

The Shoe and Leather Industry Sectors

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Sub-Regional Workshop on Environmental Requirements, market access/penetration and export competitiveness in the Leather and Footwear Sector
Bangkok, 19-21 November

Table 1: The Shoe and Leather Industry Sectors



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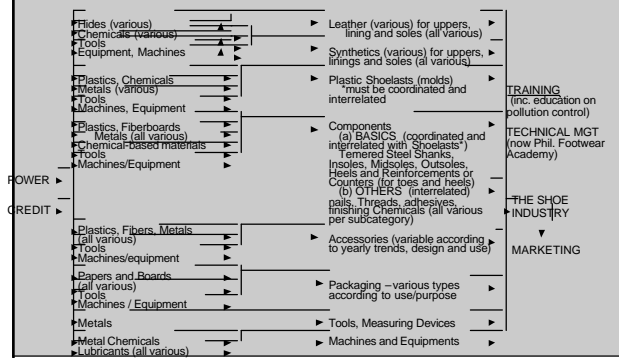
TABLE 2



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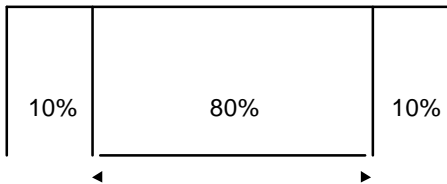
TABLE 3: AN OVERVIEW: The Necessary Elements (and in turn, their own respective elements) in Manufacturing Shoes

(This diagram can be used as base for various other estimated manpower elements per sub-sector)



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Table 4: The Usual Shoe Market

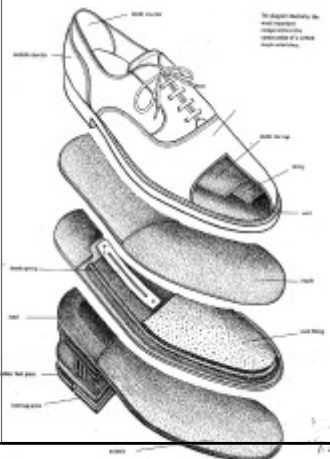


N.B.

- > ASEAN POPULATION-OVER 360 MILLION WITH AVERAGE AGE OF 16 years
- > PHILIPPINE POPULATION - 80 MILLION

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TABLE 5



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Table 6: The 2001-01 Profile the Philippine Leather and Non-athletic shoe industry (Base: Field Study of the GTZ Study Group)

| | EST. NO. Production Units | Principal Footwear products | Production Process |
|--------------------------|---------------------------|-----------------------------|--|
| Marikina City | 460 | Leather and non-leather | Artisan/ Manual/ Cottage Type, Semi-mechanized an fully mechanized |
| Laguna (Bifian and Lilw) | 326 | Non-leather | Artisan/ Manual/ Cottage Industry type |
| Bulacan | 70 | Leather and non-leather | Artisan/ Manual/ Cottage Industry type |
| Cebu | 394 | Non-leather and leather | Artisan/ Manual/ Cottage Industry Type |
| Nueva Ecija | 103 | Non-leather | Artisan/ Manual/ Cottage Industry Type |
| Others | 150 | Non-leather | Artisan/ Manual/ Cottage Industry Type |
| | 1,503 | | |

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Table 7: The Basic Shoe Manufacturing Process

1. Market and Product Research and Development (Design, Costing Sampling and Grading)



2. Organizing and preparing for production

- 2.1 Patterns, graded per design
- 2.2 Various materials for uppers, lining, counters/reinforcements, threads, chemicals, adhesives
- 2.3 Shoelasts and coordinated TS Shanks, insoles and heels per size
- 2.4 Tools, supplies, equipment and machines
- 2.5 Time schedules (of workers and supervisors) including delivery schedules
- 2.6 Costing sheets process



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3. Production Processes and Wastes Generated

| Process | Waste Generated |
|---|-------------------|
| 3.1 Upper making | variable |
| 3.2 Insole and Shanks | none if prefab |
| 3.3 Lasting of Uppers | - |
| 3.4 Heel attachments | none if prefab |
| 3.5 Outsoles | none if prefab |
| 3.6 Finishing (including sock lining and labelling or branding) | die-cutting waste |
| 3.7 Boxing and Packing | variable |

N.B. The upper making process can be formed out as livelihood projects because these are essentially hand sewing of pieces, as per graded patterns, according to sizes

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TABLE 8

All of the measurements needed for developing lasts should be checked to determine whether they can be standardized. The most important areas of standardization are

- the heel
- the contours of shank
- the shank spring
- the curvature of the heel seat
- the cross section of the heel seat
- the cross section of the heel seat

In modern shoe production, shoe lasts have to be standardized and coordinated if best results are to be obtained from certain manufacturing machines. Combining shoe component sizes in groups cut own the cost in production. We recommend taking advantage of the experience of last and shoe component specialists and advise against attempting to develop coordinate independently and with insufficient know-how.

See next slide for illustration
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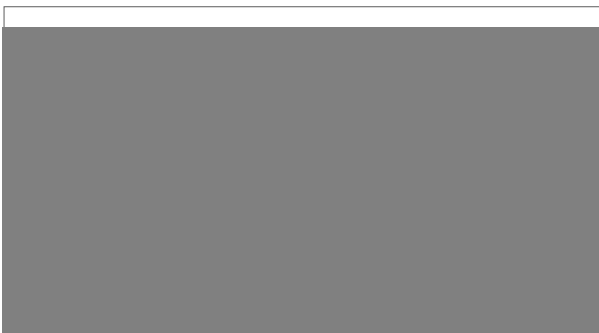


Table 10



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Comparative Summary of the Environmental Aspects of the Manufacturing and Use of Plastic and Wooden Shoelasts

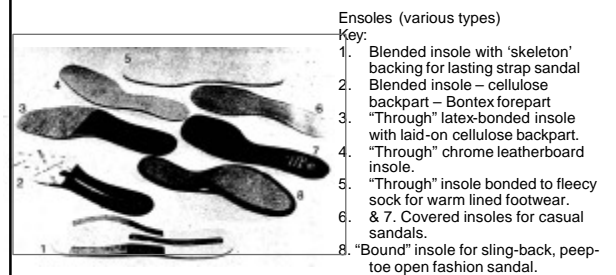
| Production Stages | Plastic Shoelasts | Wooden Shoelasts |
|---|--|--|
| 1. Production of the Shoelasts themselves | <ul style="list-style-type: none"> - Clean for workers and environment: no fumes, no effluents - Plastic material suitable for precision purposes esp. for sizing - By-products (plastic dust don't blend with air) are recyclable) | <ul style="list-style-type: none"> - Lathing processes produce fine wooden dust and shavings which air pollutants and fire hazards - Wooden dust known to cause bronchial and/or pulmonary problems/diseases. Also, wooden dust and shavings contribute to dusty and hazardous workplaces and the neighboring areas. - Wooden materials not suitable for precision/sizing purposes (shrinkage factor) - Used wooden shoelasts cannot be recycled |

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| Production Stages | Plastic Shoelasts | Wooden Shoelasts |
|------------------------------------|--|---|
| 2. During use in shoe factory | <ul style="list-style-type: none"> - Stability, precision an strength of plastic material provide basis for better quality shoes and for greater productivity. Further, plastic shoelasts is indispensable to mechanized production | <ul style="list-style-type: none"> - Unfit for international quality and sizing; cannot be used for large volumes and in mechanized processes |
| 3. After utilization in production | <ul style="list-style-type: none"> - Recyclable-plastic | <ul style="list-style-type: none"> - Cannot be recycled. Commonly used as firewood – thus further contributing to air pollution. (N.B. The cutting of trees/wood for shoelasts directly aggravates the denudation of forests and flooding. |

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Table 12: Components



Leather
 Insoles cut from leather still used in the trade particularly for more expensive footwear, but the amount is diminishing because of the high cost of leather. The leather is usually cut from the belly or shoulder of the hide and is split through its substance where necessary for the grade of footwear. Some heavy hides will give several "splits".

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Table 13: Benefits of Standardization of Shoelasts with Basic Coordinated Shanks (tempered steel) Insoles and Heels

1. Better and comparable quality footwear
2. Better productivity
3. Better costing, price and profit
4. Correct preparations for mechanization
5. Over-all upgrading of manpower skills
6. Better merchandising

Thank you very much!



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