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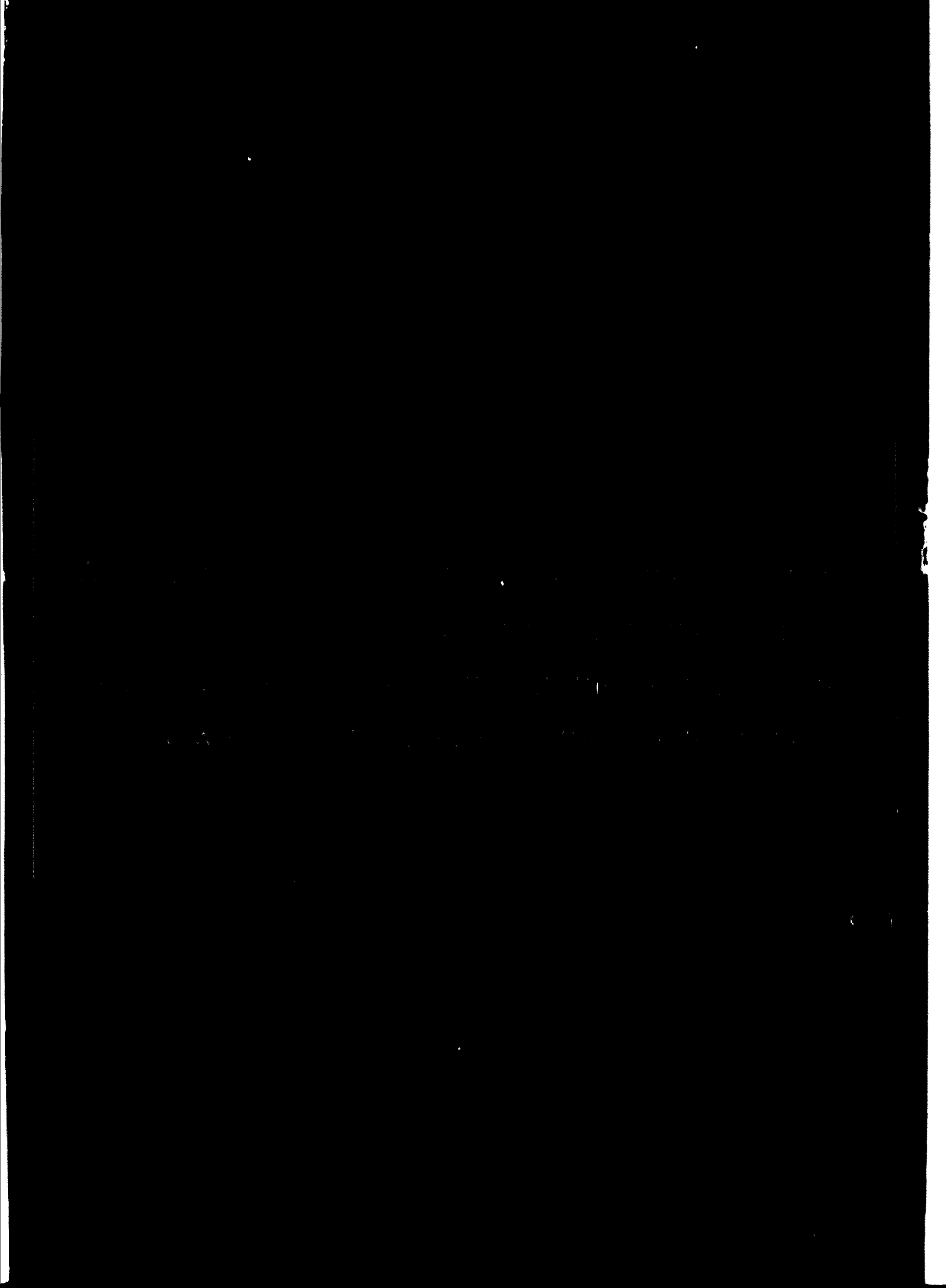
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The Furniture Industry in Ecuador^{1/}

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The furniture industry in Ecuador is quite recent. Traditionally, furniture had been produced at a craftsman level. The real industry just appeared about fifteen years ago. In a way, almost every branch of this industry has been covered. The highest quality of the natural wood produced in this country has been of big assistance for the development of our wood industries.

At this moment in time the furniture market is mainly national although our country exports large amounts of tropical woods, laminated boards, etc.

Although some industries related with furniture production, like textiles and plastics, have reached a high level of quality, they have not yet fulfilled the requirements of producers. Because of this, industrialists who try to improve their product must import the auxiliary materials they need. Our national market does not offer hardwares; consequently we have to import most of them, with the corresponding problems that will be explained later.

The wood furniture produced in our country has good quality in spite of the problems that will be analysed.

In general terms, our furniture industry faces mainly two kinds of problems:

Problems related with some market factors involving raw and manufactured materials as much as consumption of our finished products. These comprise:

1. Stock of fine woods and manufactured boards (mainly plywood)
2. National policies on reforestation
3. Absence of iron and steel industries for production of parts required by the furniture industry.

These are explained in greater detail hereunder:

1. Raw materials

Ecuador is a very rich country in fine woods mainly used in furniture production. These include the following tropical species: balsam, mahogany, laurel, tangare, mascarey and many others.

The volume of fine woods offered on the market is every day lower due to:

- Poor or little substructure which hinders access to productive areas. In winter, communications get even worse.
- Evident scarcity of woods used in most production centers, and finally,
- Large legal and illegal exports of fine woods although our market is not well supplied.

In Ecuador there are a few factories that produce boards like plywood, laminates and particle boards of good quality. Unfortunately, a large amount of this production is exported even though the demand of our national market is not fully provided.

To get these materials it is necessary to make a special order several months ahead of the planned delivery date. This situation causes big problems to little firms because it is necessary to make a previous investment that in most cases creates financial disturbances.

In our particular case, since a great part of our production is dedicated to special contracts rather than to a continuous market, the cash flow control becomes a difficult problem.

2. Reforestation policies:

Even though Ecuador has suffered consequences of deforestation, little has been done to remedy the situation. Policies have been drawn up, but their implementation has faced so many problems that are resulting in the disappearance of natural forests.

There are two main forest areas in Ecuador the NW Provinces and the ones located in the Eastern jungle.

Our government has promoted colonization in these areas, changing their traditional vocation, destroying forests and trying to improve agricultural development.

Besides, national exploitation of forests in terms of starting an immediate replanting scheme is quite recent.

3. Metal industries related with furniture production:

This is one of the most serious problems that producers at industrial level have to face. Ecuador's iron and steel industry is young and small; besides, the quality of its products is insufficient for use with finished wood goods. This obliges the major firms to import, causing tremendous increases in the prices of their final products plus the inconvenience of having to make great investments; in this way, small industries cannot reach the same level of quality.

The non existence of iron and steel parts and hardwares becomes a great limitation on design and quality of firms specializing in interior design.

b) Problems related to technical factors in the production of furniture. These are:

1. Lack of labour in woodworking
2. Lack of specialized training institutes.

These are explained in detail hereunder:

1. Labour problems:

As already said, furniture manufacturing has been a traditional activity at a craftsman level. This defines the kind of labourer we can usually find. Besides, they are mostly related to small workshops in cities like Quito and Cuenca which are centres of the wood industries.

These factors are inconvenient because it is necessary to change the artisans' skill to improve the industrial efficiency of the labourer force.

Some industrialists prefer to hire unexperienced labourers rather than craftsmen, trying to avoid their bad work habits.

2. Training institutes:

Although this point is related to the previous one, it has been mentioned separately because of its importance.

There is a national institute for training (SECAP) but it is quite recent and does not fulfil all the requirements of the furniture industry.

Since there are no specialized institutes for wood industries technology, it is almost impossible to find technical personnel.

Only big furniture industries are able to start their own training courses to prepare their own personnel.

In this way, the development of new techniques, specially for finishings, becomes a long process of testing and in most cases they are not scientifically applied.

The obstacles mentioned are mostly common to all industries in Ecuador.

Factories producing custom-built special furniture and wood partitions face the following additional problems:

1. An actual design problem is related to standardizing as many parts of a custom-built furniture as possible to facilitate production. The non-existence of hardware on the local market compounds this problem.
2. Although it is easy to find a quite simple wood partition assembly and modulation system, but nevertheless the following two inconvenients remain:
 - a) The quality of the wood based panels. Several kinds of materials have been tried, such as: fiberglass, wood boards and paper honeycomb; this last one with the best results, but since it must be imported its price is exorbitantly high. The other ones had many inconveniences related to the panel resistance and the time of assembly.

2) The second problem that is related to the finishing: It would be better to complete this work at the plant to speed up the installation, but two types of finishing tried have proved to be unsuitable since neither had enough resistance. As a result, the finishing is done once the work is installed. (The types of finishings tested were polyvinyl lacquer and oil (including imported flecto finishing); in both cases they were not hard enough).

3. Another problem is related to humidity control of non-coniferous woods, like tropical mahogany that is produced in Ecuador. We have obtained good results by using traditional drying techniques (long periods of immersion in water followed by drying under shade) but the amount of time needed causes also great inconvenience.

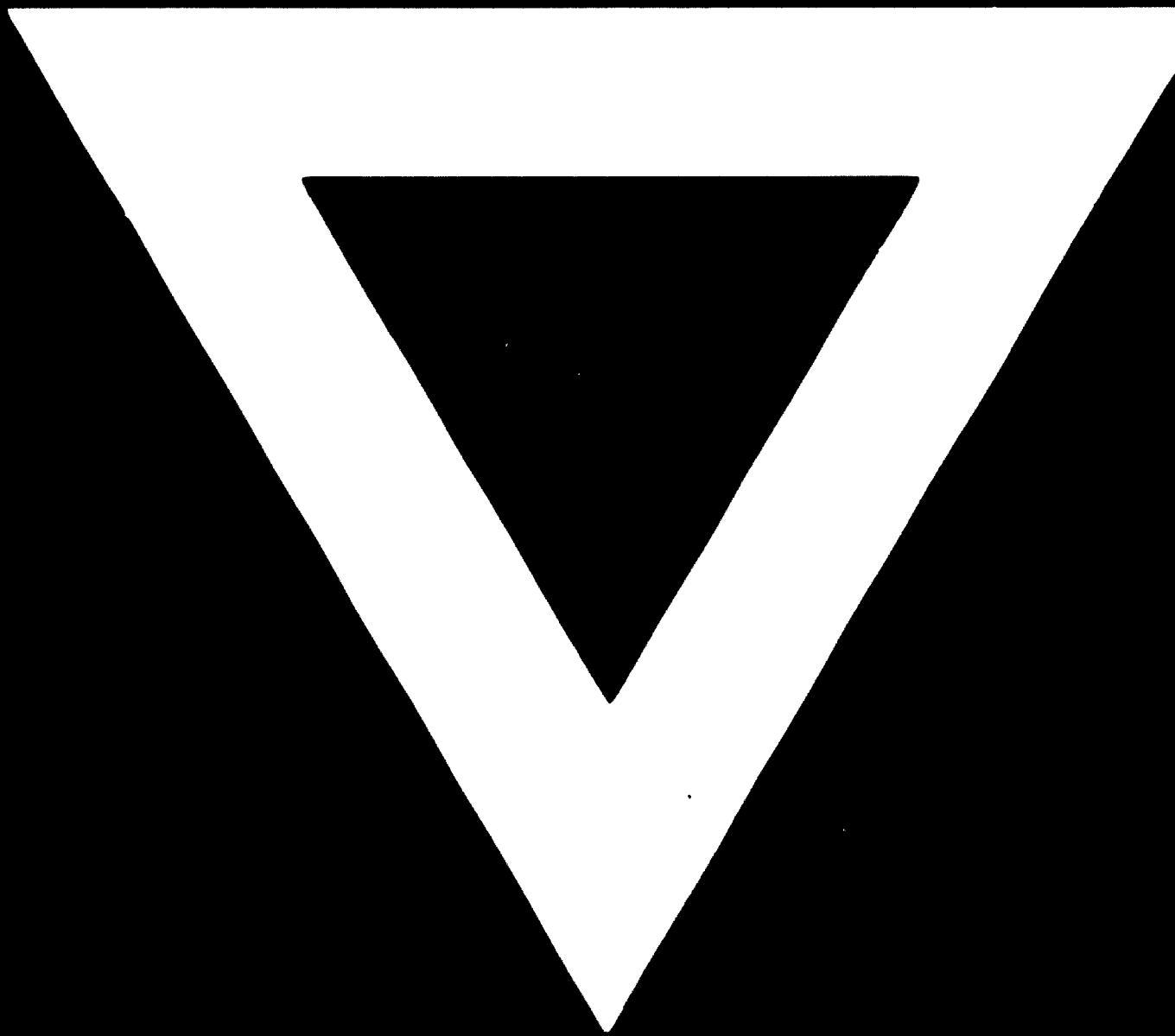
Artificial (kiln) dryings proved to be unsuitable since the colour of the wood was changed, and the timber had deep cracks or splits.

4. Generally, technical bending and modelling of wood boards have been little used here, this technique is practically unknown.

Most of the problems that this industry faces in Ecuador are due to lack of experience at industrial levels.



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