



### **OCCASION**

This publication has been made available to the public on the occasion of the 50<sup>th</sup> anniversary of the United Nations Industrial Development Organisation.



### **DISCLAIMER**

This document has been produced without formal United Nations editing. The designations employed and the presentation of the material in this document do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations Industrial Development Organization (UNIDO) concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries, or its economic system or degree of development. Designations such as "developed", "industrialized" and "developing" are intended for statistical convenience and do not necessarily express a judgment about the stage reached by a particular country or area in the development process. Mention of firm names or commercial products does not constitute an endorsement by UNIDO.

### FAIR USE POLICY

Any part of this publication may be quoted and referenced for educational and research purposes without additional permission from UNIDO. However, those who make use of quoting and referencing this publication are requested to follow the Fair Use Policy of giving due credit to UNIDO.

### **CONTACT**

Please contact <u>publications@unido.org</u> for further information concerning UNIDO publications.

For more information about UNIDO, please visit us at www.unido.org



# 05177



Distr. LIMITED

TD/WG. 169/18 18 December 1973

ORIGINAL: ENGLISH

### United Nations Industrial Development Organization

Feminar on the development of footwear manufacturing and leather goods manufacturing in developing countries Madras, India, 4 - 13 February 1974

# SOME ASPECTS CONCERNING LEATHER CLOTHING PRODUCTION AND MARKETING Y

P. Helleman

\* Managing Director, Friitala Group, Finland

The views and opinions expressed in this paper are those of the author and do not necessarily reflect the views of the Secretariat of UNIDO. This document has been reproduced without formal editing.

We regret that some of the pages in the microfiche copy of this report may not be up to the proper legibility standards, even though the best possible copy was used for preparing the master fiche.

### CONTENTS

		• • •	1		
A CONTRACTOR			1-74	enge e en e	
Introduction				. •	1
Raw materials				÷.:	2
Marketing					3
Design and form-giving					6
Technical and financial	aspe	ots			10
. Production space					10
Personnel					11
Capital requireme	nts				13
Conclusions					14
Tables 1 - 5		•			15

### INTRODUCTION

Leather clothing industry has up to the end of the 1960's played a minor role in the leather usage of the world. It has been estimated that as late as in 1968 the share of clothing industry was about 5 per cent of the total leather usage. During the last five years important changes have, however, taken place in the leather world, and the demand for clothing leather has been rising very rapidly. The development has already been in progress for a long time.

For 20 years ago leather clothing industry was serving mostly such consumers as sportsmen, outdoor people, hunting enthusiasts etc. and others who had to work outside or often in demanding and cold weather conditions thus requiring a protection against climatical circumstances. The clothing industry started realizing that to get a bigger market share of the consuming public's clothing expenses it had to come into the so-called fashion market. This was achieved by thorough and careful investigation and developing work which started from the adaptability of leather into fashion clothing industry as one of the materials, equal to textiles. A considerable change was necessary in the tanning industry in order to produce leather which met the requirements of designers and production personnel. As the situation is now, leather can be used for practically all types of clothing, not any more only for sportswear but also for fashionable outer clothing, skiris, blouses, trousers, even for evening gowns and swimming suits.

In several West-European countries, for example in Great Britain and some Scandinavian countries the share of non-shoe industry leather has during the last two years already reached over 50 per cent of the total amount of leather produced. This of course includes not only clothing leather but also leather made for leather goods industry and interior

decorating purposes such as upholstery leather etc. Requirements like faultless rubbing fastness, light tastness and surface finish are also much more demanding for the tanning industry on the field of garment leather than on that of since leather.

### RAW MATERIALS

Basicly we can talk of five different groups of clothing leather types.

Traditionally clothing leather made out of sheepskins has played the most important role as type of material, both finished as suede and as nappa leather. Even though we know that out of the total sheepskins available developing countries have only 40 per cent against the 60 per cent of the developed countries, this relation turns much more favourable for the developing countries when we remember that far better sheepskin clothing leathers can be produced of hair sheepskins than of wool sheepskins, and the majority of hair sheep population is in the area of developing countries.

Goatskins form another very important type of raw material for clothing leathers especially as suede. Out of goatskins more than 3/4 are in the developing countries and thus form a good base for clothing leathers.

Clothing leather made out of cattle hides has gained in the last five years an increasing importance, because modern tannery technology has succeeded to produce a soft and thin enough product which in best qualities can favourably compete with the traditional clothing leathers made of sheepskins.

When producing this clothing hide nappa a tannery gets an important side product, split, which earlier was used mainly as lining leather in shoe

and leather goods industries, but with proper tamery technology can now be produced to a very soft and agreeable clothing material which is very popular capecially too more sporty parts of leather clothing collections.

Clothing leather made out of pigstans has gamed increasing importance, and as the availability of this material in the world, because of new slaughterhouse techniques, is going to multiply very rapidly, this material has to be considered very important in the future years.

As earlier mentioned, the qualitative requirements in clothing leather are much higher than in other leather using industries. The colour cards change much quicker and the accuracy of shades and tones of colours is very strict on oig consumer markets like western Europe and the United States. The importance of using proper tanning and dying methods to produce a leather where colour fastness against dry and wet rubbing, light fastness of colours and tensile strength requires a much closer cooperation between the tanneries and the leather clothing factories than in other fields. Therefore a careful study has to be made first about the availability of high class enough clothing leathers before a decision can be made about starting a leather clothing plant.

### MARKETING

Planning a leather clothing industry has to start from marketing considerations. The producer has to make it clear for himself to what market area he aims his production. As shown in table No.  $1^{\frac{1}{2}}$  the consumption  $\frac{1}{2}$  Study on the international capacity of competing of the Finnish clothing industry. The Fund of the Finnish independence Memorial Year 1967, Publication A 10, 1972

expenses of clothes and personal belongings as compared with private consumption expenses person differ very much from each other in various countries. Because the leather clothing producers of most developing countries have to aim their goods to the American or West-European market areas, a careful market study has to be made of the types of clothing used, the different kinds of buying habits, different tastes, the patterns, colour trends, and naturally also the measurements of clothing on the various market areas. The form-giving of the clothing as well as the basic measurements are very different from each other if the product is aimed to the United States or to Europe. There are great variations in tastes and measurements also already inside the European market area. The basic measurements, because of a very different body-building of for example an Austrian, a Scandinavian or French woman, place different requirements for collections aimed for these different markets.

Because of the well-known fact that we are in the coming decades facing with a hide and skin shortage in the world, the trend in leather clothing industry is that in the future it only pays to produce fashion garments out of leather, and the time of big standard consumer markets on this field is going to be over. This fact emphasizes the importance of all these rather difficult considerations which a new beginning producer has to face with when starting the leather clothing production. Therefore, the most recommended form of working would be cooperation with some already existing leather clothing marketing organization or producer. This could be done in the form of joint venture or, which is another very workable solution, by contracting technical know-how planning and representation against a royally payment. Leather clothing marketing is based on advance selling, and it is not advisable to try to produce into the warehouse garments for which there are no orders in liand, not anyway more than the necessary small amounts to even up with the changing

period between the seasons. The well-organized, already existing European and American organizations operating on this field are basing their sales on careful market study and follow-up of the development of advance sales with computers so that the marketing management is all the time aware of the situation.

It has to be noted that the actual selling periods are rather short and very intensive. For example the selling of the autumn/winter collection usually starts right at the beginning of January and ends in March, during which 3-month-period the marketing of the total production for the following autumn and winter has to be secured. In the same way the selling of spring/summer collections starts at the end of August and, as a rule, has to be completed before the middle of November to secure an adequate production time for deliveries which usually start the following February.

As can be seen from this selling and production cycle, leather clothing industry requires a considerable place for storing and collecting the daily production, because the customers, as a rule, want to receive their total collection ordered as a whole shipment at a certain time agreed upon in the sales contract and are not willing to receive their goods continuously in small shipment units. Therefore when calculating the floor space necessary, one has to take this into consideration, as ready leather garments require considerably more space than what such leather working industries as tanneries, shoe factories or leather goods factories are used to.

The working capital bound to this operation is thus substantial. The capital turnover factor is in leather clothing industry much lower than for example in a tannery. Therefore in case of integrated industries - tannery, leather clothing factory, leather goods factory together - which is an ideal solution, the operation usually is planned so that the producing

capacity of the tannery is bigger, usually double to what the own integrated leather goods processing industries require, so that the turnover of the total capital bound can be accelerated by the tannery. Naturally the added value of finished products compensates for the lower turnover rate of finally processed products.

### DESIGN AND FORM-GIVING

The role of up-to-date design information in putting together a collection cannot be strongly enough emphasized. The price level obtainable is largely depending on if the product has an image of having the right up-to-date lines and forms of the existing fashion or if it has to be considered previous season production. This usually gives an idea of models being copied from somebody else. As earlier mentioned, the sales value of such a natural product as leather is in the future going to be so high that it pays to work it to well-priced market levels which require good quality together with up-to-date form-giving rather than satisfying oneself with low-priced standard markets which in the future have to be left for man-made materials.

Marketing experience shows that a brand name or trade mark has an important function of creating the image in the minds of the buyers representing for them certain standards and certain quality levels. To change this image, once established, requires a lot of extra effort. Therefore it is important that a beginning producer makes up his mind about what level of the market he is aiming his production at.

The word "design" is very much misunderstood and misused in the trade circles, so much so that maybe only the misusage of the word "democracy" can exceed that. The leather clothing producer in a developing country

has two basic lines to choose in the world of design. The first and most often recommended by advisors from outside the clothing trade is the way of national originality in designs and patterns. It is said that a producing country should develop its own style, typical of its background mentality and surroundings. A good success can be achieved on this line, too, but it has to be noted that this success has usually a short duration. Good examples are the so-called Afghan coats, Mexican styles. Eastern look etc. which all have a novelty value that naturally has to be used, but a sound long-range planning should be, according to the experience of many years on this field, based on the tastes and fashion trends in the country where the production is sold. This fact is the other way in design thinking what the producer can follow.

A well-planned and thoroughly thought-out backbone for all collections starts from the just mentioned fact. If the manufacturer has established good marketing connections through for example reliable partners in the consuming country, he is able to use and profit from the rapidly passing fashion trends, so-called surface fashion, too, like the fashion of "hot panis", gipsy looks etc. were, which constantly come and go,

Quite often new-beginners, and I am sorry to say even firms several years in the trade, consider that going to the so-called fashion fairs, where they try to copy models exhibited, is a good practice. This has to be strongly advised against, because these copies are always already at least one season, if not two seasons, behind when they are presented to the market.

Design work is usually team work the function of which has to be properly understood. Even many manufacturers, long on the market, have not made it clear to themselves and their own organization what the different time levels where the members of the design team have to work mean.

As shown below, for example in December 1973 the member of the design team who represents the coming fashion trends and ideas (I) has to live in his planning in the fash on of autumn and winter 1975, at the same time giving ideas and guidance for the team members who are in full work producing the lines and forms of spring/summer collections 1975 (II). The third level team members again (III) have to live 6 months nearer giving the final touch of industrial serial production for the autumn/winter collection 1974 the selling of which is starting in January 1974, and finally the fourth level of the team (IV), the actual marketing personnel, who do the follow-up of the sales of spring/summer collection 1974 which they have sold the previous autumn.

# The different time levels of design thinking

1 Designers responsible for fashion trends 6 months II Designers giving form to measurements of collection on the market 12 months from now (See tables 2A and 2B) 6 months Model masters adjusting collection for industrial III se rial production 6 months Dec. IV Marketing personnel (important members of the team), 1973 follow-up of the sales of collection the deliveries of which starting shortly

attention to the fact that the tannery, the second link in the integrated production line—the first link is the raw skin buying—has to know the coming colours required for the producing of sales collections well in advance to be able to order the required does and other chemicals and make the often time-consuming colour and shade matching on their own available skins and tannery techniques. The team members on level II who have to give, to memion only a detail, for example the lengths of the garments in the collection (tables 2A and 2B) which requirements vary on different marketing areas, must know what the buying public is going to require in a retail shop 12 months in advance and may not be influenced too much by the marketing team members on level IV who tend to live in their thoughts on the present requirements of the customers.

To satisfy a demanding buyer the collection usually has to be well-balanced between garments meant for different purposes. For example it is extremely difficult to sell a collection above low-priced mass levels, if it consists only of jackets, and the coats, blouses, and trousers are missing. Just as difficult it is to market a collection which is made exclusively of for example lamb suede. The buyer prefers to look for a balance between lamb suedes, lamb nappas, hide nappas and maybe sportier outfits made of sueded splits. Therefore it is a good idea to form a cooperation between different tanneries who supply the garment manufacturer with different materials, or to form a marketing group where different specialized leather clothing manufacturers can together produce a well-balanced collection.

. .

## TECHNICAL AND FINANCIAL ASPECTS

### Production space

The planning of a leather clothing plant can be started in several ways. Technical knowledge for planning a production unit can be more easily found, but as we have pointed out before, the production is only one fourth of the total structure, the marketing, design and form-giving, and financing forming the other three equally important sectors.

Concentrating at first only on the production sector, the most usual case is that a tannery, a shoe factory or a leather merchant, in several cases also a textile clothing factory, has an empty production place available, and their decision- and policy-making directors have decided to either integrate or diversify into the leather clothing branch.

A practice which can be recommended is to contact experts on this field who can make the preliminary planning and advise on how big a production can be realized on the available plant floor space. Experience shows that usually it is much smaller than what is thought beforehand, because in addition to the actual working space one has to take into account the material storage, the finishing and the quality control areas and, which usually comes as a surprise to the beginning investor, a considerably large warehouse area which receives the daily production and where the garments wait for the seasonal shipment time.

To illustrate the basic requirements needed we can look at a case study of a typical medium-sized leather clothing factory which is planned to produce about 30,000 units of leather clothing annually. If we are to build a new production unit, which usually is the most effective and rational way, we are going to need the following areas:

- about 1,200 m of production area
- minimum 500 m<sup>2</sup> of warehouse area which in modern construction is planned under the same roof, adjoining the production hall, to help the production flow
- in urban areas, depending on the local requirements, about 300 m. for washing, changing, rest rooms and canteen facilities
- the same area, 300 m<sup>2</sup>, for office space

Naturally this division is only a rule of the thumb which experience has shown adequate in most parts of the world, and it can be diminished so far as social areas and office are concerned according to the local practice.

### Personnel

There are great differences in the world, as well in developed countries as in developing countries between the ability of people in adapting themselves into the industrially organized and very requiring working conditions depending on if they are from virgin rural areas or if the industrialization has already been accepted by them.

Usually it is better to plan to increase the production gradually in order to be able to teach as well senior staif responsible of the quality and production as actual labouring production staff for the high requirements that modern industrialization and the maintaining of rigid quality require. In our case study we can assume that we want to reach the production of 30,000 units of leather garments in five years in order for us to be able to cope with the teaching and learning requirements.

To be realistic we have to remember that in most countries the working personnel in the sewing industry is young female personnel who for
natural reasons and because of the restlessness of the industrial
societies in all areas have a certain rate of changing the employment.
Therefore it is usually recommended at count on a 10 per cent addition
in the personnel needed to keep the production flow steady. For example
in our case study, due to the learning and teaching reasons we plan
the production as follows:

Time	Units	Personnel required			
	Service destiliates della con-de-	Senior staff	Production personnel		
1st year	4, 500	2 persons	21 pe <b>rsons</b>		
2nd year	8, 000	4 persons	30 persons		
3rd year	11,000	7 persons	39 persons		
4th year	18,000	10 persons	56 persons		
5th year	30 <b>, 0</b> 00	12 per <b>so</b> ns	75 persons		

With a production of 30,000 units the senior staff would consist of one manager, five foremen, one warehouseman, one work study man, one machine mechanic, and three office workers (assuming that the marketing and design staff are contracted or these functions are taken care of by the partner in a joint venture).

The schooling of the senior staff responsible for proper techniques and quality control is one of the most important factors for profitable operation. The usual method is to contract already skilled personnel, but a more recommended practice is the buying of know-how, which can be done against royalty agreements or with joint ventures. Perhaps the most successful method is to have the key persons schooled in an efficiently working, well-organized factory of an experienced partner.

- To illustrate the complexity of learner clothing manufacturing, refer to tables Nos. 3 and 4.

### Capital requirements

Capital requirements divided between the fixed cipital in buildings, machinery, spare parts call our capital decessary for salaries, operation costs, that bound to stock, taxed, address, is surance etc. vary greatly from country to commy. Due example devered floor space for production and warehousing in developing conductives can vary according to climatical requirements, on if the question is of a competitive private industry's commercial project of a so commercial schemal, although prestige project between US\$50 to US\$100 per mail. The salaries vary in the same way starting from US\$1 to US\$1,50 per day. If the price of land has to be taken into consideration or not in the calculations varies also from country to country just as well as taxes, interest rates etc.

Machinery costs depend largely on the type of production chosen as well as on the type of machinery which can be acquired from about 15 major producers in the world. The quality of the machines of course varies also greatly, thus reflecting back in the maintenance costs and spare part expenditures. We have to remember that the machinery requirements include a great variety of different other kinds of special machines, too, starting from pattern cutting and form edging machines to presses, maintenance machines, teather houses, working tables and chairs, steam developers etc. Total installations including necessary office machinery come very near to the sem of US\$150,000.

The working capital requirements vary largely because of the different leather prices, but one has so keep in mind when considering this type of industry that the turnever rate is relatively low because of the requirement of keeping the seasonal production in the warehouse to wait for the shipments. A good guiding lights is that 25-28 per cent of the yearly turnover is bound into materials, half-ready products and ready stock

and about the same amount into credits outstanding by the customers.

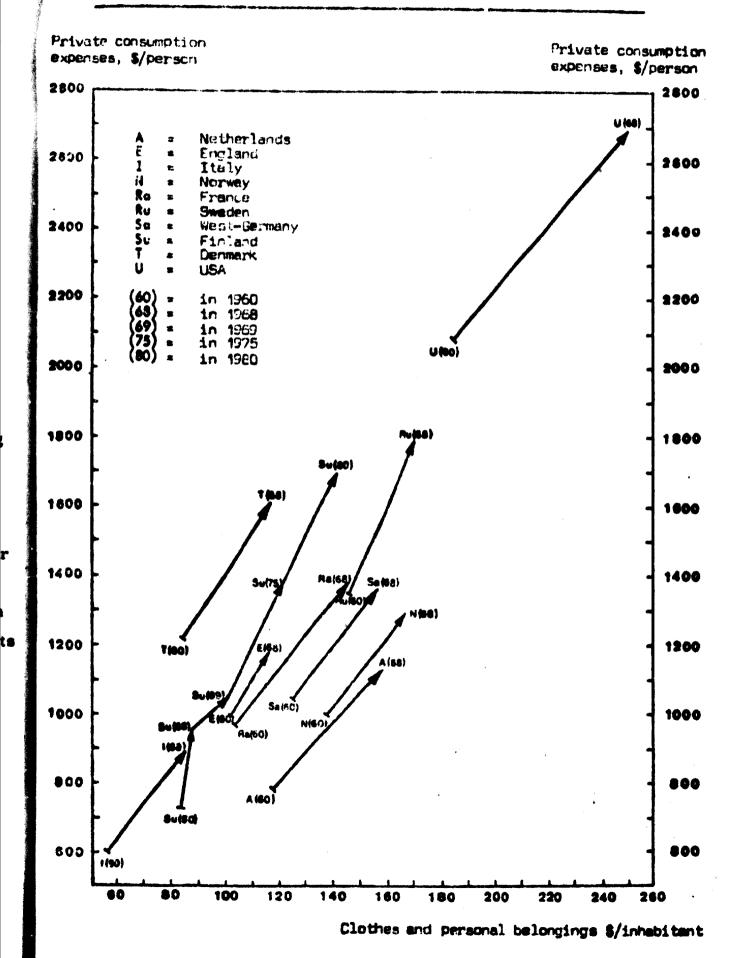
These figures have to be calculated individually from case to case, but one has to keep in mind that working capital requirements can also vary more than 20 per cent from month to month depending on if we are looking at the situation where the production season is in the beginning or near the end when the ready garment stock is at its greatest before the shipments.

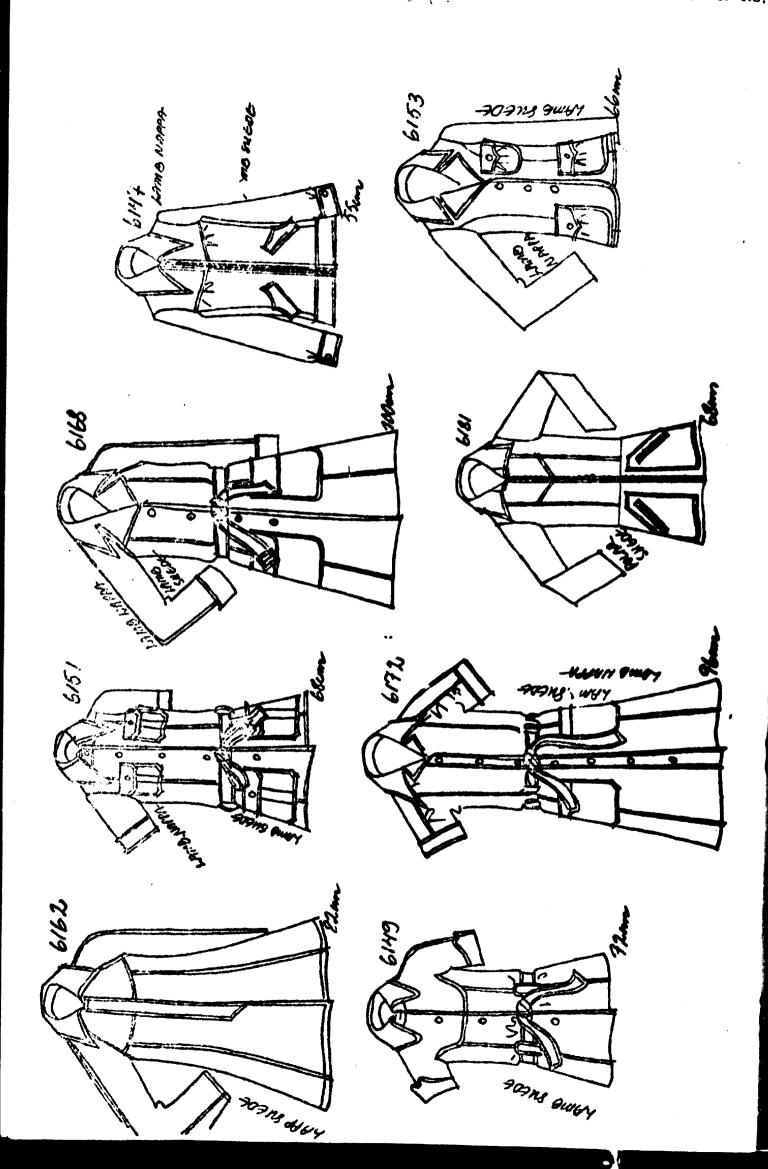
Because of the building, machinery and equipment costs in the beginning of the operation are rather substantial, a loss during the first operation year has to be foreseen, the annual profit will, however, be increasing gradually with the growing capacity and skill of the factory (refer to table No. 5).

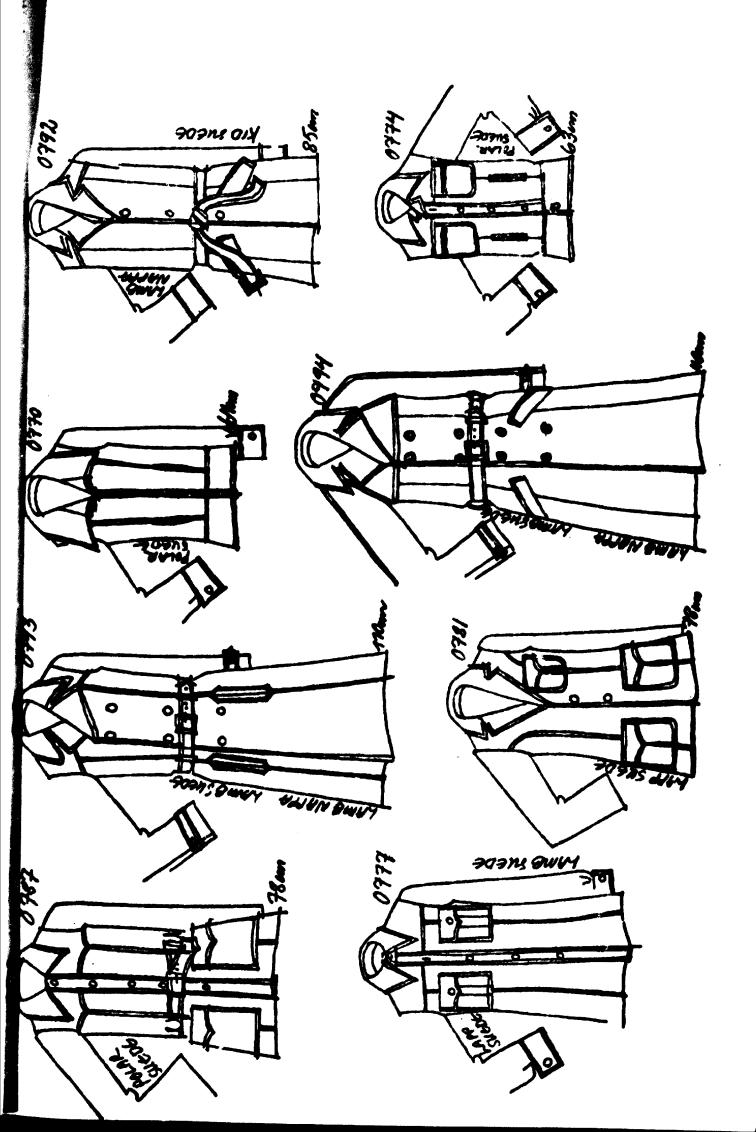
### CONCLUSIONS

The leather world is living in a period of great changes. The consuming public's hunger for natural materials is a trend which cannot be overlooked. The demand for real natural leather is going to be far greater than the available naw-material sources can satisfy. Therefore it is important that all available leather is worked to as high-classed consumer products as possible. To achieve this the countries who have the most substantial raw hide and raw skin sources should try, in cooperation with industries with longer experience, to develop these resources into products satisfying the demanding customers of today.

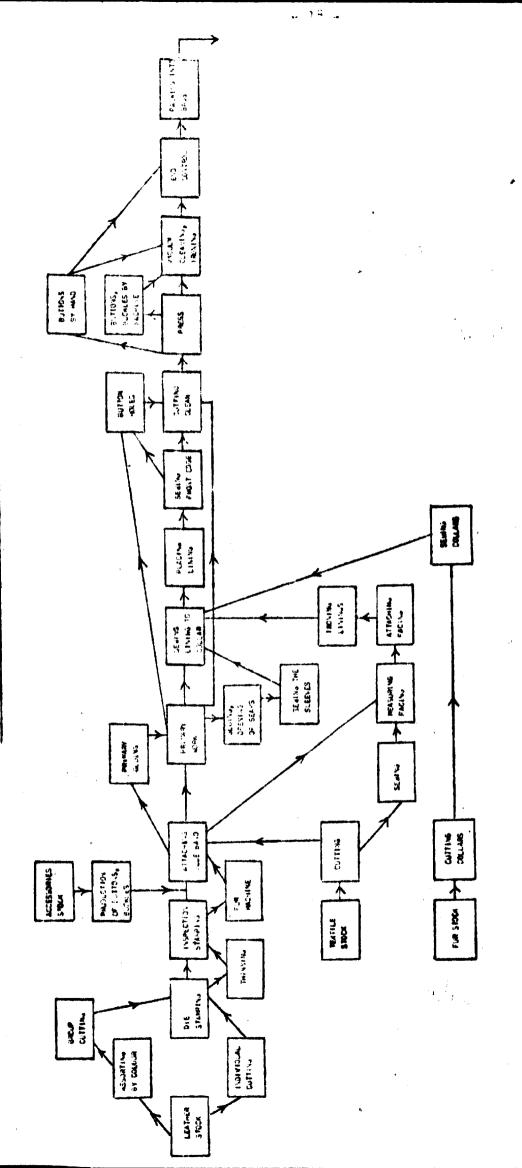
The per capita values, based on the price level of 1968, of clothes and personal consumption expenses as well as of private consumption expenses in some OECD-countries in the years 1960-1968







# PRODUCTION SCHEME OF LEATHER GARMENTS

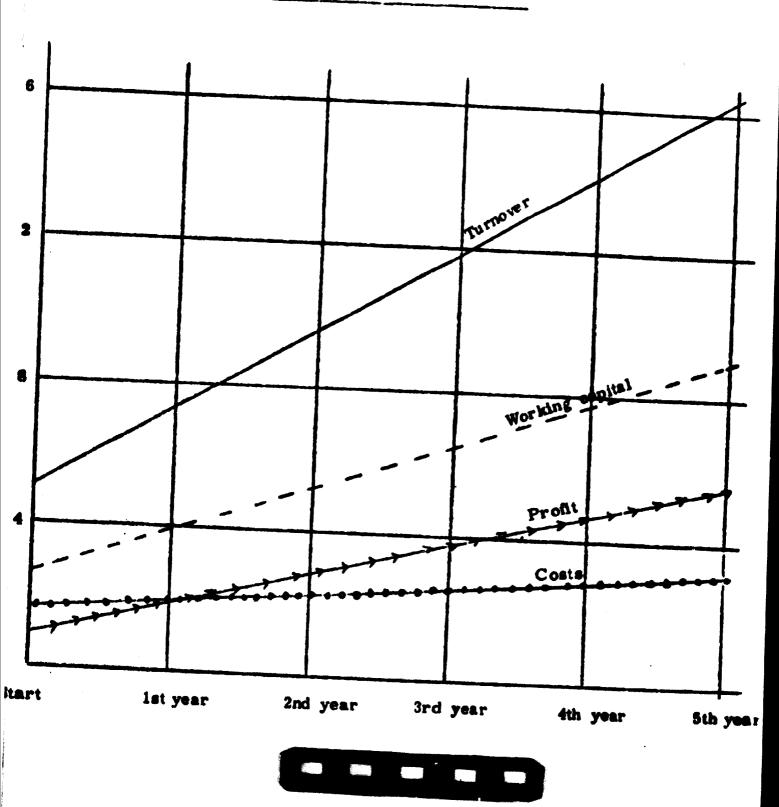


### THE WORK PHASES IN SEWING LEATHER GARMENTS

Assorting the skins by colour Individual cutting Placing the patterns Group cutting Die stamping Thinning Assorting Drawing the linings Cutting the linings Dividing the linings into bundles Ironing the glue fabrics Stretching the collars Cutting the fur collars Sewing the collar with fur machine Sewing the extended pieces with fur machine Making the buttons Making the buckles Counting the accessories Preliminary sewing with normal machine Sawing the pockets with normal machine Seaming with normal machine Double - stitching Sewings with thicker thread Primary gluings Gluing the seams by hand Gluing the button holes Turning the front edge and gluing Gluing the collar edge Spreading the glue with machine Opening the seams with machine Measuring the facing Sewing the sleeves with special machine Sewing the sleeves with normal machine Seaming the linings with special machine Seaming the linings with normal machine Sewing the inside coat pocket and labels Sewing the hem of the lining Sewing the labels Sewing the lining to the facing Sewing the edges of detachable lining

Sewing the collar with fur machine Sewing the fur trimmings with fur machine Ironing the lining Sewing together the lining and the collar Placing the lining Sewing the front edge with normal machine Sewing the front edge with cutting machine Sewing the from edge with hicker thread Ironing with a press Making the button holes with a machine Finishing the button holes Fixing the press buttons Sewing the buttons with machine Sewing the buttons by hand Fixing the buckles Evening the inside edge of the front piece Cleaning with vacuum cleaner Finishing ironing End control Packing into plastic bags

# Capital and turnover relations



2.9.74