which had an economy that was mainly agricultural.Forestry and gold and silver mining were other important economic activities.

All this changed about a decade ago, when the boom for electronics and electronic components started, and "today the field of electronics accounts for 46% of all exports earnings". 3 But as Mr. Navarro, the secretary or the Department of Trade and Industry (DTI), was quoted as saying: *"We need to diversify both our export products and our export markets; We depend too much on electronics and are too reliant on the US as a market"*. 4

> Today, the agricultural sector employs 30 % of the countries population and with the resurgence of micro enterprises and cooperatives that grow indigenous fibers and transform them into commercially viable products, more and more people have a chance to secure a living in what has always been in a traditionally agricultural way . 5

Religion

The Philippines is unique for being the only Christian country in Asia where over 90 % of the population claims to be Christian and over 80% Roman Catholic, (no doubt, and to my embarrassment, being Spanish, due to the Spanish swagger with the cross as much as the sword!).
"The largest of the minority religions are the Muslims in the South. They comprise 5% of the Philippine population or 25% in *Mindanao*. They used to control almost all the Philippines until the Spanish arrived and drove them back". 6

The Muslims in the South and the communities in the Northern parts of *Luzon* – which are the areas that have been less touched by colonialism – are the localities that have more varied textile culture and textile traditions.
Most of the surviving traditional textiles are fast disappearing, as this art was closely related to religious practices and shamanistic rituals, and the ceremonies that goes with them. In ill. 2, we can appreciate a section of a silk tapestry weave head cloth from the Tausug group in *Mindanao*; this type of textile is no longer woven.

Ill. 2 Tausug tapestry weave, Mindanao, 1998

Language

English and Spanish are still the official languages in the Philippines, although the use of Spanish is now quite rare. English is not as widespread outside the big cities even if it remains the language of secondary school education.
Tagalog or *Filipino*, the local language of Manila and parts of *Luzon* is now being pushed as the national language and is commonly used by most people as their first language.

Part II

Philippines as a Textile Producing Country

There is a tree called the coconut palm,
which is the most notable that can be mentioned
because from it are made so many incredible things,
ships have been made from it as well as food and
drink,
clothes and shoes.....
....From it's leaves canvas is made for sails and
clothes to wear, twine and sandals;
and from the thinnest part (of the leaves) threads
for shirts and collars, and for sewing....

Pedro Ordonez de Cevallos, Spanish soldier of fortune
that visited Manila in 1595, recounted in 1614.
(Montinola, *Pina,* 1993, p. 10.)

Traditional Textiles: General History

The aim of this chapter is to define some of the textile traditions of the Philippines through an inquiry into the current and historical use of indigenous materials. It also looks at manufacturing techniques, clothing forms and decorations and the present status of the materials and techniques in today's social and economic climate. The chapter also looks at different government bodies that are making changes possible.

> In general, there has been little interest in the study of textiles as a traditional art form in the Philippines. Whatever is known is derived from general ethnographic accounts written often by anthropologists, historians or collectors.1

Of it's beginnings, not much can be gleaned from archeological records

because of the perishability of materials in such a hot and humid environment, but cloth weaving in the Philippines dates as far back as 200 BC.

> Before the discovery that fabric could be woven out of fiber, certain tree barks were pounded into fibrous cloth which was derived from the outer sheaths of the coconut palms called *Bunut.* Stone or clay spindle whorls found in some sites also imply spinning and weaving.2

For finer weaves, the simplest of looms was developed – the *back strap loom.* In ill. 3 we have a traditional cotton blanket woven on a *back strap loom* ; this is an unusually fine weave, which comes from central Kalinga, northern Luzon, in the Baguio province. The *back strap loom,* which is common to many countries textile history, is still used among the *Bontoc*, the *Maranao* and the *T'boli.* 3

Ill. 3 Detail from cotton blanket from Central Kalinga, near Baguio, Luzon, 1998

Textiles from ethnic groups are closely associated with their believes, sentiments and aspirations. In the study of these textiles, not only the physical properties such as materials and techniques are important but equally important are the social and historical background in which they occur.

Textiles were used to identify man and his village. It indicates his power, status or wealth and accompanied him in rites of passage.

When these ways of life were halted, the costumes that went with them fell quickly out of use and modernising trends finished them off. 4 Ill. 4 is a Bontoc women's girdle called *akosan.* It is made of very old and worn cone shells *(Conus literatus)* and bone pieces on woven textile, it comes from northern *Luzon.*

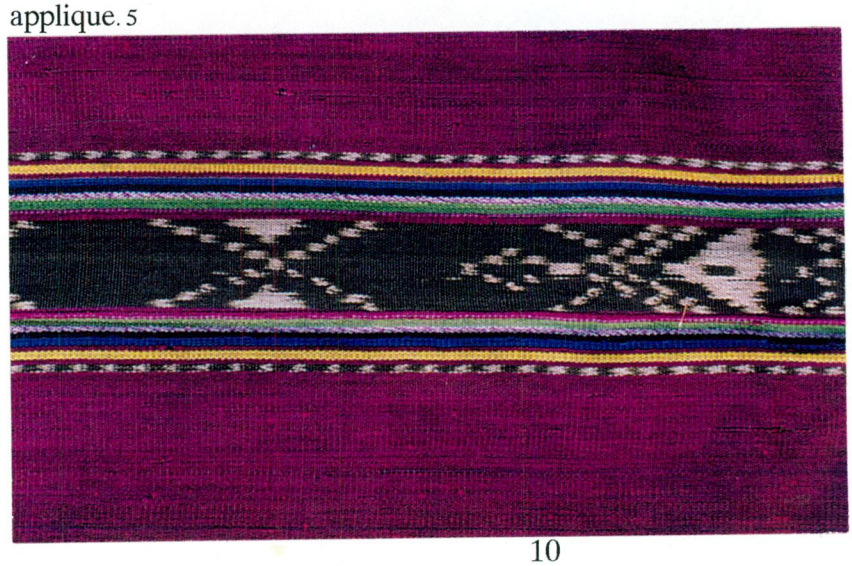
Ill. 4

Personal adornment of the northern Luzon ethnic groups, 1998.

To this day and in particular in certain areas of the Philippines, the most significant factor in the creation of the Filipino textiles is the fact that they are rich with religious connotations.The religious character is implied in the *Ikat* techniques and colours of the southern regions and the motifs that adorn their textiles. The importance of the traditional textiles in the *'Taliduma'* or marriage ceremonial and the death and burial rites, attest to the ritual role of textiles in the communities. 6

It is not only for ornamentation that the women weave and adorn their fabrics with designs, but also from an old believe that certain symbols help ward off evil spirits. Ill. 5, is a detail from a blanket from *Mindanao,* in the *Ikat* center part we can distinguish a stylised design of a crocodile, a powerful symbol to protect against evil spirits in some parts of *Mindanao.*

For the motif to be efficacious, it has to be situated closest to the human skin, hence the motif is incorporated in most garments through *Ikat*, bead work, embroidery and applique. 5



Ill.5

Detail, from blanket in *Mindanao,* 1999

Textiles are also testimonies of wealth, a believe most evident among the *Bagobo* . Colour also plays an important role in these traditional textiles. The highest dignitaries in the community ie: chieftains, spirit mediums etc, are recognised by the colour of their clothing and they are the ones that would have the privilege to wear blood-red garments.6

In cultures as varied as the Philippines that most times exist without written texts, textiles are more than objects of dress and adornment. Their work suggests that the variations in designs, colour and spatial relationship could serve as a Rosetta Stone for deciphering how the threads of Pre-Spanish cultures evolved over time and were woven into the present-day life.

It was during the Spanish colonial period that we get the first documented facts about the textile industry in the Philippines.

The first written records, which date from the first contacts with the Spanish conquerors (1570s) comment on the natives of *Cebu* wearing garments made of cloth resembling coloured calico and which the natives called *Mendrinaque,* which was made from *"A kind of banana".*7

By 1571 Legaspi, who had been appointed governor and *Adelantado* of the new colony of Spain, imposed a royal tribute on the inhabitants. This was a poll tax that could be paid in gold dust, cotton or "*novel*" cloth materials produced by the inhabitants.

The tribute, a financial measure to support the upkeep of the colony, spurred the population to create and develop manufacturing industries to assure their well being. This in turn made the manufacturing of textiles from indigenous fibers a good reason to grow and develop.

By 1834, when the port of Manila opened to international trade, the best textiles and laces were being successfully exported. By the 1900s cloth making become one of the principal household industries in the Philippines.

Present State of the Industry

In the late 1700s the Industrial Revolution helped Britain become the rising economic power in Europe and the textile industry was the first to be industrialised.

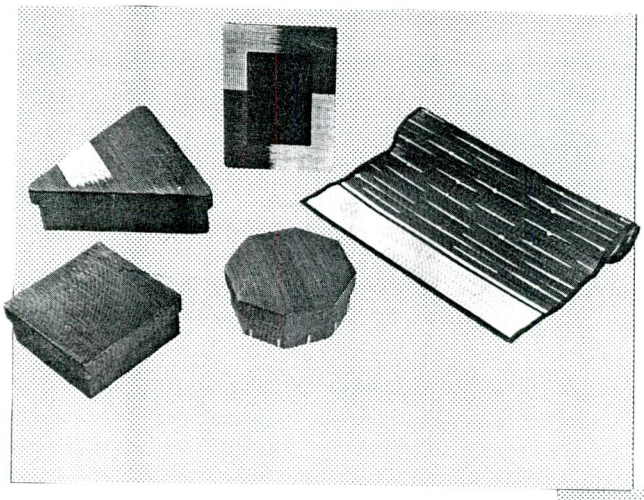
The repercussions of this was soon to be felt in other parts of the world. By the 1900s the cheap cotton fabrics (from Manchester) soon decimated the *Filipino* textile economy, as

it was virtually impossible to compete with England in the international markets. Soon the exporting of the beautiful indigenous textiles dwindled to a trickle being no match economically for these cheap textiles that had invaded every imaginable corner of the market.
To make matters worse in the Philippines, sugar had become a premium export product and the export of textiles was replaced by the export of sugar. Soon the textile industry was dying from the effects of the change from textiles to sugar exports.

The coming of the Americans in 1940, bringing new fashion and textiles into the country only added to the imminent downfall of the industry.
By the middle of the 1940s, most *Filipinos* were wearing American *"vestidos"*. This new fashion did not look well in the traditional textiles which brought them further into decline.
The Japanese occupation of the Philippines in 1940, brought still another transition and cause for setback. Many hand looms were destroyed during the war, and there was not much demand for luxurious *pina cloth* or other indigenous textiles.
However, during the 1950s and 1960s mechanised textile production grew into an important manufacturing industry in the Philippines.
The hand weaving industry was hardly affected by this and continued to be left mainly to private initiative.

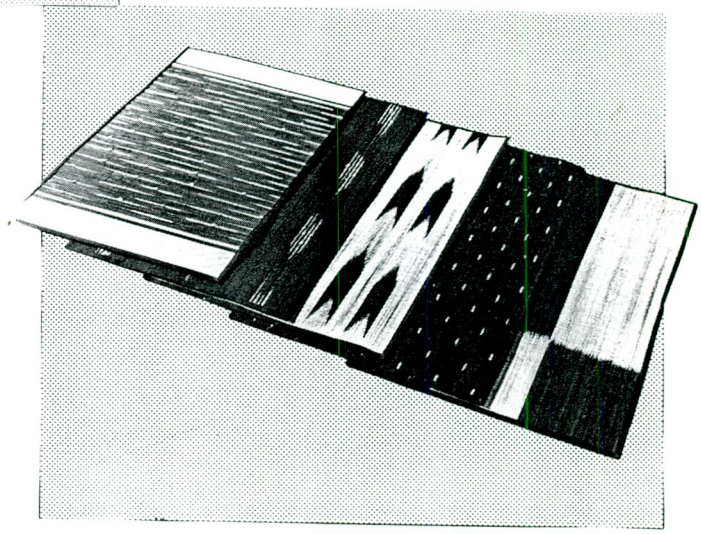
Luckily the *Philippines Textile Research Institute (PTRI)* was established in 1967 to contribute to the local production of raw materials, the improvement or invention of textile machinery, and the processes and production methods needed by the Industry.
By the mid-seventies the then *Design Center Philippines,* which later became the *Product Development and Design Center of the Philippines (PDDCP)*, began a national programme to boost the potential of hand loom weaving in the Philippines.
Intense research and development was undertaken to identify indigenous fibers and techniques that would adapt well to the loom.
In the mid-eighties they started to introduce new colour combinations based on traditional *Ikat* methods and searched for producers who would be willing to produce prototypes and execute experimental processes.

One of the people that took part in the programme, Elisa Reyes, has now a well established workshop, employing over 30 weavers and exporting her hand woven products to such prestigious places as MOMA, (Museum of Modern Art in New York). Ill 6 is a selection of boxes and place mats produced by Elisa Reyes and sold at MOMA ; Ill. 7 is a range of place mats also by Elisa Reyes.



Ill. 6

Buntal products by
Elisa Reyes sold at the
Museum of Modern Art
(MOMA) in New York City,
1997.



Ill. 7

Selection of place mats
by Elisa Reyes, 1997.

The case of Elisa Reyes is not the norm of the day; Elisa Reyes, far left in illustration 8 with designers from the Design Center of the Philippines and the Research Department of the Center.

Ill. 8

Elisa Reyes
in her workshop,
Bulacan, 1985

It took the best part of five years of product development to arrive at her present position.8 In her own words, product development takes time, money and effort and not every small craft oriented enterprise has the financial backing, skills, and most important the vision to see the necessity for this. To this day, these are the major factors in the development of the Textile Industry in the Philippines.

Government Bodies Relevant to the Development of the Textile Industry

It was during the Marcos regime in the 1970s, in particular with the help of Imelda Marcos, that many institutions relevant to the development of the craft industry started.These institutions are directly linked with the textile industry, from the growing of the fibers to the manufacturing process.

One of the establishments created was the *Design Center of the Philippines*. This center was established in 1973 and it initiated the first specific and organised effort to develope, promote and enhance the design of *Filipino* products. The Design Center activities and services were channelled towards two specific ends:

> The promotion of design consciousness though a comprehensive design education programme and
> The creation of new designs that make use of local and indigenous materials.

In the 1980s the now newly named *Product Development and Design Center of the Philippines (PDDCP)*, being a technical agency of the Department of Trade and Industry, refocused its programmes towards the improvement of the quality and competitiveness of the Philippines export products. This was to be achieved through design, with direct working relationship between *PDDCP*, designers and manufacturers in order to facilitate the actual design and production process. (This was the case with Elisa Reyes, weaver, already mentioned).

With the progression of both the business community's attitude towards design and the professionalization of the design industry in the 1990s, the *PDDCP* is gradually focusing its mandate on product and communication design. For example, "the creation and development of regional and provincial identities through the generation of designs of products that 'speak' of it's source of origin". 9

The Cottage Industry Technology Center (CITC)

The main aim of the *Cottage Industry Technology Center* is to encourage and promote the establishment of micro, cottage and small industries to improve product quality and productivity and to generate employment and livelihood in the local communities.To achieve this, the *CITC* provides skill training and technical consultancy. Some of their projects include assistance both in training and in providing equipment as well as establishing production villages in some of the most disadvantaged parts of the

provinces.

Some projects include: Hand loom weaving
Handmade pulp and paper
Pottery
and Furniture

The Product Textile Research Institute (PTRI)

The *Product Textile Research Institute*, as already mentioned, was established in 1967 to contribute to the local production of raw materials, the improvement and invention of textile machinery and the processes and production methods needed by the Industry.

It was thanks to the *PTRI* that the project I am involved in was able to break through in the development with the *abaca* fiber. Using their facilities and know how, it was possible to soften the *abaca* and make it more pliable for use in the apparel industry .

Ill. 9, *Abaca* drying in *PTRI* during the research and development process to soften it.

Il. 9 *Abaca* drying in the sun, *PTRI*, Manila, 1998

The Fiber Industry Development Authority (FIDA) is part of the Department of Agriculture and is the body in charge of fiber development in the Philippines.

At the moment they are experimenting in the blending of *abaca,* an indigenous fiber of the Philippines extracted from a palm tree, as we can see in ill.10, with indigenous cotton and polyester.

Ill. 10

Musa Textilis Nee, palm from the banana family. Detail of trunk, 1997.

FIDA and *PTRI* are the two main bodies in the Fiber and Textile development in the Philippines.
It's worth mentioning that there is little fiber research and development done by the private sector in the Philippines, mainly due to a lack of knowledge and finances. If to this we add the fact that there is no official place where one can become a textile designer, we can begin to understand the importance of these government bodies in the development of the textile industry.
Also, in the Philippines, old traditions have a way of becoming fixed rules that stagnate the on going development needed to keep the industry alive and profitable.
The weavers don't like to change their colours and ways of weaving. They are, in many cases, willing to do it if they can see there is already a market for the new product, but most of the times they themselves have no idea how to market it , being away from everything and most likely never having been any further than Manila.

These facts support the importance of the named institutions, *FIDA* and *PTRI*. Without them the textile industry with its traditions, indigenous fibers and the work prospects in this field would have very little chance of becoming a source of employment and income for the local communities in the next Millennium. 10

CITEM is the *Center for International, Trade and Expositions and Missions* and is the vital link for exporters and manufacturers with the export market. *CITEM* organises trade fairs, export missions and search for new markets.

In fact, they do anything to help increase exports.
It has close links with the Design Center and when working with the Design Center, the knowledge of *CITEM* of current export market situations and opportunities is a vital help in the development of the right products for the right markets.

Textiles have always played an important role in the Philippines but had no growth and not much future up to about twenty years ago. In present times, and thanks to the government efforts through organisations such as the ones mentioned above, the textile industry has developed well established trade links world wide by actively promoting textiles and textile related products.
It has also upgraded, and continues to do so, product design and design awareness in the manufacturing industry, emphasising indigenous raw materials and traditional skills through different projects, exhibitions and promotions. It is in one of these projects that I become involved, which is the case study in the next part of the thesis.

Part III

Fiber project: it's beginning from concept to reality.

"What happens to materials happens to yourself; nature's life-cycle of development and ageing is parallel in humans and materials"

Maria Blaise, Textiles & New Technology 2010, p. 31

In 1993 I was asked by the *Design Center of the Philippines* to upgrade the leather industry in the country. For reasons already mentioned, the project ended up becoming a *fiber development project* . This included research and development on indigenous fibers, product design and technical specifications of the products developed, and also marketing and export strategy for these products.

Little did I know at the time, of the turn around that this decision was to have in my life. What started as an idea to use an alternative material to leather because of it's abundance, has become a part of my life and most important, it has changed my outlook on how I envisage and react towards design development as a whole.
Both the project and my view of it have become people oriented, community oriented and indigenous raw materials oriented. Where before, the product, marketing strategy and market positioning were of paramount importance, now the focus is on the concept of product development linked with environmental and social issues related to raw materials and their usage. The search is for indigenous materials and skills; and the challenge to come up with a product that encapsulates all that. The overall aim is to produce a valuable product while simultaneously upgrading the quality of life of the makers.

Work in the Philippines: first attempts.

In order to work in another country – especially an Eastern country if one comes from the West – one has to learn first about it's culture, people and social habits, in order to develop a harmonious and positive working relationship.
While the Philippines has the appearance of westernisation, this appearance is often misleading as some similarities with western culture are merely a veneer. In important areas such as social and work interaction, the Philippines has much more in common with the East.
Smooth social interaction is the most important value. It means they will avoid saying "no" directly, and will act pleasantly when in fact they feel hostile.
We encounter difficulties in dealing with *Filipinos* because our frankness is considered tactless. We find it acceptable to disagree, whereas *Filipinos* consider it a breach of etiquette.
Their verbal mannerisms are also quite confusing . Laughing and giggling is used to relieve tension if they feel embarrassed about anything but is also used to show sympathy. 'Maybe' often means 'No' and 'I'll try' means 'I don't think I can'.

The fact that in the cities they all speak English makes it more difficult for foreigners to get to recognise this cultural gap. It took me a long time to tune in and understand why things were not done, when to my western knowledge things could have been and should have been done!.
Also the infrastructure seems to be against us and them. The roads are bad – many times cut off, destroyed or have simply vanished because of typhoons, floods or landslides. If we add to all these a stifling bureaucratic system, we start to grasp at the difficulties we are confronted with if we try to do things 'our western way'.

This confusing situation made me slow down and carefully listen and watch. I tried to see behind the nice and polite mask and tune to their time warp and ways.
I realised that the arrogant Western ways were not going to change the 'maybes' and the 'will tries'. It was me who had to change.
This way I have learnt humility and respect; acceptance and patience. In exchange I have won friends and the feel of being at home and accepted wherever I am working in the Philippines.

R&D with the Design Center – *Buntal* collection

The Philippines, as a sub-tropical country with lush vegetation, has an endless supply of fibers. From the world-known *abaca*, better known outside the country as *"manila hemp"* , to *buntal, pina, sisal, magey, ramie*, cotton and silk, to the less known *cabo negro, musa, canton, pacol, kenaf, coir, kapoc, buri or bandane* (fig. 1). The variety is endless.

The fibers mentioned above are all listed by the *Fiber Industry Development Authority (FIDA)*, and are in various degrees of production and exploitation both in a traditional way and in a commercial way.

Their uses vary from the very soft *kapok* for stuffing pillows, toys and mattresses to the rough *cabo negro* which is used in the making of brushes and brooms.

The more commercially used are *sisal,ramie, pina, cotton, buntal, abaca and rattan.*

Of these fibers, the fiber project got to know *buntal, abaca, rattan* and *pina* quite well through research and development with the *Design Center of the Philippines.*

The Design Center allocated a team of junior designers to the Fiber Project, as well as the use of the Research Department as the need arose. This was to be a most important decision, as it is in the Research Dept. where they have all the information about fibers, growers, weavers and the net work of contacts to make things happen. Without a network of contacts nothing moves forward in the Philippines. In the Center, they also teach weaving techniques, finishes, paper making etc. so we could avail of their facilities if needed.

Having done some market research, it was apparent that there were plenty of fashion accessories in the marketplace made of indigenous fibers but at a very low price, with forms that were stiff, brightly coloured and with a lacquered finish, ill. 11 shows a product range made from *sinamay,* raffia and sea grass from a company in Manila.

This meant that the inherent qualities of the fibers were not being used to their full potential. Also the designs were cumbersome and complicated, adding extra work and materials without increasing the final value of the product.

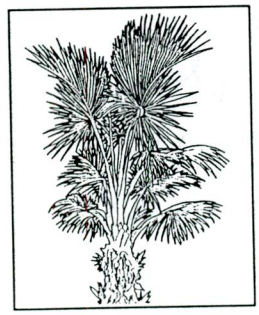
The aim of the Project became to rediscover and bring back to life the innate beauty and qualities of some of these fibers that I felt were behind the 'mask' so to speak, and in the process upgrade the design quality and market positioning of the final product.

I found myself looking into the past for clues; visiting museums and private collections that might show what had been done prior to the 'modernisation' of the indigenous

Ill.11 Filipino fashion accessories, 1993.

fibers.
To my pleasant surprise I found a great variety of weaves, forms and fibers, which to this day have been an inexhaustible source of inspiration for the project. On page 24, illustrations 12 to 15 show a selection of different traditional 'carriers' from the northern parts of Luzon, mainly around Baguio, along a mountain range called Cordillera, where the famous rice mountains are.

A turning point came when a colleague at work presented me with a small antique container made of *buntal* fiber.
Buntal is the *Tagalog* word for "hit with the fist", that is, to box, and is the name given to the fiber extracted from the petiole of the buri palm (*Lorypha Elata Rox B.).*
Ill. 16, shows a trained buri palm.

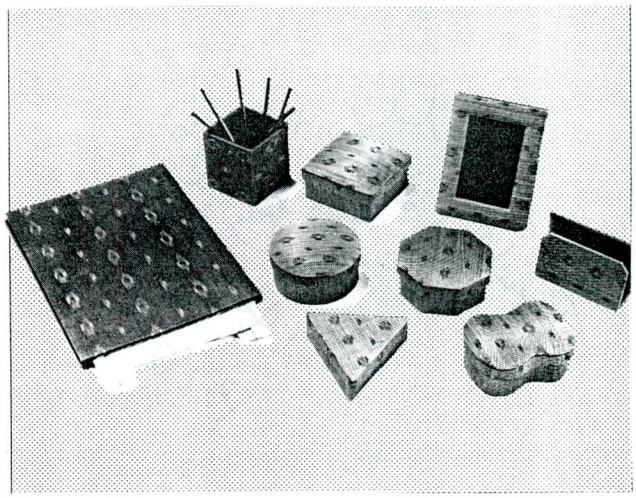


Ill. 16

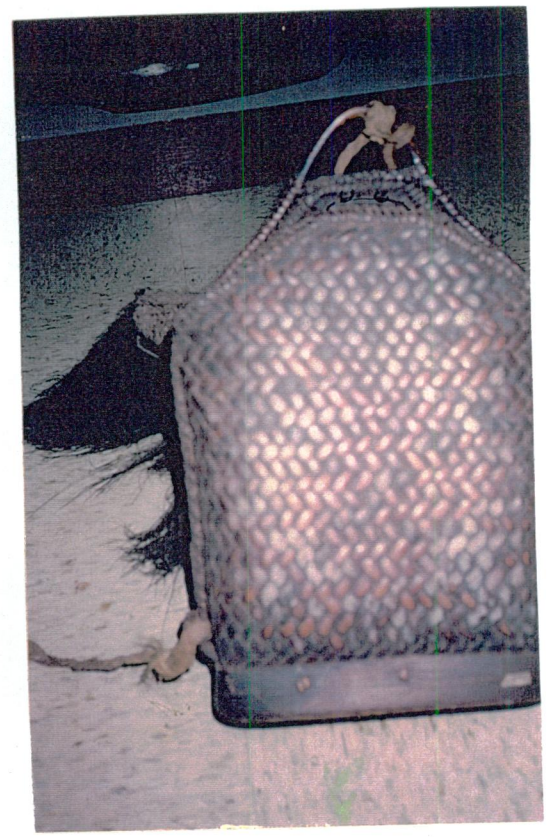
Buri Palm tree.

In the old way of extracting the fiber, the petiole had to be beaten with a wooden mallet until the fiber separated from the pulp. Though this method is no longer practised today, the buntal fibers are still extracted one by one from the petiole. It is a time consuming process, and no mechanical way of extracting *buntal* has yet been invented . Page 24, ill. 17 shows the traditional method of extracting *buntal* fibers.

The fibers are traditionally woven into hats which are also called *Buntal.* Various gifts, houseware and fashion accessories can also be made from *buntal.* Ill. 18 shows desk accessories made from *buntal.*



Ill. 18
Buntal products, 1990.

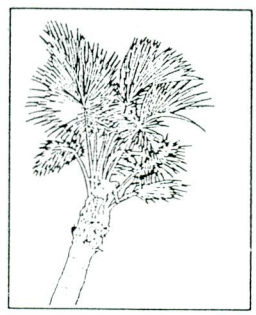


From top, left, Ill. 12, 13, 14, 15. Traditional 'carriers' from Luzon province

EXTRACTION OF BUNTAL FIBERS

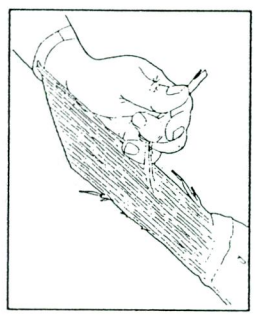
Buntal fibers are cylindrical-shaped fibers manually extracted from the petiole of the buri palm. To prepare for extraction, the buri palm undergoes a period of "training" where excess petioles are cut. In harvesting, petioles are cut from six to ten in the morning and from four to six in the afternoon. The interval between harvests is exactly one month.

Ill. 17 Extraction of *buntal* fibers

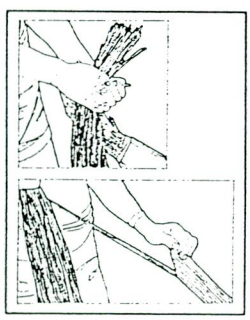


1 *Preparation of buri petiole.* Cut buri petiole from trunk at base.

6 Scrape epidermis of top back portion of petiole.

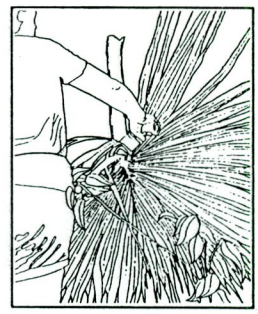


7 *Extraction Procedure.* Using bare hand, tear off a portion of exposed fibrous material and pull it down.

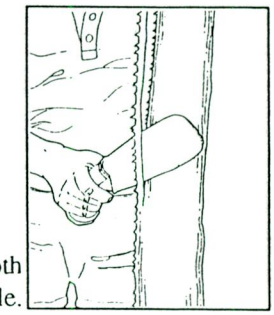


8 Grasp fibrous material tightly and pull off, exerting just enough pressure for fiber to yield. Repeat 7 and 8 until all fibers are extracted.

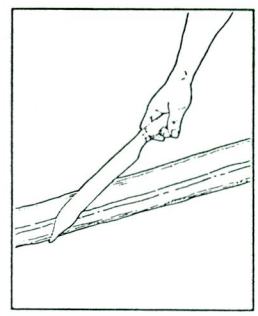
9 *Cleaning Procedure.* Tie extracted buntal fibers to a post. Let ends with pulpy material hang.



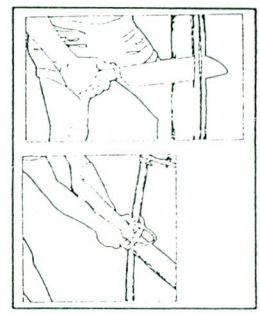
2 Cut leaf portion of petiole.



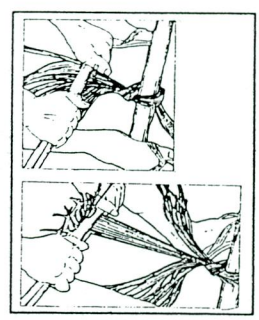
3 Trim spines along both sides of petiole.



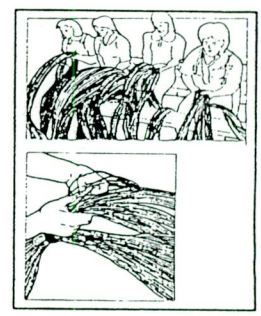
4 Divide petiole into two to facilitate extraction.



5 Strip a portion of outer layer at back of petiole and use this in tying petiole to a post.



10 Insert a small amount of fiber into slit of stripping wood and scrape pulpy material from fiber by pulling through stripping wood with applied pressure. Continue until all fibers are free of pulp.



11 *Sorting and Grading.* Tie cleaned fibers at one end. Sort according to texture, color, and length. Classify sorted fiber according to government standard grades: special, soft fine, soft coarse, medium fine, medium coarse, hard mixed, damaged.

12 *Treatment.* Soak buntal fibers overnight in drum of water (3/4 full) mixed with 1/2 kilo sodium hydrosulfite. Then with oxalic acid. Dry in shade.

13 Press buntal fibers with roller to flatten and to make pliant.

Virtually every part of the palm has commercial potential. The sap is made into alcohol, vinegar and syrup. The trunk yields starch. The buds can be prepared as a vegetable. The seeds are made into beads or buttons. The unopened leaves yield a fiber called *raffia*, while the more mature ones are turned into buri fiber and lastly we have *buntal*, la creme de la creme of the buri palm.

Buntal fibers are cylindrically shaped fibers manually extracted from the petiole of the buri palm. It has characteristics unlike any other fiber. It is the only fully cylindrical fiber, it is flexible, has no fuzz, is smooth and has a rich natural lustre and takes dye well. It is exotic, natural and replenishable, qualities that make it stand out in the fiber market.1

The main areas of *buntal* weaving are also where the buri palm abounds: Quezon and Bulacan in the island of Luzon, and in the small island of Bohol, North of Mindanao. For the *buntal* research we decided to use a *buntal* hat manufacturer called Sonia Cada, who was known to the Design Center and quite an innovative business woman in her own hat business, which she had taken over from her father- in- law Mr. Cada. Ill. 19 shows Mr. Cada inspecting a recent delivery of *buntal* brought into their shop in Bulacan by the grower.

Ill. 19 *Buntal* delivery, Aklan, 1995.

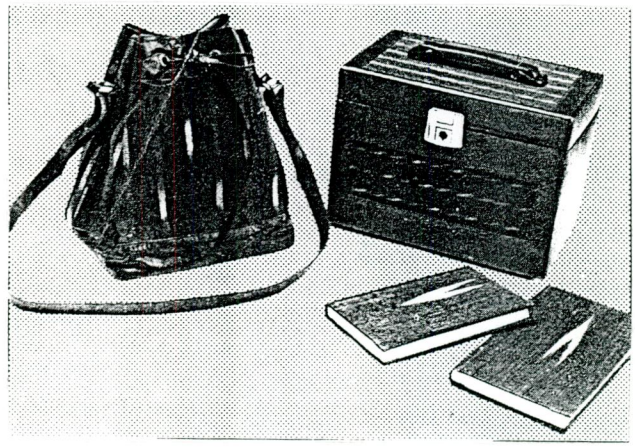
We needed somebody like her, because the antique *buntal* container given to me was woven in a circular way – not unlike *buntal* hat weaving – illustration 20 was taken in Sonia Cada's shop where one of her weavers demonstrates how to weave a hat in a circular way.

Ill. 20

Buntal weaving,
Aklan, 1995.

Our container was woven using an old weave design that seemed to have disappeared from commercial use, but we also knew Sonia Cada had a lot of weavers, some of them quite old that might just remember the weave we were looking for.

The development of the fiber products for the project were inspired by organic shapes from the country such as seeds and seed pods, and like our container and the *buntal* hats, would have no cuts in the construction or seams; it would have to be made in a continuous weave pattern from beginning to end.
The construction method we wanted to use was in fact going back in time, as far as techniques were concerned, in the weaving of *buntal* bags. In the late 1970s the Design Center had a *Buntal* promotion to try to find alternative uses of *buntal*, (apart from the traditional hat making) and came up with the idea of weaving it on the hand loom with good success; it is now used for table mats, blinds, notebook covers and screens. In the commercial manufacturing of bags, *buntal* is woven in lengths and assembled over a mould or used in conjunction with leather. The results of product development activities on *buntal*, shown in "Designs 1984" at the *Design Center of the Philippines*, are seen in ill. 21.



Ill. 21 *Buntal* weave, "Design 1994"– 1996.

I wanted to break away from these complicated manufacturing techniques and elaborate designs and create something simpler in order to let the inherent qualities of the fibers speak for themselves.

Sonia Cada readily accepted the challenge to see if we could use hat making techniques for making bags and so she asked her best weavers to try the weave from our sample. It was easier said than done. Nobody knew about this particular weave and were not prepared to waste their time trying. Eventually an old retired weaver was found who could remember it, and was prepared to make the attempt and also show others the method.

It took time and patience and trial and error. Luckily for the Project, the Design Center understood and was prepared to go along with it's birthing problems.

In the meantime we were busy finding suitable designs and ways to make these 3/D forms become a reality. Ill. 22 shows the work in progress of designs and moulds at the Design Center, Manila.

Ill. 22

Buntal design development, Manila 1994.

Again we had to persuade our weavers to try the weave on our moulds.They were convinced the forms would collapse the minute they were taken from the moulds as they were bigger and higher than was usual in hat making, but eventually it worked. Our heavy wooden moulds, as seen in ill. 23, were soon replaced by the

Ill. 23

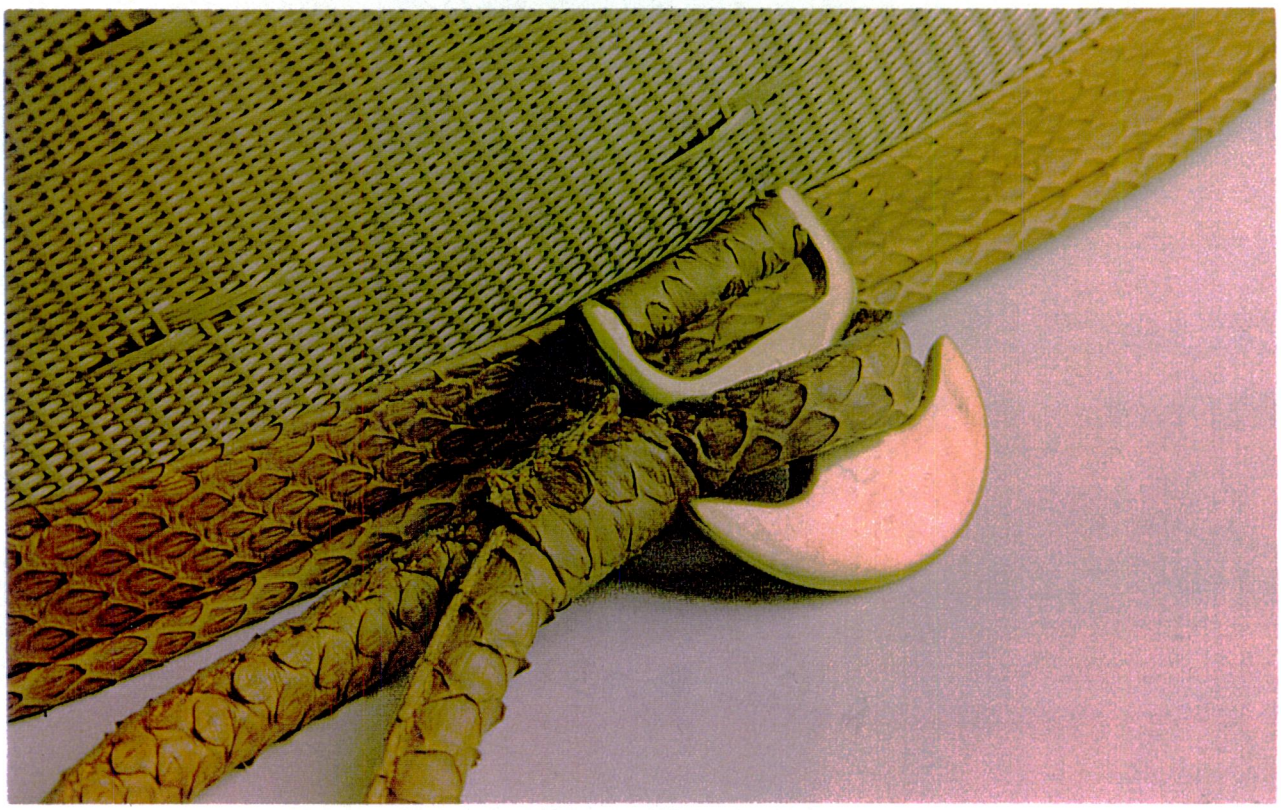
Buntal woven on wooden moulds, 1994.

lighter and easier to handle polystyrene, and slowly our forms and products took shape. Ill. 24, (p 30) shows the first finished *buntal* prototype, and ill. 25 (p 30), a detail of weave and fitting design; on page 31 we have other designs from the buntal collection. (Ill. 26, 27, 28).

True to the Project ideology, we made the whole collection using only indigenous materials from the Philippines.The linings for our collection were made in hand woven *sinamay* coming from Aklan, a northern province known for it's *sinamay* (fig. 2), and *pina* weaves (fig. 3).

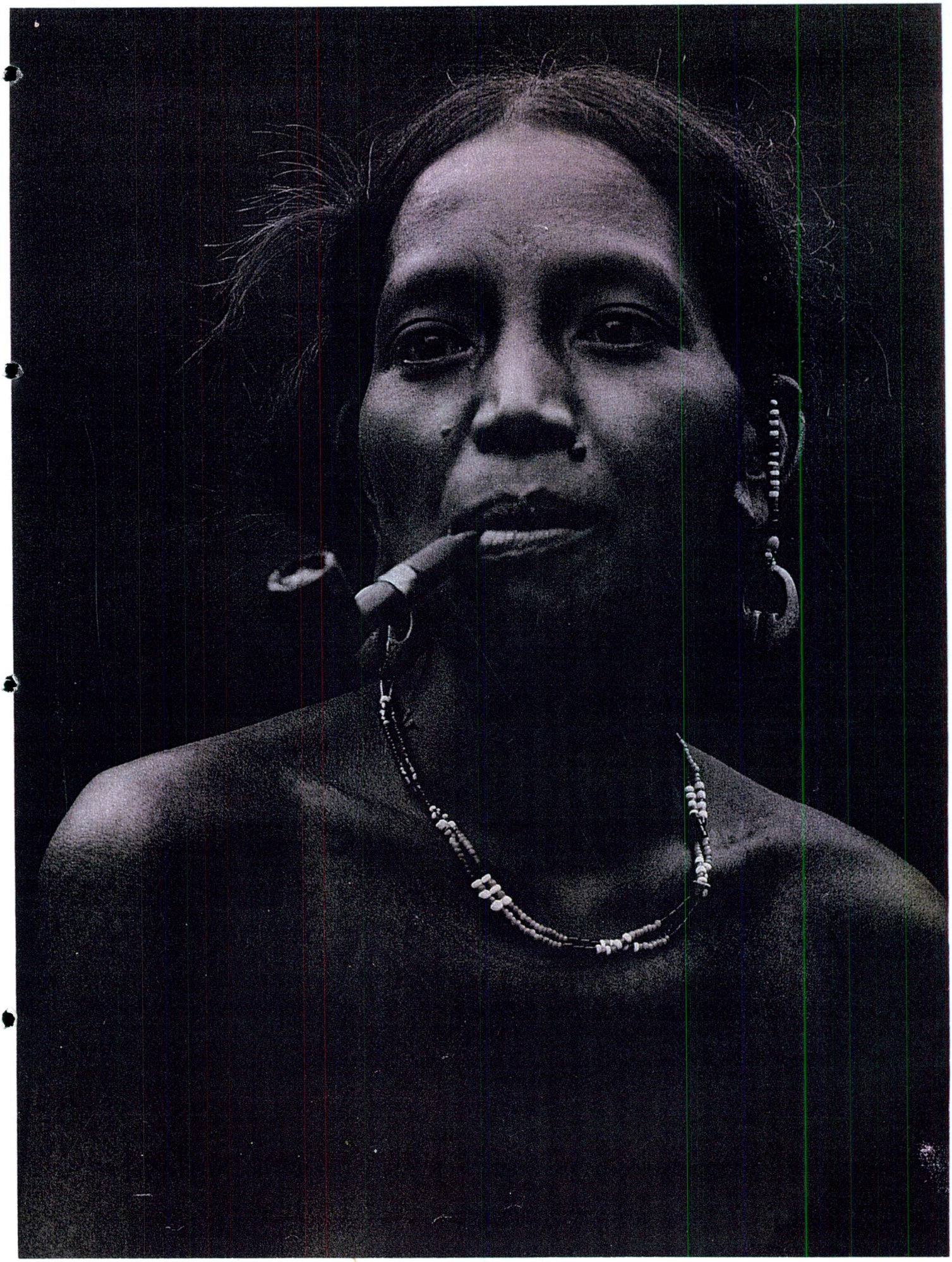
The leather components came from Walo–Walo, a sea snake from the Southern Philippines (fig 4). It is not endangered and is thought of as a pest and a nuisance by the local fishermen. It destroys their nets and eats all their fish, only to be eaten in the end by the local people!.We also designed and had all the fittings, which we were going to use throughout all our collections locally made. They were manufactured using brass and local woods and the design was inspired by an Ifugao fertility ring still worn to this day for the same reason. Ill. 29 (p 31) shows a woman from a Luzon ethnic group wearing fertility rings over her ears, as they are still worn today in some parts.

Ill. 24 First *buntal* prototype, 1993.



Ill. 25 Detail of weave and fitting 1993.

From top to bottom, Ill. 26, 27, 28, prototypes from buntal collection, 1994.



Ill. 29 Ifugao fertility ring

During the development stage of this collection, and successive ones, we were assisted by manufacturers from the industry who provided us with skilled workers and facilities in their factories to make the prototypes.
The resulting collections were presented for the first time in an exhibition entitled "BAG" at the *PDDCP* Exhibition Hall in 1996 and were very well received by the participating manufacturers and the general public.
Later on a delegation was sent to Japan with the product with very positive results.

The market targeted was the middle to high–end of the Japanese market, whose main consideration in purchasing decisions are quality, innovation and practicality rather than price. Also the Japanese are very appreciative of beautiful and unusual materials. Other targeted markets were Taiwan, Singapore and Europe.
There were several reasons for these marketing decisions. Japan was at the time, (1993 – 1995) the biggest single importer of bags from the Philippines; it's a relatively close market and already there were strong business ties with the Philippines – in fact, all the manufacturers that collaborated in the making of our prototypes already had business connections with Japan.

The Rattan Collection

The success of our *Buntal* Collection which we called "*Pitaka* Collection" –Pitaka being the Tagalog word for a particular sort of basket – brought about the use of another material, *rattan*, which is commonly used nowadays in the making of contemporary *rattan* furniture.
Rattan is a tropical climbing palm, (*Calamus Daemonorops)* with very long, tough stems.It is the stems that are especially used in the making of *Rattan* Furniture in the East, as seen on the table in ill. 30.

Ill. 30

Rattan coffee table, Manila 1996.

Rattan furniture is a lucrative export market mainly to the US and Western Europe. In 1990 the UK based Habitat retailing company introduced a range of furniture and accessories made from *rattan* and so stopped selling furniture made from tropical hardwoods such as mahogany. This has helped to position the *rattan* industry in the international market and also to bring into people's awareness the ecological importance in using raw materials from sustainable sources.

Traditionally, split *rattan* has been used in the Philippines to make baskets and other household objects from time immemorial.
For the execution of our Kostal collection of luggage we used split *rattan* woven in a variation of the traditional sawali weave, which comes from the northern parts of the province of Luzon. This is were the mountain communities have used *rattan* from early times to our days in the making of baskets and containers of all sorts. The photograph in ill. 31 was taken in 1952 by Masferre, a photographer well known in the Philippines for his work in capturing the daily life of indigenous communities in Cordillera, northern Luzon. This shows how the Ifugao people lived and still dressed up until the 1950s, however, in present times this is no longer the case.

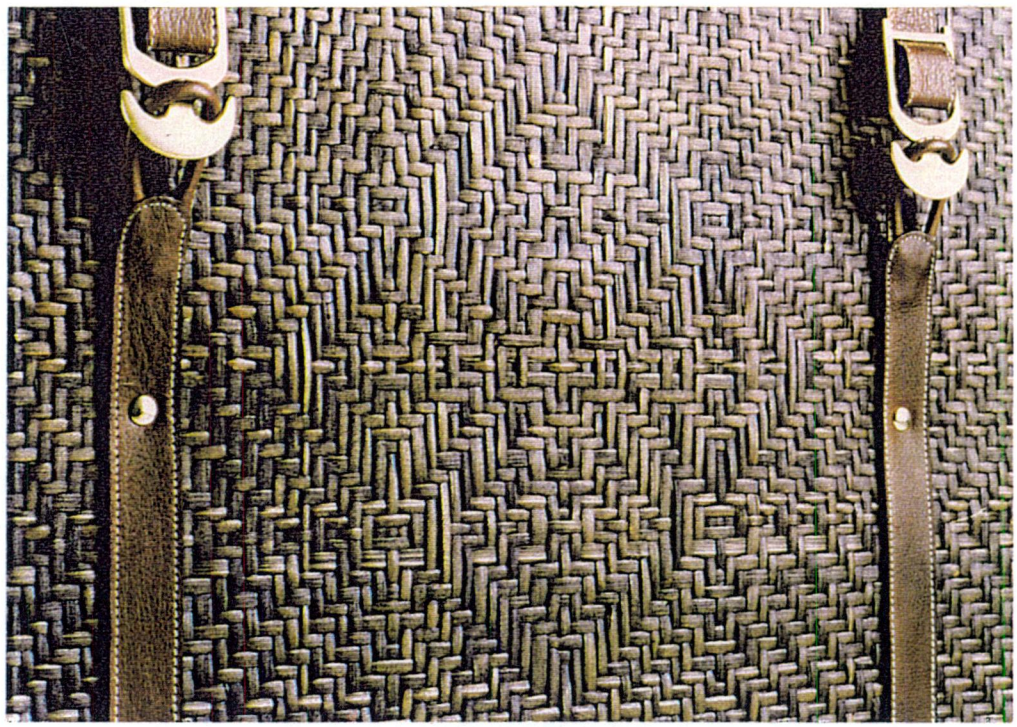
Ill.31 Ifugao community with traditional rattan 'carriers'. Masferre, 1952.

We used finely split *rattan* to make a collection of luggage and executive goods such as briefcases and designer bags. Shown in ill. 32, is a designer bag made from split *rattan* at the Design Center, Manila.

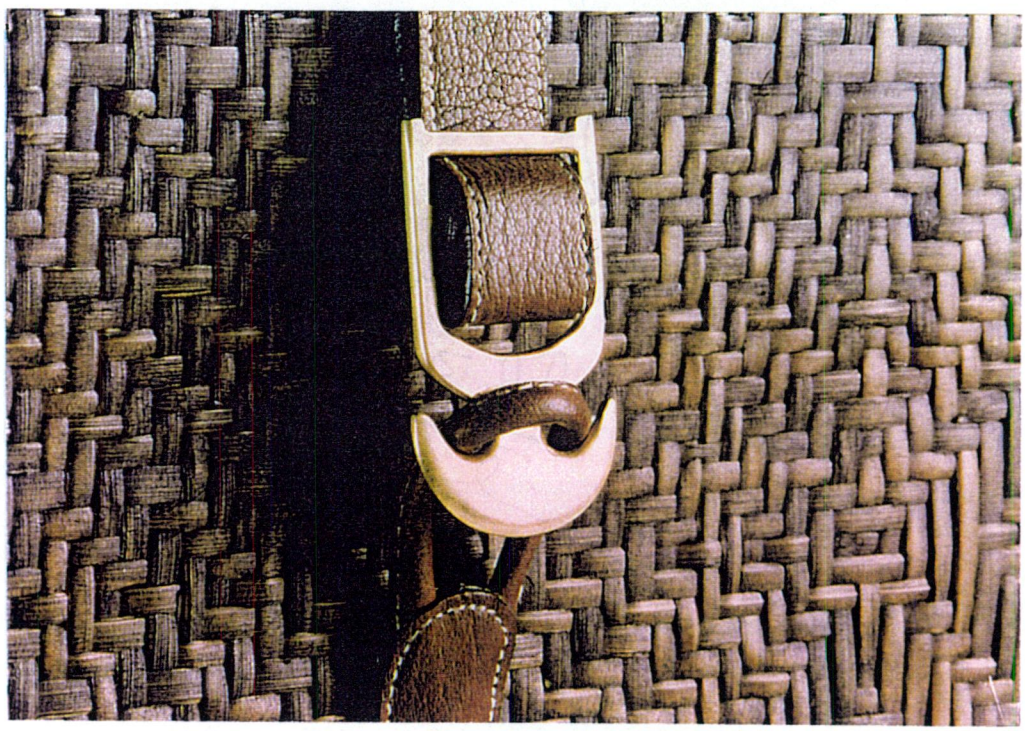
Ill. 32 *Rattan* designer bag. Manila, 1996.

The split *rattan* was woven using a variation of the sawali weave. See detail of weave in the rattan luggage in page 35.

The bags were trimmed with native drummed dyed *carabao* hide and our own designed brass fittings shown in ill. 34 (p 35). The inside was lined with *sinamay* and leather trims.



Ill. 33 Sawali weave, detail, 1996.



Ill. 34 Detail of brass fitting, 1996.

The Bagahe collection was launched, along with the other fiber collections at an exhibition in the *Design Center of the Philippines* called "Bag"in 1996. Selected items from the exhibition were brought to Japan later on a Trade Mission which was deemed successful by the *Design Center of the Philippines.*

The *Abaca* Project

As a result of our breakthrough in the accessory industry in the Philippines the Project went on, refining techniques and finding new ones; bringing in different dyeing methods and new colour combinations.
Alongside the development in *buntal* and rattan, the search for 'new' materials continued – and again it was by looking into the past at some cloth coming from Mindanao, the southern part of the country that brought to my attention the potential of the *abaca* fibers in relation to our project.

Abaca, scientifically known as *Musa Textiles Nee* (No. 1 in fig. 1), is a palm indigenous to the Philippines and known worldwide as *Manila Hemp.*
It has been grown in the Philippines for centuries and was known to the Filipinos long before the Spanish occupation. When Magallanes and his companions arrived in Cebu in 1521, they noted that the natives were weaving clothes made from the fiber of the *abaca* plant, noting further that the weaving of the fibers was already widespread in the island.

It's main use has been in traditional cordage, which started to be exported to the US in 1820 and established *abaca* as *one of the strongest materials for marine cordage in the fiber world,* with superior tensile strength, proven durability and non–slip properties.
From the beginning of the 20th Century, *abaca* fiber was the premier export commodity of the country until mid 1950s.
The advent of oil–based synthetic fibers, rapidly replaced natural fibers and displaced abaca as prime cordage material from the market and precipitated it's almost total collapse.
It was not until the start of the 1970s that abaca came back in full force as part of the filipino economy.
Significant breakthroughs in technology and processes brought about new uses for abaca, particularly in the use of the pulp for the production of specialty paper products such as

tea bags, cigarette paper, currency notes, filter papers and a host of non–woven product applications, mainly used in the construction industry for products such as roofing tiles, hollow blocks, reinforcing concrete, etc.

In the fiber craft industry, *abaca (fig. 4),* has been traditionally used to make *abaca* rugs, hats, Christmas decor, bags. Ill. 33 shows a traditional range of bags and rugs made from *abaca.*

Ill. 35 *Abaca* products, Philippines, 1997.

The *abaca* industry continues to be one of the country's major pillars in terms of employment generation, sustaining more than 1.5 million Filipinos who, directly or indirectly, depend on it for a living. The trade generates some US$ 70 million per year from exports of raw fiber and *abaca* manufacturing (1997 figures).

The *abaca* cloth that had caught my eye, shown in ill. 36, was a brown and red Ikat *Pinukcpock*, seen in the National Museum of the Philippines.

Ill. 36

Traditional woven *abaca* from Mindanao, 1997.

It is woven from *abaca* and dyed in the traditional *Ikat* manner from Mindanao, the Muslim province of the Philippines. The colours shown here are the traditional colours of that community, and to this day, they are the only colours they will use in their weaves. To us it meant that we would have limited opportunities to use it as it was.

I was also advised that to work and use weavers from that part of the country was not a very safe proposition. At that time –mid 1990s– the Moro National Liberation Front (MNLF), were pushing for independence. The region has long been a troubled area, with rebel forces staging a violent running battle with government forces, with kidnappings, and shoot outs being the rule of the day.

This situation has settled a bit now since they signed a peace agreement (1997), but it is still not a reliable or safe source to use for either materials or skills.

It was later that one of our weavers, knowing my interest in old textiles, showed me what looked like a very old cloth made from *abaca* fiber and woven in a similar manner to what I had seen in the Museum but in only one colour. This lady said : *" This came from the time your people were around here (the Spanish she meant), it is called 'Pinukcpock' which in Tagalog means beaten cloth as that was the way it was done".*

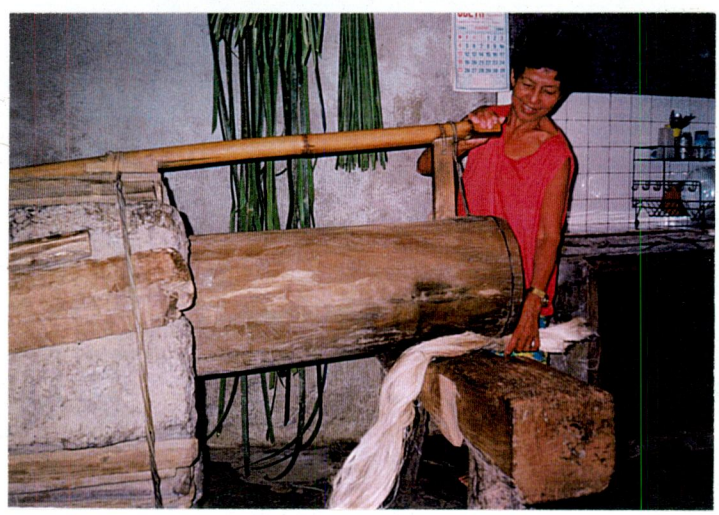
This particular cloth was made into a long skirt – an heirloom of the family – and had a sensual way of moulding itself around the body. It's colour, when hit by the light, seemed to come alive and shimmer and flow like a waterfall seen in the sunshine. The beauty of the cloth was overwhelming.
Of course they told me it could not be possible to do something similar – not profitable, time consuming etc. etc. – but it did not stop me from loving it's handling, surface qualities and the way it absorbed colour. I kept with me at all times a small piece of a similar woven cloth as a reminder of it's existence and somehow subconsciously waiting for things to happen.

It took a trip to see our *buntal* weavers in Lucban to discover a vital key piece in our jigsaw sort of research.The trip takes all day and the road meanders through congested and noisy little towns and parts of the jungle. Along the road you see the locals selling anything from freshly harvested pineapples, mangoes, coconuts etc. to baskets and containers that are woven there and then from local fibers and used in their daily chores around the house and fields.

On our way back to Manila we would always stop here and there to buy fruits or any other local delicacies made from local produce . I always wanted to stop whenever I saw any sort of baskets, brooms, boxes etc. to add to my ever growing collection of woven products.
At this particular time they were harvesting *bandane*, which is the leaf portion of the buri tree, (the same tree from which we get *buntal* fibers). It is used to make all sort of baskets, and we could see the basket makers sitting outside every house weaving, trying to get a bit of a breeze in the stifling heat of the day.
We stopped to buy one of them and we were waiting for the weaver to finish the handles. This is what she is doing in ill. 37. She in using her big toe as a starting point for the weave, in a similar way to the way the back is used with the back strap loom.

Ill. 37 *Bandane* handle making, Lucban province, 1997.

One of the weavers kept feeling the *bandane* strips and going someplace inside the house with them; when I asked what they were doing we were told they were softening the *bandane* to make it more pliable for the handles. My curiosity aroused, I wanted to see how they did it, so they showed us this huge 'beater' ill. 38, – they used a *Tagalog* word they couldn't translate – that took up most of the kitchen.



Ill. 38 *Abaca* 'beating' to soften it; Lucban province, 1997.

We very quickly saw the connection between the softened *bandane* and our own fibers and asked them if they could do the same with some *abaca* we had with us in the car. It worked very well and showed us the possibilities we would have if we softened *abaca.*

Talking about it with Fe Gonzales the head of the Research Dept. in the Design Center, she very quickly took up the challenge and arranged to go and see the *Philippine Textile Research Institute (PTRI)*, and find out if they could help us in any way in the softening of the *abaca.*
After trial and error, as they had not done this process before, we came up with the right formula, which involved a combination of chemical and mechanical processes to soften the fibers just enough for our needs (fig. 5).

We then started our weaving experiments, and this time we were not faced with weavers that did not want to try 'old techniques' as we had experienced in our *buntal* project. We only wanted a very simple weave, which was as well, as their looms are very basic. However, it is on these looms that they are able to weave the finest of fibers in a perfect way (fig.5, No. 3).

Because I wanted something less refined, more 'chunky' for our bags, we asked them to try to do an uneven sort of weave – mixing different thicknesses and introducing some knobbly effects here and there. Ill. 39 shows a sample of 'chunky' woven *sinamay.*

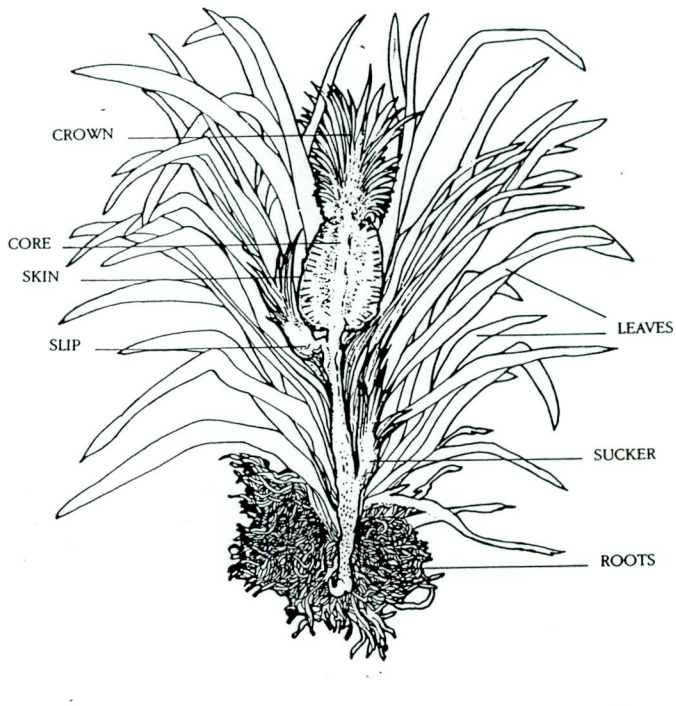
Ill. 39 Sample of woven *abaca – sinamay–.*

In the beginning they thought this was totally crazy.They pride themselves on being able to weave in such a perfect way that you wouldn't know it had been done by hand; and now here we were asking them to weave unevenly!.
After a few samples it became clear that it was working and when they saw this, they started to create variations of the weave themselves.

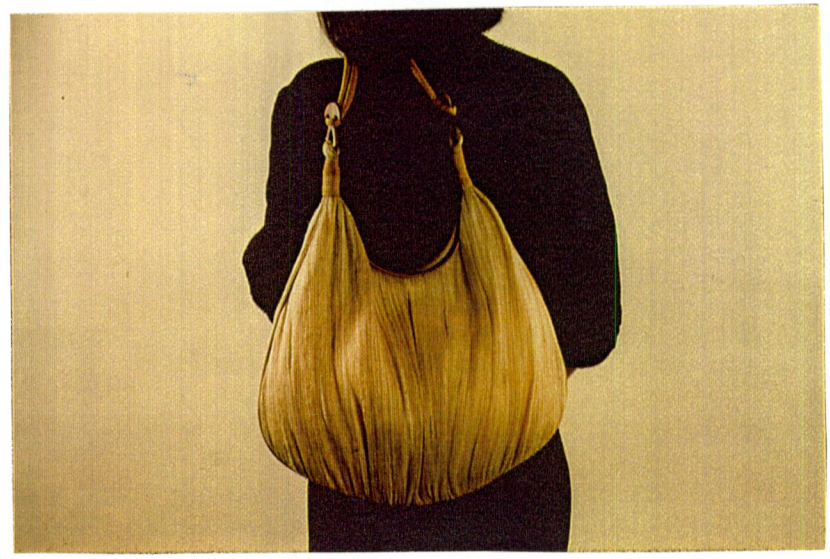
With our samples finished, we then had to go and look for a manufacturer that was willing to make our prototypes. From all the companies willing to help us, we chose two who very kindly set aside time, manpower and space in their factories in order to help us in the making of our *abaca* collections.
A few weeks later – after all our trials and tribulations – we were pleased that our accessory collection, from raw material to final product, had materialised. Ill. 40 to 42, (p43) shows samples of prototypes made with softened *abaca.*

Piña

While *Piña* did not form part of our particular fibre project, I don't think we should talk about the fibers of the Philippines without mentioning *piña.* It is the most exotic, expensive and exclusive fiber of all (Fig. 3).
Piña fiber is extracted from the leaves of the pineapple plant, *Ananas Comosus (Linn) Merr.* The plant – seen in ill. 43 – particularly the native or "red Spanish" variety, has leaves that yield excellent fibers for hand weaving.



Ill. 43 Illustration of a *piña* – pineapple plant.



From top to botton, Ill. 40-41-42 Prototypes made from softened *abaca*, 1996-7

Piña, as the name suggests, is associated with the coming of the Spanish, (It means pineapple in Spanish). It is generally believed that the pineapple was brought to the Philippines by the Spanish in the latter part of the 16th Century en route between the New World and the Philippines through the famous Galleon Trade, which for over two centuries, (1565 – 1815) ferried the riches of the East – silk, porcelain, spices – to the Spanish Americas; and to the Philippines silver from Mexico and many other plants and produce from the New World, among them the pineapple. 2

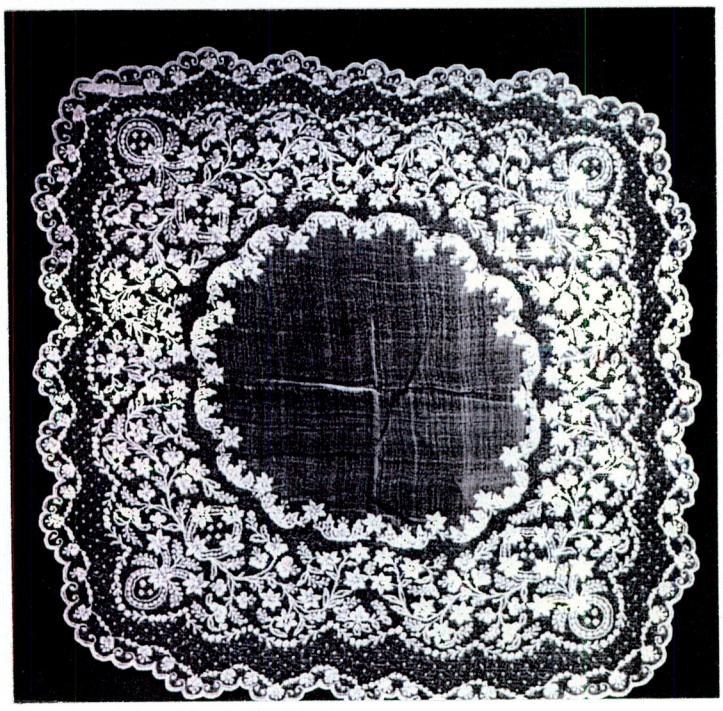
Unlike fabrics of minority groups, *piña* is not related to ritual, although it is an indicator of prestige and wealth, being a fabric of elegance, rarity and beauty.

In the mid – 18th Century, a narrator named L. Olophant described *piña* as *"one of the most beautiful fabrics of Manila.... only used in the dress of the wealthy, being too costly for common use'.* 3

Filipino *piña* was so notable then that items like handkerchiefs, gowns and table ware were considered worthy gifts for royalty.

It reached it's peak in the 19th Century, when it was woven to such finesse – see ill. 43 of a *piña* woven handkerchief with elaborate network of leaves and flowers ; Victoria & Albert museum – that combined with embroidery it matched and perhaps even surpassed in quality and price the most intricate laces produced in Europe at the time, and was exported to Europe, America and Asia.

Ill. 43



Piña
handkerchief.

To this day *piña* cloth continues to be an elitist fabric – as seen in ill. 44, showing an heirloom *piña* worn as a bridal veil – and one of the few remaining fibres that are hand knotted and hand woven.

Ill. 44 An heirloom *piña* worn as a bridal veil.

Present state of *pina* today

The economic stability of the 1970s allowed a new upper middle class to emerge in the Philippines.

Though this has not changed *piña's* elitist position in the market place, it has created sufficient demand for the fiber to improve and consolidate the *piña* industry at present. Today, demand is surpassing production and so the future for *piña* looks good .

During summer of 1998, I had the opportunity to attend a meeting in Kalibo, Aklan, which is on the island of Panay, south Luzon.Aklan is where the best *piña* fiber and weaves come from.

The meeting was well attended by the majority of weavers and growers of the region as well as the local government representatives. Ill. 45, Nick Marte, from the *Research Department of the Design Center of the Philippines* addressing the Association of *Pina* Growers and Weavers.

Ill. 45 *Piña* Association meeting, Aklan, 1998.

It was unanimously decided by all weavers and growers alike to form a cooperative in order to standardise prices and quality control from the raw fiber to the final cloth. Also to start a market strategy as a group and to avail of the help given by the different government agencies as a cooperative.

This was a breakthrough in the history of *piña* weave; for this time it was the weavers and growers who realised and acknowledged the need to unify and help each other in order to move onto the next phase of *piña*.
I am sure the *piña* industry will survive as long as weavers like Mrs. Susima Marte de la Cruz – who is one of the best *piña* weavers in Aklan, shown in ill. 46 – and growers, see the need and benefits of working together as a group.

Ill. 46 Ms. Susima de la Cruz, *piña* weaver from Aklan, 1998.

Is is also very encouraging to know that there are enough *pina* plants, growers, knotters and weavers as well as government help and enthusiasm to position the unique and exotic *pina* cloth in it's rightful place in the coming millennium.

The progress of the Fiber Project in the Philippines is slow and much has to be achieved yet, but the last samples developed in the Fiber Project (Fig. 6), show enough potential for other people outside the Project to start taking notice of the fiber developments, and what is more important, realising the potential it has economically and socially.
It was during my last visit in the summer of 1998, that the Project seemed to gather it's own momentum. Other government bodies and private individuals started to see the possibilities of the fiber as a woven textile.

The Center for International Trade Expositions and Missions (CITEM), a government agency in charge of promoting *Filipino* products around the world has shown great interest and wants to create a textile module to continue the research and development with *abaca* as a textile form.
For my part I just hope that the right people will get involved in it and that the focus on social and environmental responsibilities that have been a priority point all along will continue to be so. Of course I also hope that I will remain involved in what has become one of the passions of my professional life.

The development of these collections manifested ways in which manufacturers can explore *Filipino* ethnic traditions and nature as references for their design. The strong message was that bag manufacturers need not go any further in their search for more marketable concepts.
Even as european techniques were adopted during the making of the prototypes, what is important is that a strong *Filipino* design identity was created for the export market.

Sometimes I ask myself how is it that we were able to achieve so much and how could it have worked so well. Nothing of course would have been possible if the weavers, manufacturers and colleagues at the Design Center and many other organisations were not open minded and willing to take on risks and try new things without knowing the final results.
I think this is a trait of the *Filipino* people that we can see reflected in their products at International Trade Fairs all over the world.

Part IV

Conclusion

This dangerous times for Earth call not just for passion, imagination, intelligence and hard work, but – more profoundly – a sense of optimism that is willing to act without a full understanding, but with a faith in the effect of small individual actions in the global picture.

Victor Papaneck, The Green Imperative,
1995,(p. 130).

As the global village becomes a reality in many forms of life, with modern travel, communications, business take–overs and amalgamations, it is becoming more and more important to respect and retain our diverse cultural identities. As we are consolidating major economies and businesses, we are isolating smaller ones, fusing technical advances and crushing traditions on the way.
Where does this leave the countries and communities that are left behind?.

The kind of project that we have been looking at is an example of an undertaking that could be used by some people for purely economic gains, or could also take into account the makers and growers of the products and raw materials developed, thus helping to bridge the economic gap so often encountered in developing countries.

We also have to use our sensitivity to bring into today's economic reality century old traditions that have evolved over many generations and are part of daily life from time untold.

How can we do this without destroying the core of these traditions, without taking away their integrity, their connection with it's very own founders: the people that have brought these traditions this far into the nearly 21st century?
We need a vision, understanding and admiration for what has been developed in these regions, to help transform it into a contemporary expression that does not violate the makers acquired abilities, but rather enhances them.

In the late 20th century, we have in large measure lost what in some areas of our planet is still present: the rich fabric of the built up heritage and diverse culture that has come about over many generations; qualities that have been nurtured by an understanding and awareness of the natural world in which some groups of people are still embedded, out of which they fashion their daily lives.

We should be sensitively aware of what we bring to them from our western world – that we do not destroy theirs – as is only too often the case. For this we have to develop skills that we can use in an advisory capacity to the indigenous crafts; to hopefully make people aware of the wealth of the natural materials that surround them.

This is to ensure that the richness of the culture that they have enhanced through the skills that have been developed over generations are not overlooked, and to avoid imposing " trendy western styles". Instead, we must aim to make those people aware of their indigenous qualities, which could in turn become an important contribution to the spiritually impoverished western daily life.

From the fusing of these, something comes about, qualities and ideas that can help transform the old ways into the new.
We have to do this with the sensitivity of an artist: without violating what has already been achieved, but rather enhancing and developing it.

GLOSSARY

Abaca Known as Manila Hemp; It is a fiber extracted from the *Musa Textilis Nee,* a palm from the banana family indigenous of the Philippines.

Aklan The province of Aklan in the island of Panay, South Luzon, is the birth place of *Pina and pina cloth* in the Philippines.

Back Strap Loom Traditional loom in many cultures, consisting of a series of loom bars. The top bar is attached by a cord to a fixed object, such as a tree, and the bottom bar is attached to a belt that encircles the wearer, whose weight and backwards pressure against the loom serve to hold the warp threads taut.

Bagobo, B'laan , Mandaya and T'boli: Ethnic groups from the interior regions of the island of Mindanao, southern Philippines.

Bontoc, Kalinga and Ifugao Ethnic groups from northern Luzon.

Buntal Fiber extracted from the petiole of the bury palm

Carabao Water buffalo from the Philippines

Cebu Island North of Mindanao

CITC Cottage Industry Technology Center, Philippines

CITEM Center for International, Trade and Expositions and Missions, Philippines

Copra Coconut meat

DTI Department of Trade and Industry

FIDA The Fiber Industry Development Authority

Filipino Name given to the people of the Philippines

Ikat Traditional Eastern resist dye process where warp and weft are tied dyed individually , following a pattern before setting the yarns / fibers to the loom in order to weave the textile

Luzon Northern and biggest island in the Philippines

Mendrinaque Is a Spanish word still in use, it means 'cloth made of abaca'

Mestizos Is a Spanish word still in use, it means 'a person of mixed blood'

Mindanao Biggest island in the southern parts of the Philippines

Pina and pina cloth Pineapple plant and fabric woven from the pineapple plant fibers

Pinukcpock Tagalog name use to describe abaca that has been beaten after being woven to soften the cloth

Rattan Stem of a tropical climbing palm indigenous from the East

Sinamay Fine fabric woven from pure abaca

Tagalog National language of the Philippines

Vestidos Spanish word meaning clothing

BIBLIOGRAPHY

Books

- **Burrall, Paul,** *Green Design,* London, Design Council, 1996
- **Colchester, Chloe,** *The New Textiles: Trends and Traditions*, London, Thames and Hudson, 1991
- **Dorothy, Mac Kenzie,** *Green Design,* London, Calman and King Ltd. 1991
- **Gorz, Andre**, *Ecology as Politics*, London, Pluto Press, 1987
- **Holborn, Mark**, *Issey Miyake*, Koln, Tschen, 1995
- **Isuji Kiyoji,** ed. *Fiber Art Japan*, Tokyo 1991
- **Marie O'Mahony, Sarah Braddock**, *Techno Textiles, Revolutionary Fabrics for Fashion & Design*, London, 1998
- **Mildred Constantine,** *Whole Cloth,* London, 1993
- **Montinola, Lourdes R.**, *Pina*, Manila, Amon Foundation, 1990
- **Naess, Arne**, *Ecology, Community and Lifestyle*, Cambridge, C. University Press, 1982
- **O'Mahony Marie, Braddock Sarah,** *Textiles & New Technology*, Crafts Council, London 1994
- **Papanek, Victor,** *The Green Imperative*, London and N.Y, 1995

- **Papanek ,Victor,** *Design for the Real World,* London, Thames & Hudson, 1972
- **Reyes Linda, Angelica,** *The Textiles of Southern Philippines*, Quezon City University Press, 1992
- **Schumacher, E.F.**, *Small is Beautiful,* London, Blond & Briggs Ltd. 1973
- **Shuichi Kato,** *Japan, Spirit and Form,* Tokyo, Charles E. Title Company, 1994
- **Sparke, Penny,** *An Introduction to Design and Culture in the 20th C.*, London, Rutledge 1994
- **Sparke,Penny,** *A century of Design,* London, Reed Consumer Books Ltd. 1998
- **Sudjic Deyan,** *Rei Kawakubo and Comme de Garcons*, London, 1990
- **Wada Yoshiko, Kellogg Rice Mary, Arton Jane,** *Shibori, The inventive art of Japanese shaped resist dyeing,* Tokyo, Kodansha International Ltd, 1983
- **Well, Kate,** *Fabric Dyeing and Printing,* London, Conran Octopus Ltd., 1997
- **Wheeler, Tony,** *Lonely Planet on a Shoestring,* South East Asia Lonely Planet Publications, Australia, 1992

Periodicals

- **Abild Helle,** *" Innovative textiles from Japan",* Textile Forum, January 1998, pp. 48–51

- **Anaya, Yosi,** *"A Cultural Heritage Endangered in Mexico",*Textile Forum, January 1998, p. 42
- **Baurly Sharon,** *"Japanese Textiles",* Textile Forum, 1997, pp. 48–51
- **Asa Wall,** *"Textile Art of the World",* Form / Sweden, Vol 90, No. 692, 1994, pp. 58–59
- *"A Vision of Textiles in the Next Millennium",* Textile View No. 29, 1995, pp. 6-7 (no author)
- **Chee Pearlman,** *" Cut to fit",* I.D. March/April 1995, pp. 64–67
- **Ferris, John,** *"The Muslim National Liberation Front",* The Philippines, October, 1998
- **Ferris John, "***Doing business in the Philippines",* Philippine Update, Manila, September 1994
- **Friedman Mildred, "***Miyake",* ID Magazine, Vol 44, No. 2 1997, pp. 54–59
- *"Future Shock",* Vogue, March 1996, pp. 200–204 (no author)
- **Geesin Francis, "** *An Ingenious Approach to Textiles",* Textile Forum, March 1995, pp. 22–25
- **Helkama Iris,** *"Planned Happenstance,* Form / Function, Finland No. 2, 1993, p.66
- **James Geary,** *"Green Machines",* Time, March 1998
- **Kawaguchi Eriko,** *"In Search of Nettle Fibers in Bhuttan",* Textile Forum, March 1997, pp. 8–9
- **Kevin Healy,** *"Back to the Future: Ethnodevelopment among the Jalq'a of Bolivia",* Grassroots Development, February 1992, pp. 22–34

- *"Looking Good, Feeling Great' on New Fibres"*, Textile View, No. 17 Amsterdam, August 1992
- **National cotton council**, *"Cotton Naturally"*, International Textiles, 1995 pp. 5–7
- *"Nuno"* Axis 46, January 1993, pp. 125–124
- **Pollock, Naomi R,** *"Dream Weaver"*, Metropolis, September 1992, pp. 55–63
- *"Restoring the Asian Miracle"*, Asian Time Magazine, February 1998
- *"Riches from Rags: Recycling in Japanese Rural Weaving"*, Ornament , Vol. No. 18, 1994, p.15
- **Soubeyran, Helene**, *"Shibori in India"*, Textile Forum, February 1997, pp. 32–33
- *"Stand Alone Synthetic"*, International Textiles No. 765, London, July 1995
- *"Textile Design by Reiko Sudo"*, Textile Forum, 1995, p. 20
- Textiles Now: *"Fibre and Fabric Developments and Innovations"*, International Textiles, No. 772, London, November 1995
- *"Textiles"* International Design Yearbook, 1990 to 1998
- *"The Philippines from Stability to Growth"*, Asian Review of Business & Technology, (supplement), 1995
- *"The Philippines: Present and Future"*, Financial Times, February 1998
- *"Un Vestito Tecnologico"* Domus No. 748, April, 1993 pp. 104–107

Reports

- *"Buntal"* PDDCP Design Digest, Manila 1997
- *Catalogue on Fiber Properties, Products and Machines, Tools and Devices for Fiber Extraction and Processing,* Fiber Development Authority, Makati, Philippines, 1994
- *CITC Annual Report,* The Cottage Industry Technology Center, Philippines, 1996
- *"Sinamay",* Fiber Industry Development Authority, Philippines,1997
- *"The Philippine Abaca Industry",* Fiber Industry Development Authority, Marketing Division, Philippines 1997
- *"The Philippine Pina Fiber Industry",* Fiber Industry Development Authority, Philippines,1997

NOTES

Part I The Philippines, General History

1 Extract from Time Magazine, April 27 1998 issue, (no author)

2 *Fortifying the Design Image of the Philippines,* A press release commemorating the 25th year of the Design Center's Foundation.Manila August 1998

3 Financial Times, February 1998

4 *The Philippines, from stability to growth,* Asian Review of Business and Technology, 1997 (no author)

5 From an interview with John Ferris, Philippine Honorary Consul, Dublin. Held in Dublin October, 1998

6 John Ferris, *The Philippines,* October 1998

Part II Philippines as a Textile Producing Country

1 Interview with Ms. Soto, artist in residence at the PDDCP, Manila. August 1998, National Museum of the Philippines

2 Lynda Angelica Reyes, *Textiles of Southern Philippines,* University of the Philippines, 1992, p. 142

3 Lourdes Montinola, *Pina,* Amon Foundation, 1990, p. 9

4 Lynda Angelica Reyes, *Textiles of Southern Philippines,* University of the Philippines, 1992, p.2

5 Lynda Angelica Reyes, *Textiles of Southern Philippines,* University of the Philippines, 1992, p 152

6 Lynda Angelica Reyes, *Textiles of Southern Philippines,* University of the Philippines, 1992, p 143

7 Lourdes Montinola, *Piña,* Amon Foundation, 1990, p. 10

8 From an interview with Elisa Reyes at her workshop in Bulacan, August 1997

9 *Fortifying the Design Image of the Philippines,* press release commemorating the 25th year of the Design Center's Foundation.Manila August 1998

10 Extract from a meeting with Jobi Carrida, PTRI, August 1998, Manila

Part III Fiber Project

1 Extract from PDDCP Design Digest, Vol. 2 No. 2, 1995

2 Lourdes Montinola, *Piña,* Amon Foundation, 1990, p. 28

3 Lourdes Montinola, *Piña,* Amon Foundation, 1990, p. 19

Fig 1 **Samples of some *Filipino* fibers**

No. 1 Abaca. Hand stripped
Excellent Grade

No. 2 Abaca. Hand stripped
Residual or Coarse Grade

In between the excellent grade and the coarse grade there are about eight different grades.
Usages: cordage, pulp & paper, fishing nets, filters, handicraft industries

Fig 1 **Samples of some *Filipino* fibers**

No. 2 Buntal, first grade
Usages: Handicrafts

No. 3 Kenaf,
Usage: Sacks

No. 4 Maguey
Usages: cordage, twine, handicrafts, industrial carpets

Fig 1 **Samples of some *Filipino* fibers**

No. 5 Pacol
Usages: Twine, pulp, paper

No. 6 Piña
Usages: Fabric,pulp & paper

No. 7 Ramie
Usages: Fabric, packing material, host filters

Fig 2 **Sinamay samples**

No.1 Sinamay used as lining

No. 2 Sinamay used as lining

Fig. 3 **Piña Weaves**

No. 1 Piña-Seda (warp silk, weft, pina)

No. 2 Piña silk

No. 3 Piña-Bastos (second grade pina fiber)

Fig 4 **Abaca samples**

No. 1 Single ply, plain weave

No. 2 Heavy single ply

No. 3 Abaca two ply

No. 4 Basket weave abaca cloth

Fig 5 **Softened abaca**

No.1 Single ply softened abaca

No. 2 Softened abaca
used in ill. 39

No. 3 Fine abaca, *Pinukcpock*

Fig. 6 **Softened abaca and raffia samples**

No. 1 Softened abaca 1

No. 2 Softened abaca 2

No. 3 Softend raffia