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*for a sustainable future*

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Unido Contract No: 2004/073  
Project No: US/KEN/04/078  
Purchase Order: 16000625

## **FINAL REPORT**



## Foreword

The contract envisaged four broad areas of work:

- Work-package 1 – Preparing a diagnostic aimed at assessing the organisation of the factory operations, technical and business management.
- Work-package 2 – Preparing a detailed training and product development programme for each factory.
- Work-package 3 – Assisting in enhancing the competitiveness of leather product manufacturing through the development and promotion of a “Made in Kenya” product.
- Work-package 4 – Assisting local companies in the promotion from European in footwear manufacturing.

## 1. About the results

Work-package 1 – Preparing a diagnostic aimed at assessing the organisation of the factory operations, technical and business management.

We were able to carry out a diagnostic of 15 companies stratifying the sample in order to obtain a certain degree of representation, although the main sub-division is between formal and informal sector. Company profiles are enclosed as annex I, whereas general considerations are supplied herewith.

We visited 15 companies, out of which:

- 6 informal manufacturers in THIKA producing footwear
- 1 informal manufacturer in THIKA 1 producing leather articles
- 4 informal manufacturers in NAIROBI producing footwear
- 1 informal manufacturer in NAIROBI producing leather articles
- 1 in NAIROBI (United Footwear)
- 1 in LIMURU (Bata)
- 1 in NAIROBI (Santa Theresa)

Therefore, we shall focus the report about results mainly on the informal sector as the formal one is well analyzed in the position paper for the industry of leather produced by Unido. —

### 1.1 Jua Kali : informal manufacturing of leather products

#### • *Type of production*

The informal manufacturers we visited, are able to produce all kinds of footwear and leather goods although they mainly focus on few items: stitched down and cemented shoes, along with school bags and ladies bags.

#### • *Manufacturing process*

All manufactures carry out the whole productive cycle. No one resorts to sub-contractors. All the artisans visited produce cemented footwear. Pattern-making is carried out manually by themselves, copying already existing patterns, without any previous training on that. The final outcome is nevertheless acceptable, thanks to repetition (basically they always produce the same models) and manual skill. At the same way, cutting and preparation to stitching is made by hand.



Stitching, on the other hand, is the only operation carried out using machines. The most common one is a simple flat-bed sewing machine with one needle. Lasting and finishing are made manually as well.

• *Raw materials*

Uppers and linings, are produced using either natural or synthetic materials. It is clear that the choice to use leather depends on the availability of that. Leather is usually supplied by other informal manufacturers (usually women) who are able to obtain some rejects from local tanneries and are also able to finish them at the common facility of LDC (see the report about the contract to develop the capacities of the service and support structures).

Soles are quite exclusively made of PVC – TR – RUBBER.

All materials are purchased on the local market and are very poor as regards quality

• *Daily production*

The average productive capacity a single shoemaker ranges from a minimum of 5 to a maximum of 20 pairs a day, up to 40 pairs a day for those who produce sandals. Effective production – however – varies a lot depending also on seasonal factors (such as the beginning of the school year).

• *Sales prices*

Sales price ranges from 200 Kshs for sandals up to 300-400 Kshs for leather shoes, with PVC sole. Stitched down footwear (a rough copy of the SAFARI BOOT, produced and sold by Bata) is quoted 7450 Kshs (Bata's shop sells it at 1.899 Kshs). This price range could be competitive with second hand shoes (350-700 Kshs) and Asian cheap imports. Nevertheless

• *Distribution*

Finished product is exclusively sold on the domestic market. Customers are: wholesalers, retailers and private citizens. They are used to approaching manufacturers on demand. Terms of payment are particularly unfavourable for informal manufacturers

• *Training*

The informal manufacturers we visited never participated in formal training sessions. Notwithstanding they expressed positive attitudes towards the possibility to receive proper training in footwear design and manufacturing

• *Pattern-making study and realization*

Patterns are realized copying already existing shoes, taking their pieces apart and copying them one by one.

• *Personnel employed*

2/3 people are used on average by each manufacturer. They aren't formally employed and are called in when there are seasonal peaks.

• *Working conditions*

We recorded very poor and unhealthy working conditions: small stall on the road.



• *Machinery*

As said before, the only machine of JUA KALI is the sewing machine, except for one entrepreneur who had the inventiveness of attaching a wheel with an abrasive cloth to an electric engine shaft, creating equipment for different works on footwear (roughing and so on).

**Conclusions**

JUA KALI succeeded in making all operations on footwear and leather-goods manually. The only machine is usually a very common flat-bed sewing machine with one needle.

In stitched down manufacturing, they succeed in sewing the part of the upper turned outside by hand, joining it to the insole. Later on, they press it to sole with pliers after cementing.

In CEMENTED manufacturing, they press sole to shoe with a hammer.

Upper skiving is made manually using a tool similar to a little box with a final sharp section.

All of them weren't aware about the existence of small machines for SKIVING-PRESSING-LASTING-FINISHING. They were interested in seeing and testing them.

TPCSI can organize DESIGN AND PATTERN DEVELOPMENT Courses for JUA KALI, footwear manufacturers, presenting at the same time a plant of "first mechanization", with the following machines

- UPPER SKIVING MACHINE
- SEWING MACHINE
- MECHANICAL MACHINE FOR MANUAL LASTING
- PNEUMATIC PRESS WITH BOXES TO PRESS SOLE TO LASTED SHOE
- COMBINED MACHINE FOR DIFFERENT OPERATIONS (lasted shoe bottom roughing, sole edge and heel scouring, sole roughing, leather sole buffing, finished product brushing and polishing, sole edge and heel trimming)

As regards the endowments of equipment of TPCSI and the need to integrate them, see the report about the contract on the service centres.

Here it is necessary to note that TPCSI already owns the following pieces of equipment:

- UPPER EDGE SKIVING MACHINE
- MACHINE FOR DIFFERENT OPERATIONS
- UPPER SEWING MACHINE
- LASTING MANUAL MECHANICAL MACHINE

The only missing machine is:

- PNEUMATIC PRESS WITH BOXES

Luckily TPCSI, owns also a "first mechanization" machine. Brand and country of origin of such machine is the following:

GEPGYARTO ES SZOLGALTATO KFT  
9700 SZOMBATHELY  
SZABADSAGHARCOS U. 9-12  
HUNGARY  
MODEL SG-209



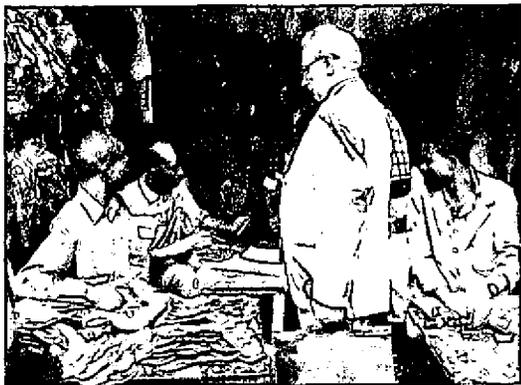
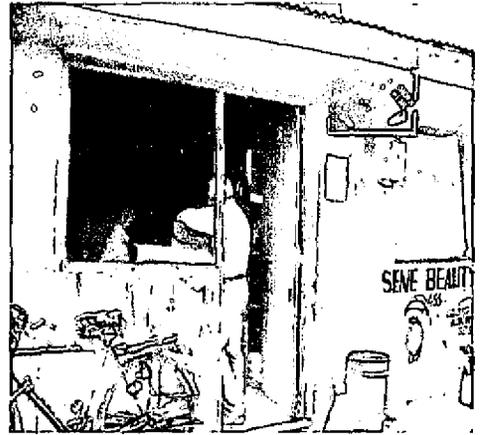
Having these pieces of equipment in good conditions, TPCSI could also make them available for small manufacturers who need some extra capacity to increase the volume or quality of their production.

A rough SWOT analysis for the informal sector is as follows

<b>Strength</b> <ul style="list-style-type: none"><li>• Flexibility in production</li><li>• Basic productive capacities</li></ul>	<b>Weakness</b> <ul style="list-style-type: none"><li>• Lack of proper training</li><li>• Lack of working capital</li><li>• Lack of raw material with a good price/quality ratio</li><li>• Lack of credit</li></ul>
<b>Opportunities</b> <ul style="list-style-type: none"><li>• Domestic market</li><li>• Networking with the formal sector</li><li>• International tourism in Kenya</li></ul>	<b>Threats</b> <ul style="list-style-type: none"><li>• Second hand shoes and bags</li><li>• Chinese imports</li></ul>



Photographic section





## Second area of work

- Work-package 2 – Preparing a detailed training and product development programme for each factory.

Our experts were able to outline some guidelines for training. The kind and nature of it should be tailored on the needs identified in the first field mission. We are suggesting to carry out basic training about production (cutting and stitching) for the sector of Jua Khali and more structured training about design for the formal sector. The latter is to be carried out at TPCSI using the multimedia training course on footwear design supplied by Pisie. As regards training for small and informal manufacturers, we assessed that in house training is not feasible. We are therefore suggesting to carry out a mix of activities structured on technical assistance and training at TPCSI:

This requires to complete the equipment available in the centre through:

- a- replacement of the existing machines in their appropriate positions to facilitate production phases
- b- Completion of the production line with some missing machines ( to be used also for the formal sector)

SEAT LASTER  
SIDE LASTER  
POUNDING MACHINE FOR LASTED SHOE BOTTOM  
HEAT SETTER  
HEEL-SEAT HUMIDIFYING MACHINE  
COOLING UNIT  
CEMENT REACTIVATING UNIT  
PRESS TO APPLY SOLE TO SHOE

We were also able to gather information about the most common raw material in order to set the stage for the preparation of a collection made in Kenya. The approach to that has been innovative in the sense that we chose to identify all kinds of material which could convey a clear idea about the cultural specificity of Kenya (see the following paragraph).



### Third area of work

- Work-package 3 – Assisting in enhancing the competitiveness of leather product manufacturing through the development and promotion of a “ Made in Kenya” product.

#### **Developing Made in Kenya**

We were able to gather information about the most common raw material in order to set the stage for the preparation of a collection made in Kenya .

The approach to that has been innovative in the sense that we chose to identify all kinds of material which could convey a clear idea about the cultural specificity of Kenya (see the following paragraph).

We started to outline the main features of the collection, sub-dividing that into shoes and accessories. The latter is easier to be developed and allows a higher degree of identification with Kenya. The international and local market for this kind of accessories is in fact structured with some segments for these products, whereas the one for footwear is oriented towards more international styles. This explains why we outlined the following lines of style.

During a mission specifically devoted to the elaboration of the concept of Made in Kenya, we were able to present the following guidelines ( as you can see in the cd-rom as annexe II )

#### Fourth area of work

- Work-package 4 – Assisting local companies in the promotion from European in footwear manufacturing.

#### **International vs. local networking**

The last area of work is about networking the formal and informal sector, in view of further networking with European manufacturers. This is extremely difficult, first of all because the image of the country as a manufacturing basis. We are suggesting to promote its image using the materials produced for this purpose within the framework of the made in Kenya approach. Therefore we have set up the project for a web site on Made in Kenya and its main features.

This site should be about the industry of leather in Kenya with two specific sections about:

- TPCSI as a capacity building centre,
- Made in Kenya,

Esalia already manages a very good web site. The idea – however – is that of linking this site to that of some European association of manufacturers. A model for that was developed on the site of Assomac.

#### **Conclusions and recommendations**

We are suggesting to achieve a synergy with the work to be carried out within the contract regarding service structures. TPCSI is the key structure in developing the capacities of Kenyan manufacturers, but LDC could become useful if able to provide petty cottage tanners of the informal sector with the materials and equipment needed to finish the pieces of leather, they process for downstream manufacturers (always in the informal sector). Considerations about that are in the report about LDC enclosed as annex II in the other contract.

A final consideration as regards design. The process of equipping the centre with a CAD facility is for the development of a made in Kenya of the utmost importance, as it sets the stage for a correct introduction of design methodologies in the sector.

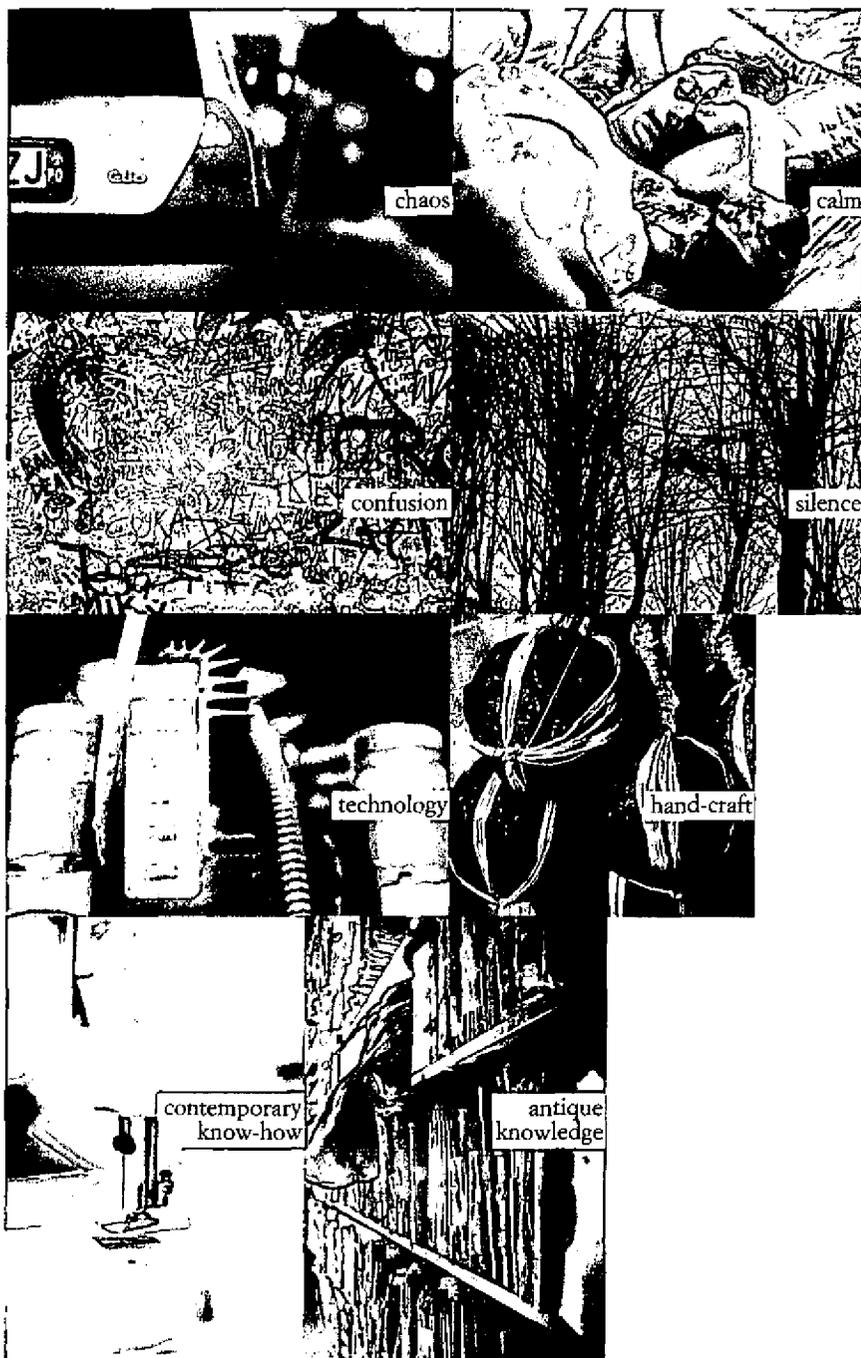
Networking the Kenyan sector at international level is quite a task, although it has to start from the knowledge of the sector

## Suggestions for a made in Kenya

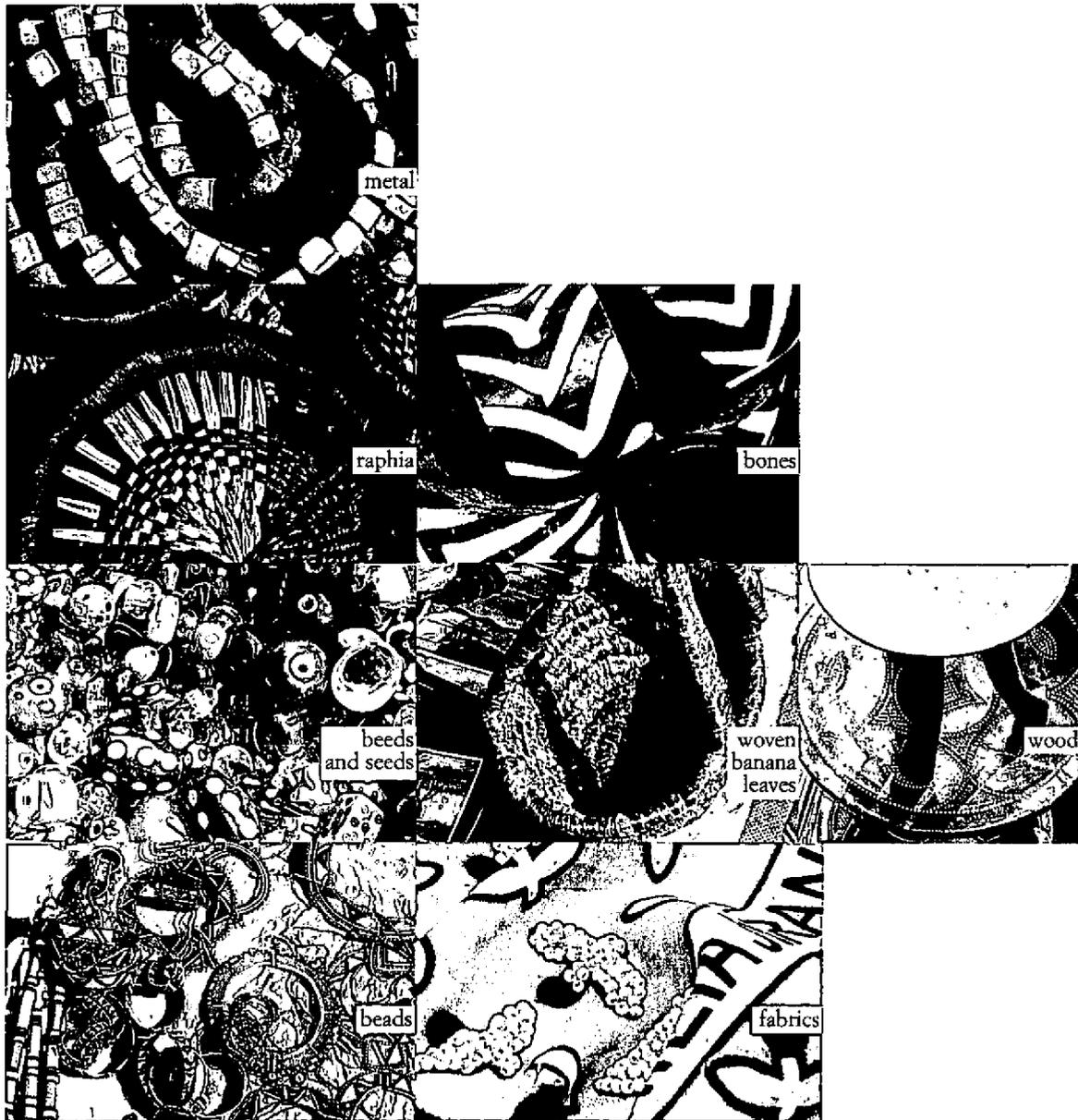
The concept of the made in Kenya presentation supports the idea that designing a collection needs a confrontation with the environment and the life-styles of the consumer we want to reach with our products. Therefore it was necessary to start from a brief social-cultural analysis of consumers' targets divided into age groups exploring their attitude towards life and consequently fashion consumption.



The analysis of contemporary lifestyles showed the balance and coexistence of contraries in our society, looking at all aspects of life, giving emphasis on the need of harmony between technological search in fashion products and an hand-crafted feel exploring at the same time the need of costumization of contemporary consumer.

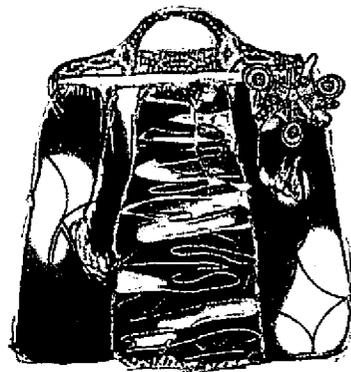
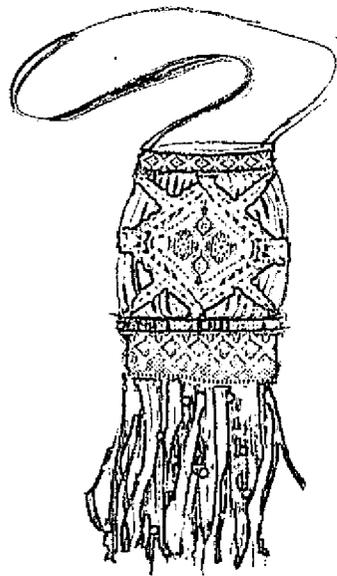
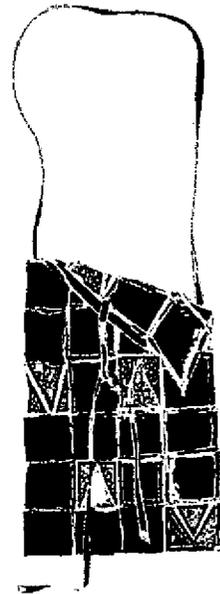
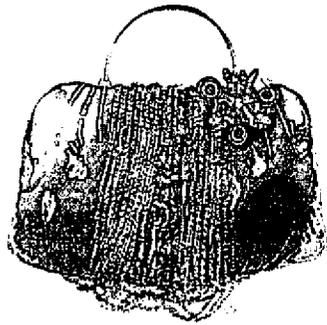


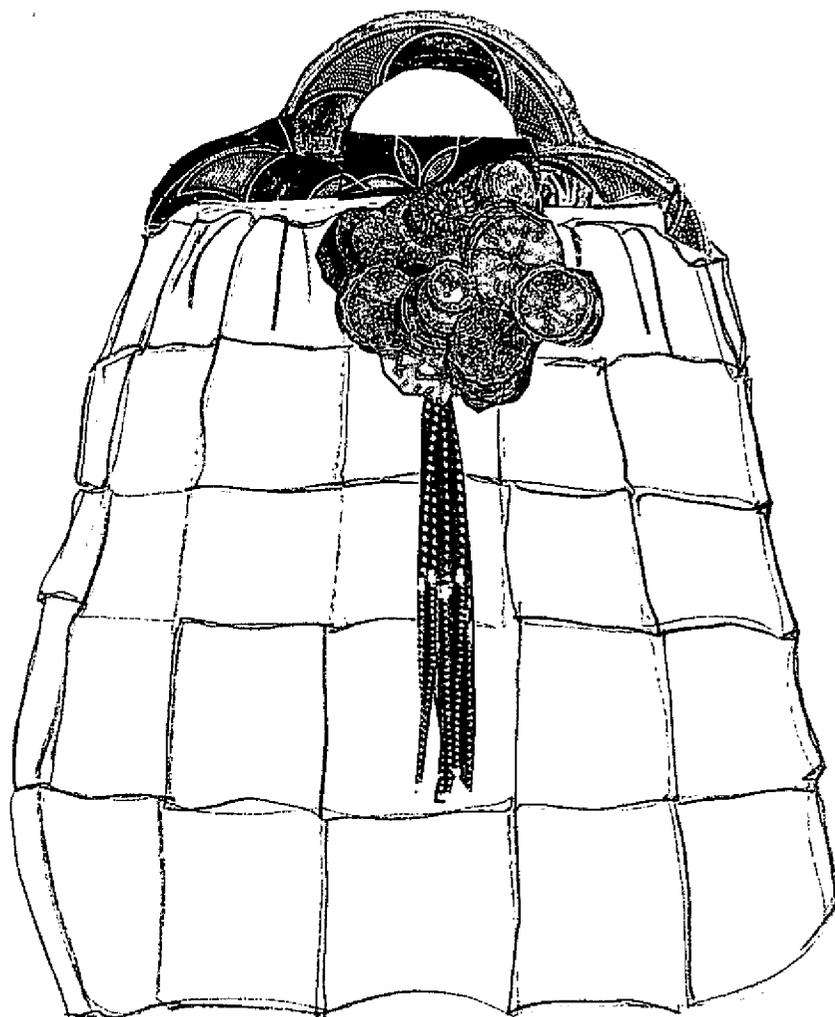
A talk on creativity and creative approach to collection designing explored the way to find new ideas through deep observation of people, art, music, nature, but most of all through the observation and use of traditional materials that could be found in kenya, rethinking them with a contemporary approach in order to recontextualize what belongs to their tradition into a fashionable product.





The final suggestions for a made in Kenya were given through a few designs which were proposing a new way to use traditional materials underlining strongly the urgent need to start improving their skills on design and start proposing products which could represent this search of balance among design innovation, improvement on quality and a deep search on handcraft skills; as the key to reach innovative products to be proposed to an international market.



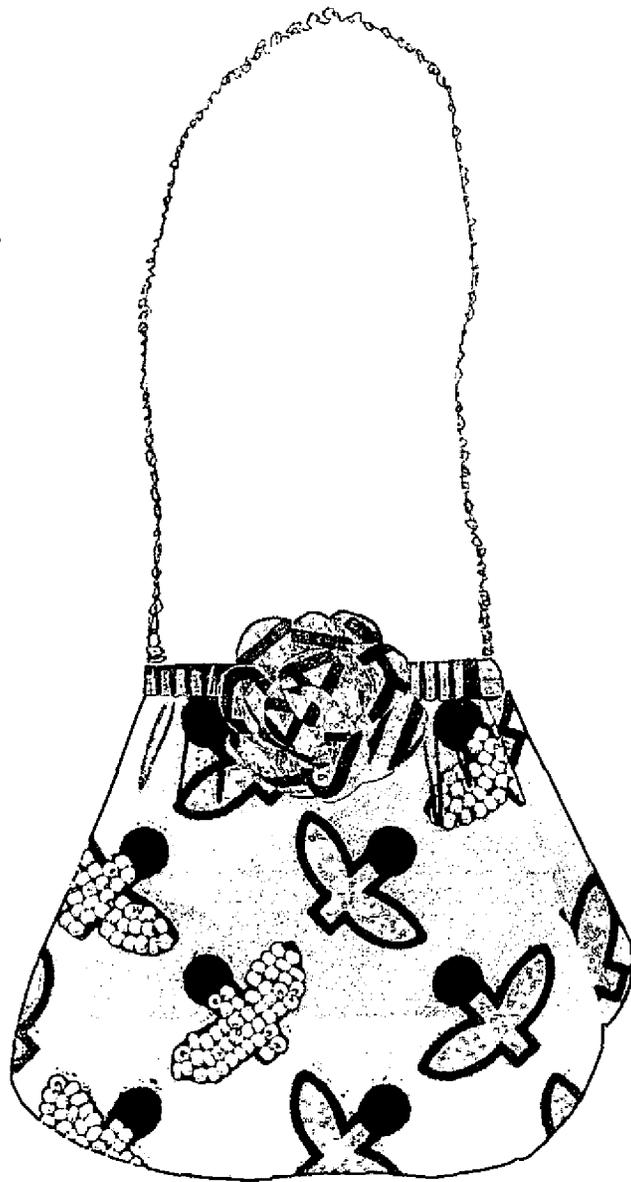


regular patchwork of multicoloured leather  
wooden handle with beads design  
beads decoration

PISTE



PISTE



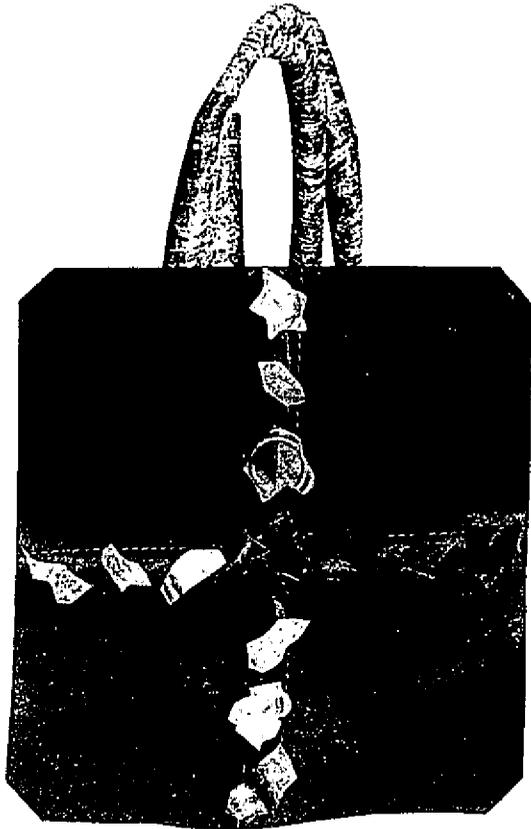
embroidered traditional fabric with  
flower decoration  
recycled glass beads handle



irregular patchwork of leather  
woven raphia handle



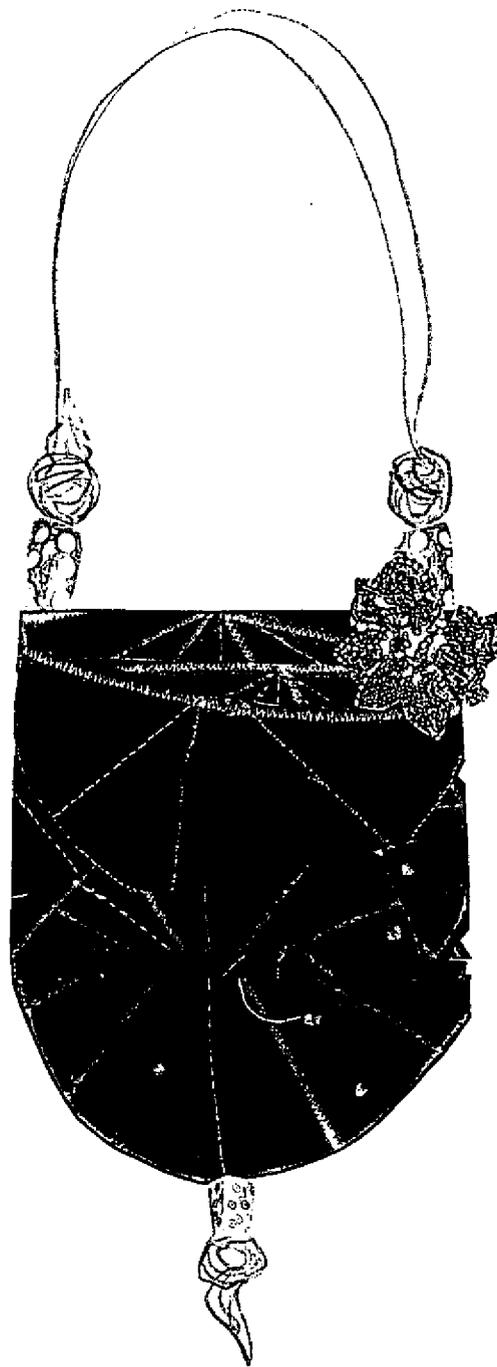
PISIE



leather  
abstract design made of can  
woven banana leaves handle



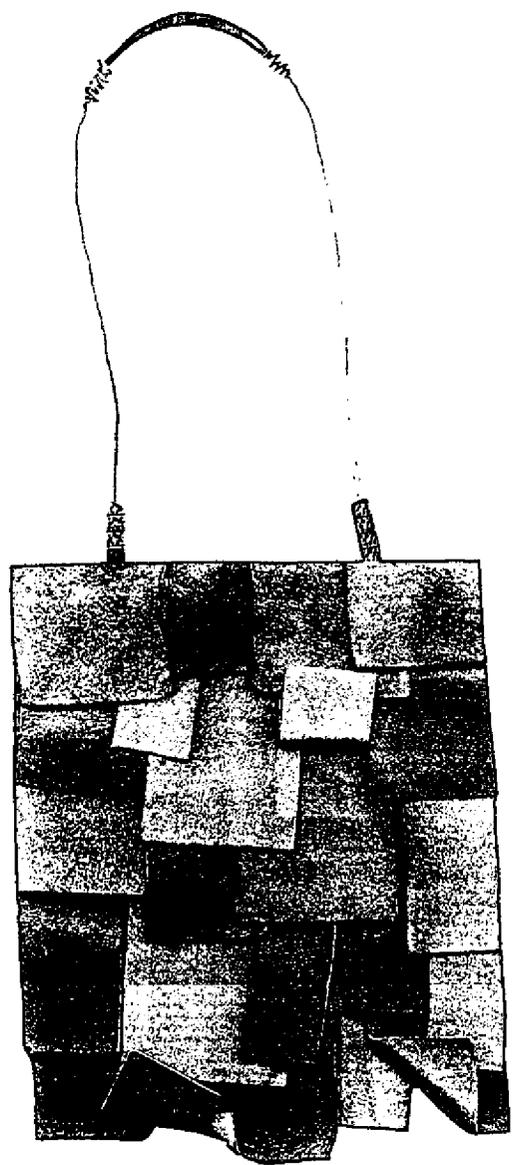

**PISIE**



regular patchwork of multicoloured leather  
 wooden handle with beads design  
 beads decoration



PISIE



irregular patchwork of leather  
wooden decorations on leather string handle

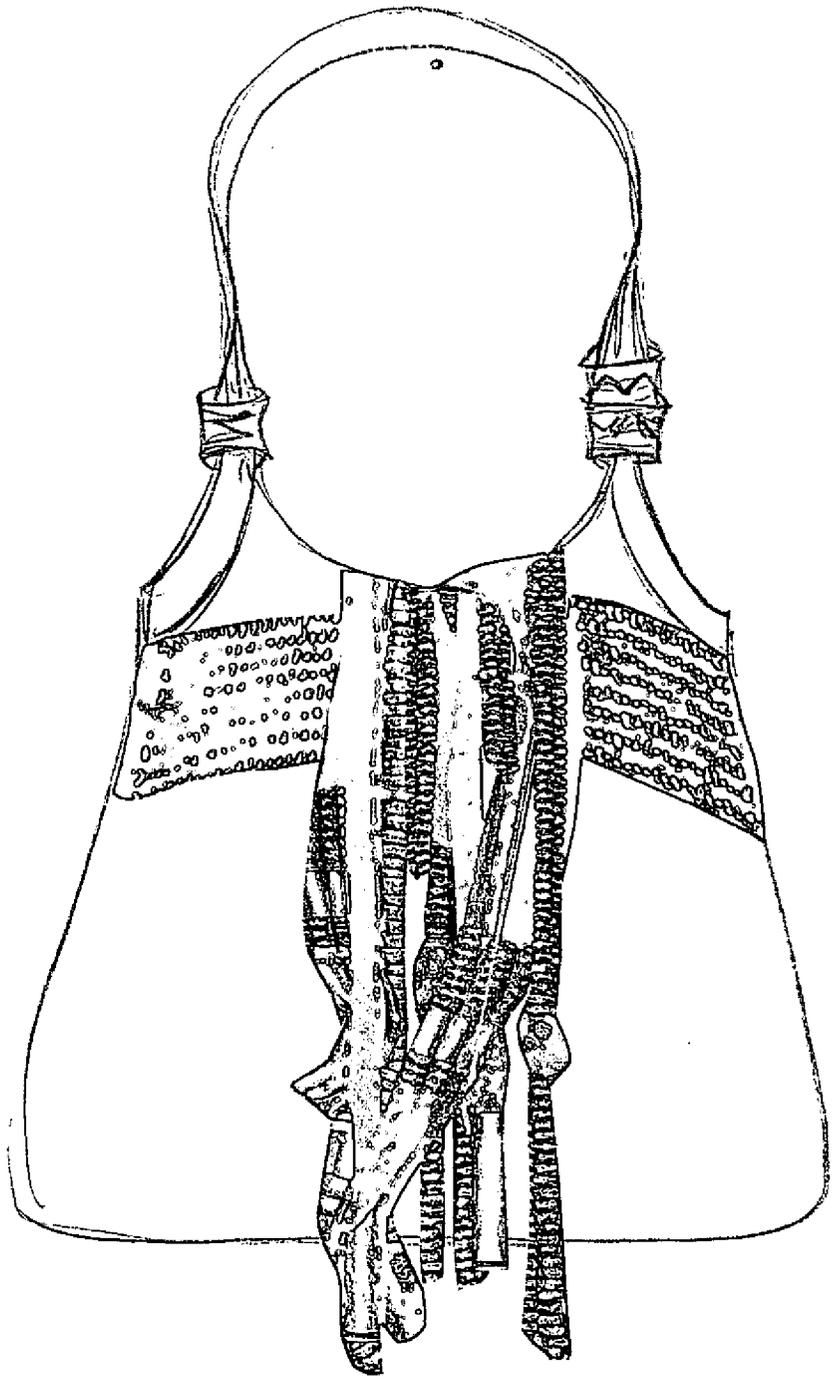


pleated leather  
beaded butterflies applications  
leather handle

PISTIE



PISTE



leather bag with metal beads decorations



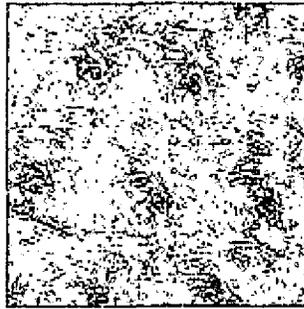
**SUGGESTIONS  
FOR A SHOE COLLECTION  
MADE IN KENYA**



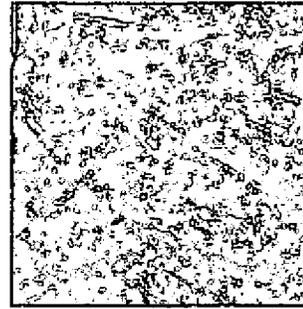
## MATERIALS FOR THE LAST



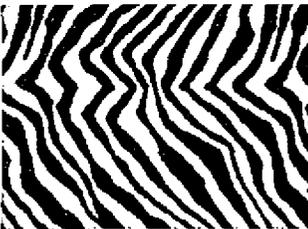
*Elephant*



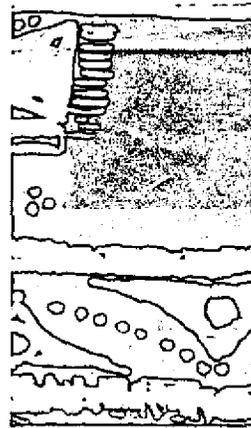
*Ostrich*



*Hippo*



*Zebra*



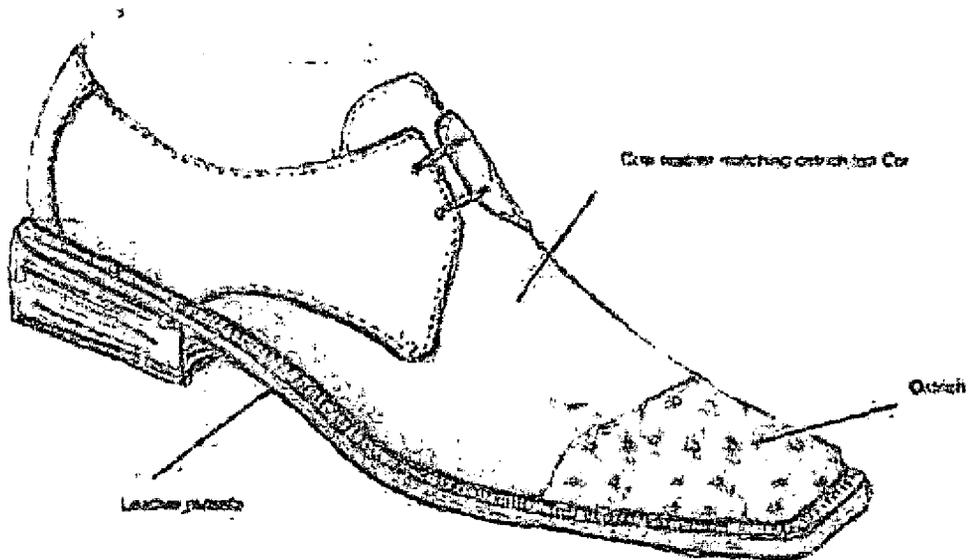
*Ethnic tissue*



**GIORGIO ARMANI**  
Designer: *Giorgio Armani*

**Dress Line**

AD199/03/03



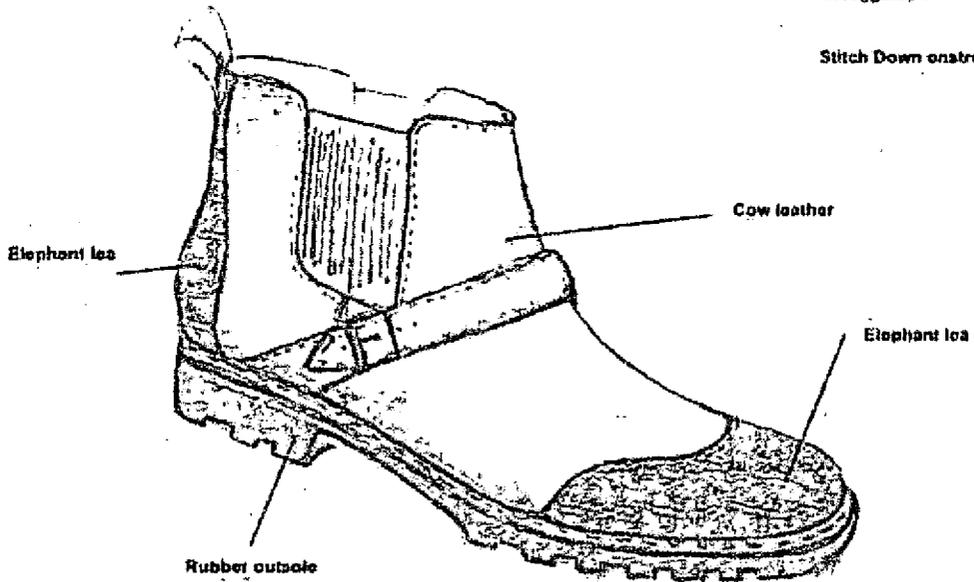


GIORGIO GADINA  
Designer - Footwear construction

Casual / Safari Line

A003ggEleph

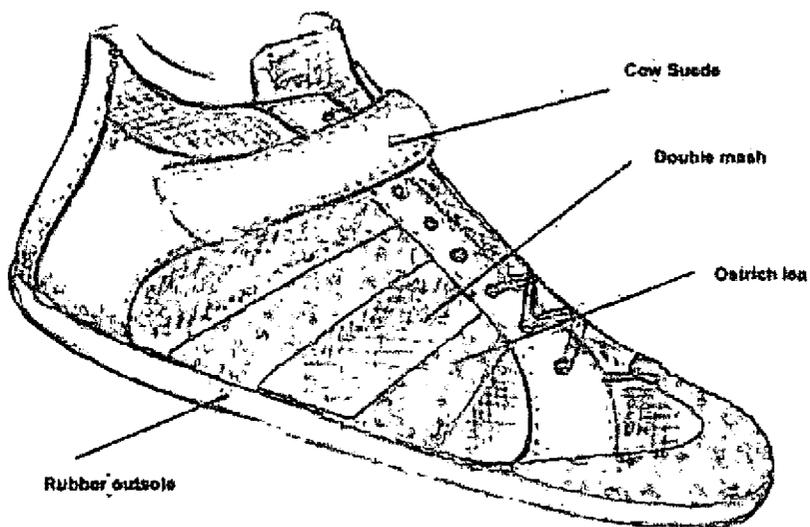
Stitch Down construction



GIORGIO GADINA  
Designer - Footwear construction

Fashion Casual Line

A004dOst

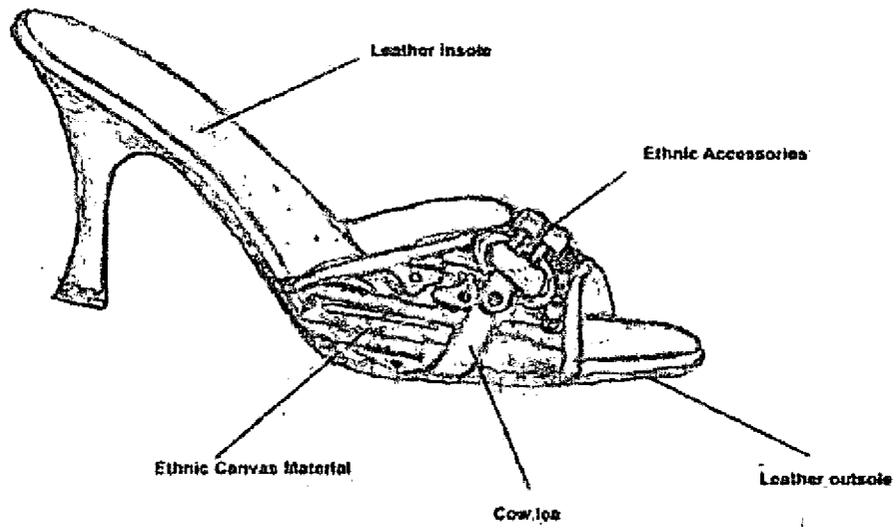




GIORGIO GADINA  
Designer - Factory consultant

Lady Line

A005ggDEtn

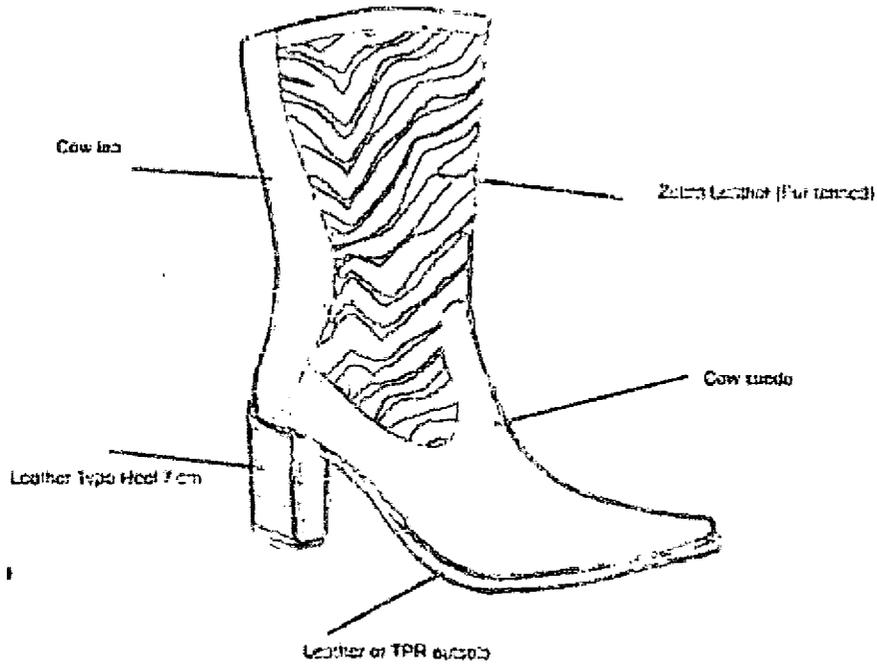




GIORGIO ARMANI  
Color: Faded leather

Levy 81/9

AS07 (g/10)

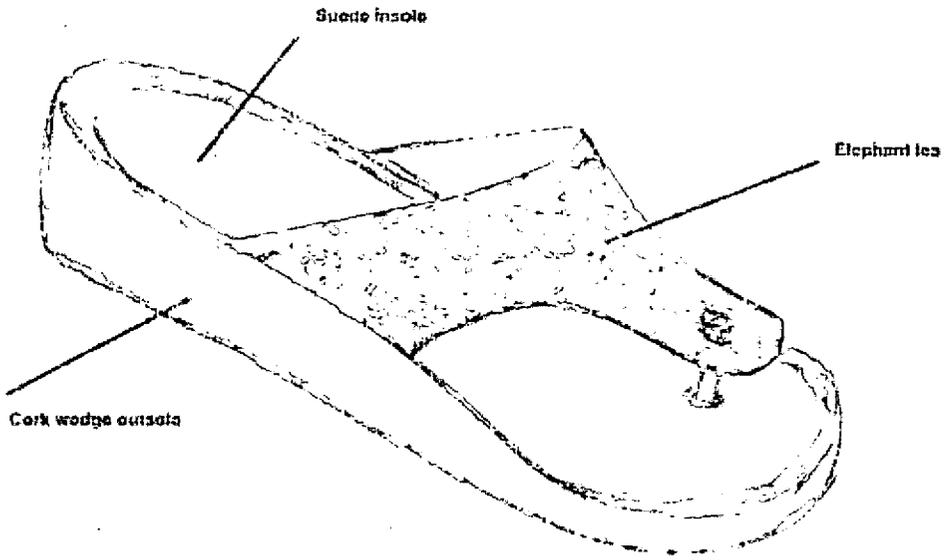




GIORGIO GADINA  
Designer

Lady Line

A08ggEloph





## SAMPLES FOR A COLLECTION



# **ANNEX**

## **I**

### **The Company profiles**



## COMPANY PROFILE

### FORM NR. 1

PIVOT FOOTWEAR  
MADARAKA MARKET  
THIKA  
KENYA

---

Date of establishment: 1992

Production: 20 pairs a day

Equipment: n. 2 sewing machines

Materials employed in the productive cycle: natural leather – PVC soles

Product: man's footwear

Productive process: Cemented

Sales price (EW): 350 Kshs

Employees: n. 4

Working venue: n. 8 sq.mt.

Distribution Channels: 2 shops in central Kenya NYERI

No training received.



**FORM NR. 2**

G. NDUATI  
KAWENDO FOOTWEAR  
MADARAKA MARKET  
THIKA  
KENYA

---

Date of establishment: 1990

Production: Boy footwear for school

Raw material characteristics: Leather upper and PVC sole  
(Pattern never changes; it has been the same for years)

Customer: retail shops  
(They have a good number of orders when school is beginning)

Mechanization: only one machine and one sewing machine for uppers

Brand: SINGER flat-bed, one needle

Interested in "first mechanization",

Particularly interested in the MACHINE TO PRESS SOLE TO

LASTED SHOE

His financial problem is to pay suppliers at material's delivery, while his customers pay after 60 days.



**FORM NR. 3**

ROZZIE ENTERPRISES  
MADARAKA  
THIKA  
KENYA

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Date of establishment: 1997

Product: Man's footwear

Raw material characteristics: Upper skin - PVC soles

Production: max 40 pairs a day.

Employees: 4 people

Selling price: 350 Kshs

Mechanization: n. 1 sewing machine

Working venue: 6 sq.mt.



**FORM NR. 4**

SUMMER SHOES  
MADARAKA  
THIKA  
KENYA

-----

Date of establishment: 1990

Production: Man's footwear - sandals for woman and child

Raw material characteristics: Upper leather- PVC sole

Production: 15 pairs

Employees: nr. 4

Distribution channel: shops

Working venue: 9 sq.mt.

Sales prices (EW): 300-400-500 Kshs

Mechanization: n. 2 sewing machines (SINGER)

Pattern-making: copying patterns market asks for.



**FORM NR. 5**

J.G. BAHATI FOOTWEAR  
JAMHURI MARKET  
THIKA  
KENYA

---

Date of establishment: 1980

Production: IDEAL shoe

Cemented man's footwear

Employees: nr.3

Distribution: retail shops and wholesalers

Equipment: n. 1 sewing machine

Sales price (EW): Ideal shoe is sold at 450 Kshs

Production: n. 7 pairs a day for IDEAL footwear  
n. 20 pairs a day for other kinds of footwear

Pattern-making: patterns are copied by already existing ones



**FORM NR. 6**

THE PALM PRINTS AFRICAN ARTIFACTS  
P.O.BOX 3860 THIKA  
TEL254 151 30964  
KENYA

Owner: Mr. PAUL MWANGI

Production: Leather product  
Wallets-Belts-Coaster-Menu Covers-etc:

Date of establishment: 1995 as JUA KALI SHED; in 1996 they have registered as enterprise

Customers: Tourist shops, Safari hotel shops.

Export: in USA - S. AFRICA – EUROPE

Raw material characteristics: either vegetable tanned leathers or chromium tanned leathers are supplied by domestic tanneries

Mechanization: USM Hydraulic Press - Skiving machine ALPHA - n. 3 Sewing Machines.

Interested in training courses and in implementing machines buying:

-Travelling head press

-Linear Folding Machine

-Various machines for belts

-Strip cutter



**FORM NR. 7**

JOHN OCHIENG  
KARIOKOR MARKET  
NAIROBI  
KENYA

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Date of establishment: 2001.

Production: Ideal and cemented footwear.

Raw material characteristics: leather upper, PVC and rubber sole.

Pattern-making: copying already existing products.

Daily production: n. 7 pairs for IDEAL footwear.  
n. 20 pairs when manufacturing cemented footwear.

Sales price (EW) IDEAL: 350-450 Kshs

Mechanization: they only have one sewing machine (EAGLE-CINA)

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They are interested in "first mechanization"



**FORM NR. 8**

VICTORY  
KARIOKOR MARKET  
NAIROBI  
KENYA

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Production: leather small flip-flops upper with ethnic drawing, with ornamental small pearls and shells.

Employees : nr. 10

Daily production: 15 pairs. A lot of time taken for the preparation of flip-flops "small uppers".

Costs: 50-80 Kshs a pair for each manufactured "small upper"

Small mechanical equipment, besides the sewing machine.

-Stitch separating machine with heater and manual conveyor

-Trimming machine obtained by attaching a wheel to an electric engine shaft

-Mechanical press to impress brand on insole

A JAU KALI already projected towards "first mechanization".



**FORM NR. 9**

SKIM'S  
MR. ROBERT OCHIENG  
KARIOKAR MARKET  
NAIROBI  
KENYA

---

Date of establishment: 1994.

The owner had worked in a shoe factory, before becoming an entrepreneur.

Production: IDEAL Shoe- Cemented footwear – Sandals.

Pattern making: copying already existing products.

Distribution: Retail shops.

Equipment: n. 1 sewing machine (SINGER) for uppers.

Daily Production: 40 pairs

Employees: 6 people

Sales prices (EW) : 350 Kshs sandal

350 cemented footwear

350 Kshs IDEAL footwear

Interested in "first mechanization".



**FORM NR. 10**

LEATHER MASTERS LTD  
P.O. BOX 10293  
NAIROBI  
KENYA

---

TEL. 254.20.542462

Owner: Mr. IDRIS RUPANI

Date of establishment: 1980

Production: many kinds of leather products.

Employees: 50 people.

Production: made on patterns sent by customers.

Many customers in U.K. and France.

Equipment: very old - sewing machine (ADLER) - Evening machine

Skiving machines- many cutting machines (KAEV) - hot marking machines.

The owner is very interested in **Training Courses** and in receiving pictures of machines for his activity.



**FORM NR. 11**

BATA SHOE COMPANY  
P.O. BOX 23  
00217 LIMURU  
KENYA  
TEL. 254.66.71620  
FAX 254.66.71145

Owners met during the visit:

MR. JOHNAME MGHEUYI - Factory Manager

MR. MICHEL JEANNOUTOT - Production Manager

Production: This factory now produces 1000-1200 pair in 8 hours in opposite to 3.500 pairs made some years ago: They also have a tannery and all the components are self-made.

Employees: 970 people (some years ago employees were 5.000).

Quality is questionable, as said to Mr. MGHEUYI

There are three lasting lines, 1 for the IDEAL production and 2 for the cemented one (leather shoes and sports shoes).

Sub-constructors are normally used.  
At the moment, there are the following ones:

- TIPCSI - Seaming department, upper leathers
- 4 M ENTERPRISES LTD - LIMURU - Cloth uppers

Mr. JOHNAME has shared my suggestions to improve quality and is interested in receiving information about the following machines:

- Machine to press and to trim IDEAL upper surplus.
- Insole trimming machine.



**FORM NR. 13**

**AVERAGE MONTHLY WAGES**  
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WORKER	WAGE BEFORE TAX	FROM	KSHS	TO	KSHS
OFFICE ASSISTANT	"	"	5.820	"	6.840
DRIVER	"	"	5.820	"	"
STOREKEEPER	"	"	8.380	"	"
KEEPER	"	"	5.820	"	"
			4.700		

**TAXES**  
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NATIONAL SOCIAL SECURITY FUND    KSHS 200

NATIONAL HOSPITAL INSURANCE FUND    KSHS 150

**WORKING HOURS**  
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N. 8 HOURS A DAY

N. 45 HOURS A WEEK

N. 240 WORKING DAYS PER YEAR



**FORM NR. 12**

SANTA TERESA SHOES  
NANYUKI RD.  
IND. AREA  
NAIROBI  
KENYA

TEL 552886-50-  
721 714 390  
0720 243.073

Italian branch: CALZ. ST. THERESA  
VIA TOGLIATTI 334  
51035 LAMPORECCHIO

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The Owner Mr. ERMANNO LEPORATTI, retired person, has transferred his activity from Italy to Nairobi.

In Kenya company produces the same shoe manufactured in Italy.

-MAN'S SHOE WITH EXOTIC LEATHER LIKE CROCODILE-OSTRICH-SNAKE ETC

Customers are the same; they export to U.S.A.

The owner is a local partner

Problems: Company will apply to TPCSI to stitch uppers.

I've suggested applying to TPCSI also for LEATHER PRE-FINISHED SOLES

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