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DEVELOPMENT OF FOOTWEAR MANUFACTURING AND LEATHER GOODS
MANUFACTURING INDUSTRIES IN DEVELOPING COUNTRIES ✓

Report of a Seminar
Madras, India
4-13 February, 1974

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INTRODUCTION

The Seminar on the Development of Footwear Manufacturing and Leather Goods Manufacturing Industries in Developing Countries was held at Madras, India, from 4 - 13 February 1974, following the Ninth Tanners' Get-Together convened by the Central Leather Research Institute (CLRI) of Madras as part of the International Leather Fair. The United Nations Industrial Development Organization (UNIDO) and CLRI jointly organised this regional project for Asia and the Far East to discuss the problems associated with the development of the footwear and leather goods industries in the region. Discussion of the various aspects of both industries, including investment and management considerations as well as the transfer of technology between developing countries, and the presentation of country statements by participants from the region were complemented by an extended tour of tanneries and other industrial plants at Madras, Ranipet, Vellore, Ambur, Vaniyambadi, Agra and New Delhi, in the course of which the problems facing the industry in India were studied and, in certain cases, solved.

I. ORGANIZATION OF THE SEMINAR

The Seminar was intended to bring together participants from developing and developed countries to discuss the techno-economic aspects of developing the footwear and leather goods industries in the region. The lecturers invited were industrial experts of international renown, managers of leather-processing plants or persons closely associated with leather research and development work. Participants nominated by the Governments of developing countries were persons occupying managerial or policy-making positions in the footwear or leather goods industries in their own countries. Observers who met the same qualifications also attended and actively participated in the Seminar.

In an address of welcome delivered by J.W. Parkinson on behalf of the Executive Director of UNIDO, attention was drawn to the added value developing countries could derive from the effective utilization of raw materials in the footwear and leather products industries, in which consistent quality and design awareness were determinant factors. Furthermore, in view of the similarity of economic conditions in many developing countries, mutual technological assistance could be conducive to the establishment and development of viable industries.

An inaugural speech was given by M. Santappa, Director of the Central Leather Research Institute, who advocated success through the infrastructural development of the footwear and leather goods industries, supported by appropriate technology and standardization in concert with an effective marketing policy. He went on to stress that in the present period of international economic re-adjustment precipitated by the currency and energy crises, the developing countries should utilize fully their total raw material resources, which held the key to real economic power.

The Seminar was attended by 16 participants from the following countries or areas: Afghanistan, Bangladesh, Fiji, Hong Kong, Iran, Malaysia, Nepal, Republic of Korea and the Philippines.

In addition, 122 observers came from the following countries: Burma, Hungary, India, Somalia, Spain, Switzerland, and the United Kingdom of Great Britain and Northern Ireland.

The lecturers came from Finland, the Federal Republic of Germany, India, Spain, United Kingdom of Great Britain and Northern Ireland, United States of America, and Yugoslavia.

The following persons acted as chairmen of the technical sessions:

- M. Santappa (India)
- M. Paniker (Spain)
- O. de Guzman (Philippines)
- A. Nagappan Chettiar (India)
- B. Harvey (United Kingdom of Great Britain and Northern Ireland)

J.W. Parkinson (UNIDO) served as seminar co-ordinator. R.D. Higham (United Kingdom of Great Britain and Northern Ireland) acted as Rapporteur.

UNIDO commissioned 18 documents (see annex I) dealing with topics related to the agenda items. These documents were distributed to the participants, in addition to six country papers which were presented during the Seminar.

II. INDUSTRIAL DEVELOPMENT OPENINGS

The Seminar took note of the paper entitled "Problems of establishing a footwear industry and viability prospects for developing countries" presented by R.F. Ledger. The author outlined the plant, machinery and equipment requirements for the establishment of large, medium and small-scale footwear production units, and indicated the best means of utilizing local skills as well as the benefits to be derived from proper marketing.

In the ensuing discussion, the Seminar dwelt at length on the suitability of certain leathers for footwear manufacture, in particular the utilization of leathers containing vegetable tannins. It was felt that further processing of vegetable-tanned leathers could render them suitable for modern footwear production; alternatively, more full chrome-tanned leathers could be produced.

Attention was drawn to the different basic requirements of the markets of countries with tropical as opposed to temperate climates.

The discussion then centred upon the difficulties encountered when considering the correct equipment for factory. The Seminar warned against succumbing to high-pressure salesmanship on the part of machine manufacturers, and advised entrepreneurs to seek the guidance of independent expert bodies or organizations, such as UNIDO, which were fully equipped to supply equipment procurement and contracting services. The Seminar also drew particular attention to the risks inherent in the purchase of second-hand machinery and equipment.

The success of a certain European country, which had also been emulated by a country in the Latin American region, was cited as an example of effective penetration of large export markets by means of fashion-oriented leather footwear.

The Seminar also took note of the superabundance of labour in many developing countries, the productivity of which was lower than that of labour in developed countries.

The Seminar considered the paper presented by P. Hollemaa entitled "Some aspects concerning leather clothing production and marketing", in which the author drew attention to the growing demand for leather clothing of all kinds, stressed the advantages open to countries with abundant hide and skin resources, and emphasized the need for careful marketing and appealing design. The importance of brand names and the effectiveness of tanners' consortia were highlighted, and an approximate indication was given of operating costs with reference to large-scale rather than small-scale production units.

It was pointed out in the course of the discussion that followed that long-range production planning was essential if investment were to be attracted and loans secured.

The Seminar was informed that the fundamental ingredients of a successful leather clothing enterprise were good and consistent product quality, designs that satisfied the market demands, and punctual delivery. With respect to the first prerequisite, batch-by-batch colour consistency in the leather supplied to the garment manufacturer was essential. The models shown at international trade fairs could in effect be regarded as obsolete at the time of showing, since design had to be far in advance of their presentation to the market. Hence, no benefit could be derived from copying fashions, and aspiring manufacturers were advised to establish direct contact with international fashion and design councils in order to keep abreast of fashion trends and social moods in their prospective markets. Emphasis was placed on the equal importance of the design, production, marketing and financial functions within a company in this field, since greater stress given to any one sector was detrimental to the over-all structure of the enterprise.

In the paper entitled "Problems of leather auxiliary link industries in developing countries", presented by M. Santappa and K.J. Kedlaya, attention was drawn to the fact that the leather industry also generated a large number of link or feeder industries,

which, if actively supported by the state, preferably in collaboration with other developing countries, would increase local employment opportunities and, in turn, improve national economies. The assistance that such organizations as UNIDO and CLRI could provide in this sector was also emphasized.

In the ensuing discussion, it was remarked that experience had shown that within trade blocs, it was frequently difficult to reach agreement upon measures relating to the free passage of materials between countries. Attention was drawn to the escalation of prices demanded for chemicals and auxiliaries used in leather manufacture. Prices had begun to rise long before the dramatic increase in oil prices had occurred. However, it was pointed out that the shortage of petrochemicals had existed for some time as a result of the lack of investment in new manufacturing plants.

The content within the total value of leather occupied by chemicals and auxiliaries was small. It was suggested, therefore, that high import duties conflicted with the interests of the industry since the chemicals required to manufacture the quality leathers needed in the export market were not so readily available on account of their inflated price and the complex import licensing procedures.

The importance of link industries was also underscored in two papers with the same title, "The necessity to encourage link industries and ancillary trades to obtain supplies of materials from local sources. Can governments play a bigger part?", presented by T.K. Parthasarathy and K. Radhakrishnan. The necessary development of various branches of the light industry sector, such as electro-plating, machine tools, adhesives, linings, packaging and printing, should be promoted by Governments, which should also consider the establishment of testing and design centres and display units. Furthermore, Governments could provide further incentives in the form of tax concessions, import liberalization and changes in regulations, if and when applicable, the most significant contribution being financial assistance through state financial bodies or nationalized banks.

The Seminar questioned the need for such reliance on government support, which should be sought only if entrepreneurial initiative were insufficient. A plea was made for lifting the myriad restrictions of the Indian Government which affect many aspects of industrial life, so that the link industries, in fact all industry, could progress and aid the growth of exports. Development openings in the footwear and

leather goods industries were also indicated in the six country statements presented by the participants from Fiji, Hong Kong, Iran, Nepal, the Philippines, and the Republic of Korea.

III. PLANNING CONSIDERATIONS

Participants discussed the paper entitled "Investment and management considerations in establishing new and expanding existing plants in developing countries" presented by H. Auberry, in which particular attention was drawn to market selection, factory location and capital requirements. The lecturer also included sample material and labour-costing analyses as well as a profit and loss statement, and provided basic criteria for equipment selection.

Several participants questioned whether it was preferable for footwear manufacturers in developing countries to aim at the fashion or more traditional footwear markets in developed countries. The general consensus was that the ideal solution lay in the production of an individual style which by virtue of its fashionableness became universally acceptable. It was also pointed out that, even if the potential domestic market were limited, commercial viability could be assured through export orientation. Furthermore, many Governments in developing countries were willing to grant industrial growth and export incentives to new industries. Under such circumstances, competition from imported footwear should not be feared.

It was remarked that, prior to entering the export market, footwear production units should have been in operation at least 12 months to give time to overcome any teething troubles. Overseas marketing should be approached with maximum discernment, so that products would be presented to the market in the most advantageous manner. An allusion was made to the experience of the Italian footwear export industry which had been transformed through co-operation with major overseas purchasing organizations that were fully cognizant of the market needs and consumer preferences in the respective regions. Italian success had been shaped by the Italian manufacturers' willingness to yield to the specific requirements of the buyers.

National exhibitions with government participation in purchasing countries were felt to be of definite value in establishing business relationships on a sound basis.

Y. Nayudamma, Director General of the Council of Scientific and Industrial Research at New Delhi, spoke on behalf of the Indian Government and stressed the need for proper assessment of the individual developing countries' developmental requirements, with particular reference to India.

He posed several challenging questions, such as the necessity for the mass production of Western-style footwear in tropical countries, the appropriateness of traditional footwear to other developing countries with similar climatic conditions, the need to promote local design artistry to improve the sales potential of traditional styles, and the continued necessity for the importation of machinery and chemicals.

He advocated further development of cottage industries as an employment generator which would also ensure greater freedom from multinational companies. Better management was also of prime importance in small-scale industries, and much could be gained from the definition of the optimum size for a footwear manufacturing unit in India. International co-operation was undoubtedly welcome, provided the development was truly beneficial to the developing country. The importation of capital and technology into India was perfectly legitimate, but the attachment of any "strings" to joint ventures was undesirable. He suggested that suitably qualified teams from India could go overseas to investigate avenues for the transfer of appropriate technologies, which could involve the exchange of research programmes, training programmes and standards. A centre for scientific and technological development in developing countries could prove a useful institution. The Central Leather Research Institute at Madras was already such a foundation in microcosm, and the Indian Government was eager to promote this idea even further.

In reply, it was stated that each developing country should assess its own consumer and external trade requirements. It should not neglect the needs of its home markets, nor should it underestimate the potential sales of its traditional products overseas. Participants were urged to study thoroughly the contents of the papers presented to the seminar in order to extract the information most applicable to their requirements.

Note was taken of the paper prepared by J.A. Rant entitled "Leather goods production planning in small or large units", which was presented on the author's behalf by J.W. Parkinson. Details were given of production flows and emphasis laid on training requirements. It was shown that in developing countries footwear and leather goods

could be produced in the same plant in the initial stages of development. However, successful operation was dependent upon efficient quality control and adequate operational skills, which had to be taken into consideration at the earliest planning stages.

In the ensuing discussion, it was pointed out that small leather goods factories could be based upon the scrap leather accruing from tanneries, footwear and leather garment factories, thus paving the way for larger integrated units which ensured maximum utilization of available raw materials.

IV. PROCESSING CONSIDERATIONS

The Seminar noted the paper entitled "Finished leather which is used in the manufacture of footwear and leather goods", prepared by M. Luginbühl and presented by R.L. Sykes, in which the author drew attention to raw material characteristics during the tanning, dyeing and dressing of upper leather. He also emphasized the importance of adequate storage facilities and the need to provide a resistant dressing and finish in keeping with customer requirements, thus making close co-operation between the tanner, shoe manufacturer and supplier of auxiliaries absolutely essential.

The speaker commented on the paper in the light of his own experience, and stressed the need for regular testing of leather consignments as they left the tanneries in order to ensure that manufacturer requirements should be properly met. It was deemed desirable for shoe manufacturers to be advised of the type of finish applied to the leather, thus facilitating the repair of any damage to the finish incurred during processes.

The proportion of grain in a grain split had considerable bearing upon the unit strength of the leather. A low substance side leather grain split would have a correspondingly low strength.

Knowledge of the shrinkage tendencies of various leathers was desirable. The virtues of sensible leather storage were fully expounded, and the importance of the use of correct auxiliaries to obtain the range of properties desired in the finished leathers was also indicated.

It was remarked that fashion was created and could not develop naturally. However, the forces that created fashion were not clearly definable, and the requirements of fashion should be balanced by the technical parameters involved in the production of

leather and shoes. Technologists should, therefore, be admitted to the design department at an early stage. It was essential to have a thorough knowledge of the limitations of the materials being utilized.

The Seminar discussed the paper entitled "Footwear design, patterns, cutting dies, lasts and units of leather and synthetics" presented by P. Panter, who described the successful production of a salable shoe based on previously identified market requirements. He stressed that companies had to be market-oriented from the outset. Shoes should be viewed in the context of the ready-to-wear business and, consequently, should complement clothing fashions. To be successful a company had to be able to deliver the right product at the right time at the right price of the right quality.

Despite the exacting nature of the latter exigency, several persons asserted that it was a necessary objective. Most footwear manufacturers in the developed countries considered their products a success only when the customers returned for a second pair; it was clear, therefore, that a good reputation was essential to continuing commercial credibility.

The pattern of footwear manufacture was noted to have radically changed since 1945, when shoe manufacturers had most probably produced all their own components. It had since proved more efficient to purchase standard components from specialized manufacturers. Unit sales fell within this category, and these easily satisfied footwear requirements. It was pointed out that a compromise between the essentially artistic nature of the designer and the technical approach of the pattern-maker should form the basis for the production of fashion footwear. Developing countries should be able to plan ahead, taking into consideration all the points considered in the paper. It was remarked that several Latin American manufacturers were currently preparing collections for spring 1975.

Emphasis was laid on the fact that building an image as an imaginative footwear manufacturer was preferable to copying the designs of others, notwithstanding the fact that only 25 per cent of the total footwear market could be construed as the fashion market. Hence, a company should decide where its forte lay and manufacture accordingly. The highest degree of success could be enjoyed by companies in the developing countries in what was termed the "bread-and-butter market".

In response to a query about a return to the greater use of leather in shoes, it was stated that the increased utilization of leather was beneficial in cost terms since the shortage of petrochemicals and the higher oil prices were forcing up the cost of many alternative shoe materials. One of the manifest advantages enjoyed by the developing countries was their abundant raw material resources which could be converted into reasonably priced footwear for the world market. It was also emphasized to the participants that the footwear market in the developed countries was highly segmented, and it would be in their interests as a whole to assess their ability to supply these individual segments.

The importance of effective training procedures was high-lighted in the paper entitled "Training of middle management and personnel for leather products industries", presented by H.E. Stoll. It was shown that production performance could be improved through proper motivation by increasing an employee's awareness of his contribution to the company; active participation in training courses was conducive to this aim. Details were given of various types of training courses and an assessment was made of their results, which demonstrated that management through learning and teaching was most effective.

The Seminar welcomed the concept of active teaching, which encouraged the trainee to generate his own ideas and to contribute to discussions. It was also felt that teacher training was imperative, especially in the areas of lesson content, the psychology of teaching, and the use of visual aids.

In companies in developing countries whose size did not justify the establishment of a plant training centre, managers should apply training on a small, yet systematic basis in order to gradually achieve better production targets. It was also thought that managers would benefit from visits to developed countries in order to observe training methods and procedures.

No stratum of management should be exempt from training; successful upper echelon management courses had confirmed the value of training. But horizontal and vertical cadres should be set up within companies to ensure efficient movement of ideas in the interests of productivity.

It was pointed out that the higher the level of the executive who convened the training committee within the company, the better would be the results. The executive himself should also learn from the exercise. With regard to the basic principles of training, it should be made certain that the language and terminology used should be thoroughly understandable. Training should involve actual practice in the job taught as well as an assessment of performance so that weaknesses could be subsequently rectified.

It was suggested that a distinction be made in training time between training at home and training during office hours. Training on office time demonstrated that top management was serious about training programmes.

Participants also discussed a paper prepared and presented by J.F. Burroughs entitled "Production, quality and process control in footwear units", in which the author identified major problem areas and the manner in which quality and process control could be used to maintain an effective quality policy. Having established that a limited number of causes were the source of major quality costs, he set forth the priorities for corrective action and indicated its implementation at various levels, with due consideration given managerial and supervisory responsibility.

A discussion ensued on quality incentives: departments within a shoe factory should establish quality target levels, the achievement of which would be rewarded by wage bonuses or social benefits. Wages should always be directed towards giving a balanced reward for both output and quality. Incentive schemes, therefore, should be precisely appropriate to the various jobs: a cutting incentive scheme, for instance, could be successfully operated only when using quality graded leather, and it would be necessary for the supplying tanner to be informed that sub-standard leather would be returned without exception, as was common practice in industrialized countries. Under such circumstances, the person controlling quality was forced to work within certain tolerances since he had to ensure consistency of production quality within that portion of overhead costs allocated to quality control.

Quality control was equally desirable in every branch of footwear manufacture. It was, therefore, felt that such control should be exercised in the artisan and small-scale industries in developing countries in the form of thorough work inspection; improving quality standards by these simple means would enhance exportability, as well as improve the manufacturers' position in the face of local competition. Apparently, it was not usual for shoes to be returned to retailers in developing countries. The Seminar deemed this unfortunate since wearer returns pinpointed production faults. Thus, consumers should be encouraged to adopt a critical stance. Contracts should contain returns clauses so that any sub-standard bulk order could be returned.

It was suggested that numerous buyers from developed countries effected purchases in developing countries purely for price reasons. However, as quality was of lesser importance in such transactions, this practice was not conducive to repeat or long-term business.

In the paper by N. Lakshminarayana, entitled "Mechanised footwear production: the advantages and disadvantages in developing countries", which was presented by K. Seshagiri Rao, the author analysed the structure of the footwear industry in

developing countries, in particular in India, and indicated the constraints upon development. A plea was entered for greater co-operation between the developing countries and for the development of machinery and equipment appropriate to those countries' requirements. It was suggested that a footwear design, development and marketing institute be set up in a developing country to redress the balance between developed and developing countries in the fields of research, design, marketing and trade fairs.

The author also encouraged Governments and international organizations to prepare development blue prints for the footwear industry, possibly through the services of a **footwear industry development corporation**, and he felt that the idea of integrated **tannery-cum-footwear** units should be fostered.

It was suggested that optimum levels of mechanization be determined for different productions. Mechanization could be introduced gradually after maximum use had been made of manual labour. The application of organizational methods to developing industry at this stage was of considerable value since it would identify scientifically the real advantages of mechanized production over manual operations.

An interesting method of mechanization was that of co-operative production whereby a syndicate of small manufacturers purchased a series of machines for distribution amongst their plants. Such operations were a good method of manufacturing on a large scale to satisfy export market requirements, and by virtue of the exercise, the practical mechanization requirements could be assessed. The segmentation of leather manufacture amongst small family businesses had been successful in a major centre in Italy, and it was thought that similar exercises in shoe manufacture could meet with equal success in developing countries. In fact, some small shoemakers in India were already operating in this manner.

Mechanization, if correctly implemented, would not precipitate unemployment as was commonly feared: it would increase productivity per employee. This theory supported the proposition for gradual and limited mechanization. In developing countries, many sophisticated machines designed for use in capital-intensive industry could not be effectively utilized to their full capacity, which was greater than the total daily output of the factory. The machine could not be correctly used owing to its highly technical nature: furthermore, maintenance of the machine and supervision of its operation would pose problems in an environment previously accustomed to manual operations. In view of the abundance of labour in developing countries, every endeavour should be made to use human resources to an optimum degree.

A plea was entered for less institutionalization since the key to commercial success lay in contact with the buyer. This had been the keystone of success in several Mediterranean countries. It was considered fundamental that manufacturers produce according to the buyers' requirements.

Shoe manufacturers in developing countries were observed to be competing with their counterparts in developed countries: in the future, however, they would be increasingly in competition with one another in the European and North American markets, as well as in their own domestic markets.

The Seminar took note of a paper entitled "Materials other than leather used in the manufacture of footwear and leather goods" presented by B.C. Harvey, who described developments in the field of synthetic bottoming and upper materials as well as "support components". The various materials were described and compared with leather in terms of the shoemakers' and wearers' requirements. Indication was also given of more recent developments using various materials which had yet to prove superior to those currently used.

The speaker expanded upon his paper with reference to marketing, splitting the market into three segments: conservative footwear buyers, middle ground and the fashion buyer, the first two segments governing some 75 per cent of the market.

It was pointed out that fashions tended to change every six months, whereas changes in conservative footwear occurred only every seven years or thereabouts. It was also stressed that traditional styles from developing countries had already exerted an influence upon Western shoe manufacturers; the Indian "chappal" and the desert boot were cited as examples.

The speaker also explained in detail the development of a shoe manufacturing company in the United Kingdom, revealing that its origins and early development were comparable to those of numerous enterprises in developing countries today.

Practical low-cost research and development programmes were advocated. It was also remarked that the proportion of leather clothing in the high fashion bracket was higher than that of footwear; thus in export market terms a greater amount of design innovation was needed in leather clothing. The importance of establishing a good brand image was stressed; however, brand images could be damaged by the inclusion of ordinary lines. Hence, a second brand name should be adopted: a principle that applied to both footwear and clothing.

The suitability of various component materials was discussed. It was felt that in view of the rising costs of man-made materials throughout the world, shoe manufacturers entering the field should concentrate on leather. The developing countries had at their disposal the means to penetrate the markets in developed countries. The cost of producing all-leather shoes in developing countries was much lower than production costs in developed countries. Consequently, the situation should be fully exploited since the all-leather shoe was in great demand.

It was felt that it would be expedient for the manufacturers in developing countries to work with manufacturers in developed countries whom they would supply with leather shoes in order to fill the vacancies in the over-all range. Dependability and punctuality were essential when working over extended lines of communication.

In manufacturer/buyer relationships, the best results could be obtained through mutual investment plans.

The Seminar considered the paper entitled "Quality control and standardization in footwear and leather goods industries for consumer protection" presented by S. Bangaruswamy, in which emphasis was laid on the need to introduce quality control and standardization in footwear and leather goods industries, as well as various quality control measures in respect of raw materials and finished products. An outline was also given of the future course of action in the field of application of quality control in these industries through the introduction of newer test methods, more recent and appropriate testing instruments and training procedures.

It was observed in the ensuing discussion that a super-abundance of standards could exercise a deleterious effect upon regular production. Tanners' production control should concentrate upon the consistent chemical analysis of the leather and on certain physical properties which, under the ideal circumstances, should conform to the production processes subsequently adopted by the manufacturer.

Conversely, the manufacturer should monitor the performance of leather in the light of his own manufacturing processes and the final performance of the product when worn. It was thus evident that standards should be selected, and that they should be the subject of agreement between the buyer and the seller in relation to both domestic and export sales.

The most important type of quality control occurred during manufacture since it was clear that inspection at the finished product stage could only be disastrous. It was

felt that there was no reason for not applying simple quality controls to the cottage industries since an artisan should be capable of making adjustments to his work. In all quality-control exercises, a certain percentage of rejections occurred, and export rejects should be sold on the home market.

V. MARKETING

The Seminar took note of the paper entitled "Prospects for increasing exports of footwear and leather goods from developing countries" presented by R.D. Higham, in which an indication was given of the manner in which developing countries could take further advantage of their raw material resources. Before embarking upon the production of more advanced products, they should take steps to ensure the proper marketing structure, marketing ability, market demands and adequate technology. Although the production of "ready-to-finish" leather offered good return on capital plus high value added in terms of foreign currency, the increase in relative value between raw hide and a shoe was of the order of 1,000 per cent. Given the increased demand for footwear on the domestic markets and the export openings for all-leather shoes and leather goods, prospects were good in the developing countries for both footwear and leather goods production on an industrial scale.

In the ensuing discussion, the participants from the developing countries were asked to describe the footwear import restrictions imposed in their own countries. The answers ranged from total embargo through various import tariff levels to free entry. A comment was made upon the demand for gloving, as the sharp rise in the production of clothing leathers had restricted the amount of skins available for gloving manufacture. Market research had recently shown that the demand for gloves would rise very slowly over the next eight years, a situation that was in balance with the present increased level of garment manufacture.

Reference was made to the glove industry in the Philippines which imported gloving material from developed countries for the manufacture of gloves that were then exported, thus demonstrating that developing countries did not have to wait until the right raw materials were locally available, but that a thriving industry earning foreign exchange could be based exclusively upon the availability of local labour using imported materials.

In his paper entitled "Difficulties and problems which arise in the marketing of footwear and leather goods in developing countries", P.Z. Baldik identified the shortcomings in India as being poor hide quality, shortage of both tanning materials and

footwear machinery, inadequate supply and fluctuations in price of rubber, the poor profit margins for manufacturers and the bewildering array of market requirements. Indian footwear exporters encountered difficulties in competition with other international manufacturers, and were hampered as well by long delivery periods and changes in fashion. The paper, however, indicated areas for improvement, involving increased government assistance in the import of necessary equipment on the basis of performance vouchers, vertical integration of the small-scale sector, promotion of finished leather production, and the establishment of a design centre.

In the ensuing discussion, it was shown that the developing countries' opportunities for exporting to the developed countries were affected by the politico-economic conditions of local markets. The elevation of oil prices might herald a serious depression, in which per capita consumption of footwear would be reduced. This notwithstanding, the prevailing weather conditions made the wearing of footwear essential. In order to develop the footwear industry in a developing country, government protection in the form of footwear import restrictions and direct incentives to the industry were both beneficial and desirable. However, developing countries were advised not to rely wholly on such measures. Self-help and initiative had lain behind the success of many present major enterprises in the leather industry sector.

The problems of marketing were debated at great length: marketing footwear in rural areas was a problem peculiar to all developing countries. In India, the turnover of small retailers in villages was very low. Nevertheless, penetration into this market by the big manufacturers was deemed worthwhile since the villagers seldom visited the large towns where the majority of retail stores were located. In fact, there was a slowly rising demand for footwear in the rural areas of India. Marketing activities on two levels could thus be discerned.

It was felt that small artisan shoe manufacturers could market and retail their products through a government organization, although there was a danger of over-dependence on government agencies. Small manufacturers could in fact sell certain hand-made footwear, such as "chappals", through the large chain stores which did not produce such items themselves.

Since 80 per cent of India's population resided in rural areas, fashion consciousness was low. None the less, an institute for garment and footwear design would be desirable so that India could design for the world market. Caution was advised with respect to the disposal of goods once they were out of fashion. The rapidity with which fashion changes justified the high mark-up applied by retailers, since later disposal at even very low prices was often impossible.

Developing countries, on initially entering footwear production, should commence with a limited range with the aim of substituting the main lines of imported footwear. It was emphasised that marketing costs should not be underestimated so that a good reputation could be built through delivering goods on schedule. It was, therefore, politic for manufacturers to guard against discontinuity in every function of manufacture.

Manufacturers in developing countries should urge their governments to offer air freight subsidies. Packaging for exports was very important since goods had to arrive at their market destinations in perfect condition. Packaging should thus be able to withstand the rigours of long distance deliveries, often through different climatic zones.

It was postulated that an excellent formula for success could be found in teamwork.

In her paper entitled "The role national trade associations can play in the promotion, liaison and contact with government departments", M. Paniker outlined the means by which developing countries could best penetrate the discerning footwear market. Collaboration through trade associations would permit the planning of long-term price policies as well as facilitate the collection of market intelligence, whilst keeping the members abreast of the latest technological developments on the basis of the industry's evolution.

The opinion was expressed that the future of the leather and leather products industries in developed countries depended increasingly upon capital intensification and the adoption of the very latest technology. These had not hitherto been discussed since they were not appropriate to the needs of the developing countries. However, the latest technology was already overcoming the problems of escalating labour costs and effluent disposal. Furthermore, an increase in meat-eating habits was resulting in an increased supply of raw hides in the developed countries, thereby partially alleviating the problem of raw material supplies. The future of these industries in developing countries was thus assured to a certain degree.

It was agreed that the furtherance of international trading would benefit the developing countries, and reference was made to a recommendation made at the UNIDO Workshop on Leather Industry Development in Developing Countries, held at Vienna in August 1973, which had called for revitalization and co-ordination of the existing international techno-chemical and commercial associations to ensure full recognition of the legitimate interests of developing countries.

It was also suggested that UNIDO assistance should take into account the development aims of the country. UNIDO assistance, it was felt, reflected what had already been established in the developed countries, whereas the country concerned should follow the course of progress if desired. The advice of UNIDO should be sought when a country could not identify its problems. Assistance could then be offered through an appropriately formulated project. Attention was drawn to the fact that government officials frequently lack an essential knowledge of the industry which often resulted in the erroneous selection of project personnel. Joint ventures at the company level and subcontracting arrangements under United Nations guidance were recommended, whereby executives from developing countries could receive training in developed countries.

VI. RESEARCH AND DEVELOPMENT

In the paper entitled "The research and development of leather for the footwear and leather goods industries using indigenous raw materials" presented by W. Rieger, the relationship between domestic raw material, leather production, and leather processing was demonstrated. Although medium and large-size companies were better suited for expansion, even the smallest plant was shown to be capable of development. Integration into production groups, without complete loss of independence, was conducive to such development, the main prerequisite being the capability to produce leather of good, uniform quality.

With reference to tannery machines, it was pointed out that difficulties were often encountered in obtaining spare parts. It was suggested that plants should install machines from a limited number of companies, thus making for less diversity in the mechanized section of the tannery. A cautionary note was added with respect to the use of sophisticated machinery in the light of maintenance and operational problems. Attention was also drawn to simple effluent treatment measures.

It was remarked that the emphasis upon good maintenance engineering was fundamental, whilst the capacity to build simple equipment, such as drums, dryers and conveyors, was not only important but also cost-saving. Furthermore, better collection and preservation of raw hides and skins in many parts of the world would yield an increased and improved supply of raw material, without increasing the livestock population or slaughter rate, the principle hindrance being the lack of sufficient reward to the farmer or rural butcher for looking after the hide on the animal in the first instance and treating the hide properly after slaughter.

The Seminar also considered the paper entitled "Standard footwear sizes for children" presented by N. Ramanathan and B. Venkatappaiah, in which an analysis was made of the predominant sizing systems. The suggestion was made that size markings on the shoe should be the length of the foot in millimetres, taken in the weight-on position, and the width of the foot. Other parameters such as instep, joint girth and heel would have to be taken care of in the manufacture of the shoe. It was felt that the adoption of this method would permit the development of suitable sizes and fittings for any region or country.

The Seminar welcomed the paper as an endeavour to emerge from the plethora of sizing systems. At the same time, it was reported that an international system had been sought for many years, and the International Organization for Standardization (ISO) was currently formulating such a system. It was suggested that the findings contained in the paper be brought to the attention of the ISO Technical Committee 137 for serious consideration.

It was pointed out, however, that the smaller gradations propounded in the paper could meet with consumer resistance owing to increased frequency of buying and the costs involved. Retailers of footwear would also be required to carry much larger stocks. One of the greatest problems confronting any new apparel calibration system was making it comprehensible, and hence acceptable to the public.

Problems also emerged with respect to translating foot girth into a last. It was essential that the correct cross-sectional area be obtained, a factor that could vary within the same girth measurement.

Annex I

LIST OF PAPERS SUBMITTED TO THE SEMINAR

<u>Rubber</u>	<u>Title</u>	<u>Author</u>
ID/WG.169/1	Problems of establishing a footwear industry and viability prospects for developing countries	R.F. Ledger
ID/WG.169/2	Investment and management considerations in establishing new and expanding existing plants in developing countries	H. Auberry
ID/WG.169/3	Leather goods production and production planning in small or large units	J.A. Rant
ID/WG.169/4	Training of middle management and personnel for the leather products industries	M.E. Stoll
ID/WG.169/5	Production, quality and process control in footwear units	J.F. Burroughs
ID/WG.169/6	Mechanized footwear production. The advantages and disadvantages in developing countries	N. Lakshminarayanan
ID/WG.169/7	Materials other than leather used in the manufacture of footwear and leather goods	B.C. Harvey
ID/WG.169/8	Prospects for increasing exports of footwear and leather goods from developing countries	R.D. Higham
ID/WG.169/9	Difficulties and problems which arise in the marketing of footwear and leather goods in developing countries	P.Z. Baldik
ID/WG.169/10	The research and development of leather for the footwear and leather goods industries using indigenous raw materials	W. Rieger
ID/WG.169/11	The necessity to encourage link industries and ancillary trades to obtain supplies of materials from local sources. Can Governments play a bigger part?	T.K. Parthasarathy
ID/WG.169/12	The necessity to encourage link industries and ancillary trades to obtain supplies of materials from local sources. Can Governments play a bigger part?	K. Radhakrishnan
ID/WG.169/13	Quality control and standardization in footwear and leather goods industries for consumer protection	S. Bangeraswamy
ID/WG.169/14	Problems of leather auxiliary link industries in developing countries	M. Santappa K.J. Kedlaya
ID/WG.169/15	Standard footwear sizes for children	N. Ramanathan B. Venkatappaiah

Annex I (cont'd)

<u>Number</u>	<u>Title</u>	<u>Author</u>
ID/WG.169/16	Finished leather used in the manufacture of footwear and leather goods	M. Luginbühl
ID/WG.169/17	The role national trade associations can play in the promotion, liaison and for contact with Government departments	Mercedes Paniker
ID/WG.169/18	Some aspects concerning leather clothing production and marketing	P. Hellemaa
ID/WG.169/19	Footwear designs, patterns, cutting dies, lasts and unit soles	P.D. Parter

Annex II

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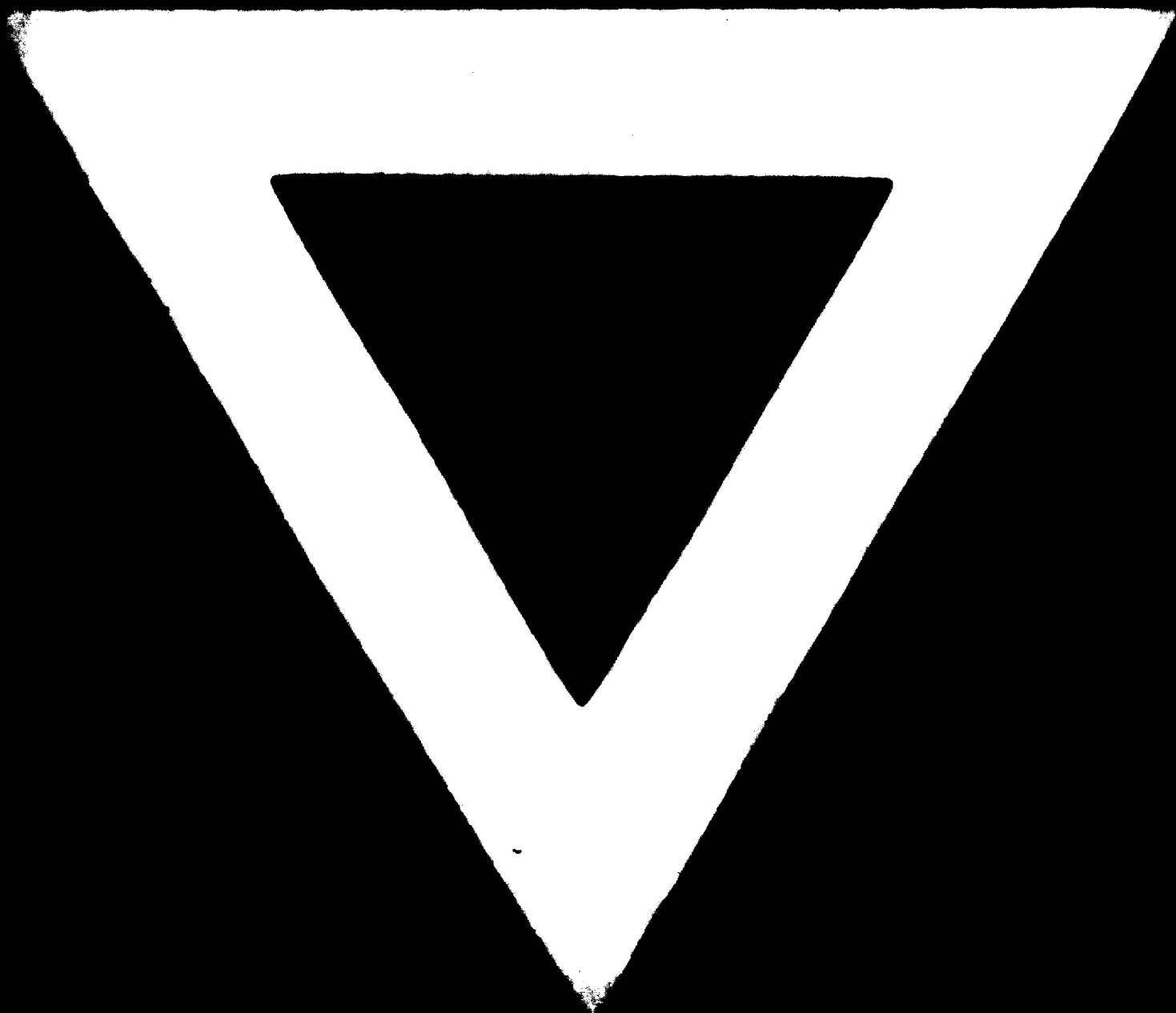
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