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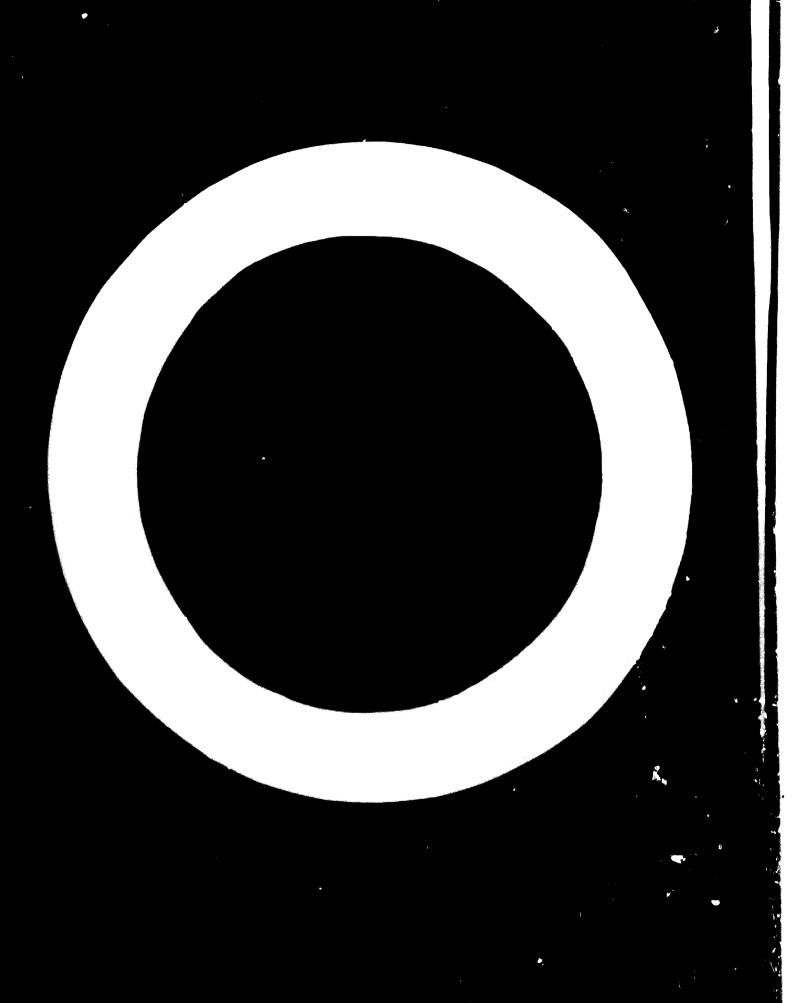


## UNITED NATIONS INDUSTRIAL DEVELOPMENT ORGANIZATION

# **PACKAGING**

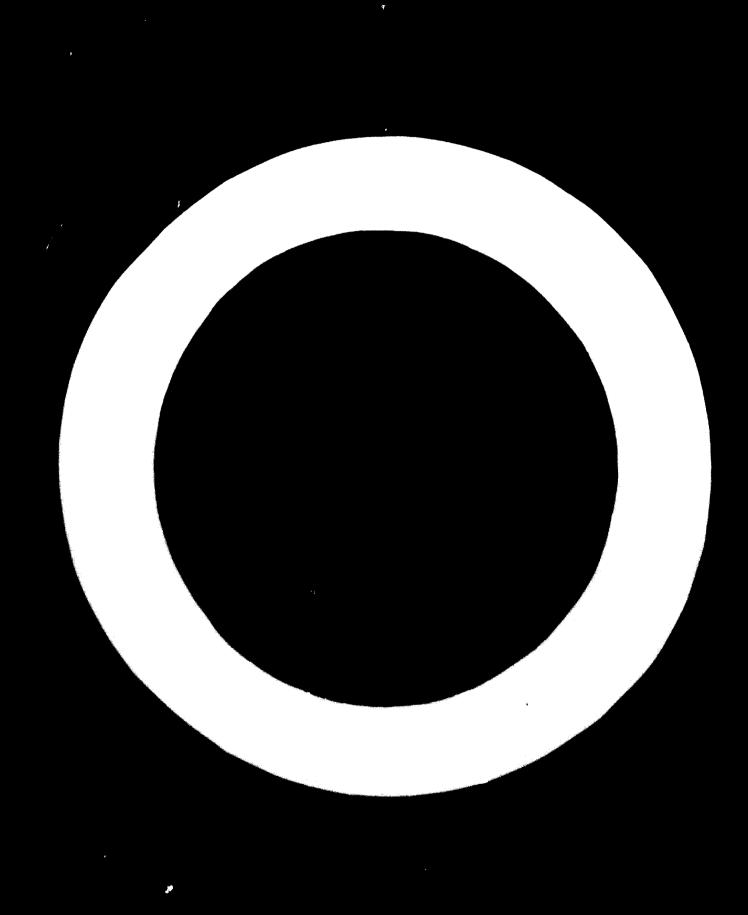
Report
of an Expert Group Meeting
Vienna
20 – 22 October 1971

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.



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### I. ORGANIZATION OF THE MEETING

In October 1969, UNIDO initiated a technical associatance programme for the packaging and package-making industries of the developing countries of the world. On the basis of the experience gained in order lishing this programme, it was possible to arrive at certain conclusions. In order to compare these conclusions with the opinions of the developing countries themselves, on Expert Group Meeting was held at Vienna in October 1971.

The Meeting was opened by the Director of the Industrial Technology Division of UNIDO, who welcomed the participants on behalf of UNIDO and expressed the hope that the Expert Group would be able to recommend specific proposals to be adopted not only by UNIDO, but also by the Governments of the developing countries and by other international organizations, as such measures would foster the development of packaging in countries where it was most needed.

The Meeting was attended by 19 participants, including eight experts from the Federal Republic of Germany, Finland, France, India, Poland, Spain and the United Kingdom acting in their personal capacity and not as official representatives of their Governments; six observers from Algeria, Argentina, Austria, Brazil, Hungary and Morocco; and one observer each from the Industrial Development Centre for Arab States (IDCAS) and the UNCTAD/GATT International Trade Centre. The Asian Packaging Federation and the World Packaging Organization were also represented.

N.V.R. Iyengar of the Indian Institute of Packaging was elected Chairman and F.A. Paine of PIRA, the Research Association for the Paper and Board, Printing and Packaging Industries, United Kingdom of Great Britain and Northern Ireland, was elected Rapporteur of the Meeting. The agenda of the Meeting is given in annex I. Presentation of each paper was followed by a discussion on the subject. At times more than one subject was considered in a discussion, with both the observers and the representative of the UNCTAD/GATT International Trade Centre taking part. On the third day of the Meeting the Group drafted its conclusions and recommendations, which are contained in this publication.

## II. GENERAL OBSERVATIONS AND CONCLUSIONS OF THE EXPERT GROUP ON PRESENT CONDITIONS AND CURRENT PACKAGING NEEDS IN DEVELOPING COUNTRIES

The need for packaging of any kind is minimal in a country with a simple agricultural economy, since almost all products used by the population are made locally. However, with the growth of cities whose population must be supplied with a variety of products, particularly food products, the demand for packaging increases. The more rapid the industrialization is, the greater the strain on the distribution system that previously served an agricultural economy. Thus, the first task of the packaging industry in a developing country should be to meet all basic domestic needs for packaging.

As the economy of a country expands, opportunities for exporting goods will arise; the need for packaging materials and containers will thus increase; and the packaging industry will undertake new tasks. Export goods must be suitably packaged for shipment by land, sea or air. If they are to compete in sophisticated markets, their packaging must compare favourably with that of goods produced in the developed countries.

The great differences in the need for packaging and the potential packaging resources of the developing countries preclude a simple formula for solving the packaging problems of such countries. The size of a country is not an indicator of the level of its packaging facilities, nor does it determine the potential for growth of the packaging industry. Packaging in the developing countries today is, in general, at the level existing in Europe and the United States of America 50 years ago.

For some countries a packaging institution within the country may be the best way to tackle packaging problems, but for other countries such problems can be dealt with more effectively through an organization common to a group of countries. At present, packaging institutions have been set up in only a few developing countries. The Expert Group agreed that no attempt should be made to deal with all countries in the same manner.

The need for packaging in the developing countries can be considered under two headings: the domestic transport of goods and the transport and

distribution of goods abroad. Proper packaging is a major factor in the state movement of goods within a country, while a principal factor involved in the preparation of goods for competition in the export market is the development of effective point-of-sale packaging.

Packaging is one of the principal tools of marketing. The functions of packaging, therefore, must be defined within the framework of marketing. Packaging problems are undoubtedly marketing problems as well. Packaging is a means of ensuring the safe delivery of a product in prime condition to the ultimate consumer at a minimum over—all cost. To achieve delivery at minimum cost, the packaging operation — producing the container and filling it — as well as the transport of the package must be planned efficiently. The package itself must be suitable for the market in which it is competing. A careful consideration of marketing is essential, therefore, in the evaluation of all packaging problems.

The establishment of a local packaging industry must be examined oritically, particularly when the packaging of goods for export is being considered. It may be more economic in the initial stages of a country's development to import packing cases or packaging materials for export goods than to set up local production. The Expert Group discussed what data were needed before a national decision could be taken regarding the establishment of local production.

During the discussions it became evident that terms such as "packaging institute", "packaging centre" and "packaging association" evoked responses that differed according to the background of the user. The Group agreed, however, that in each country (or developing region of related countries) there should be some focal point - a person or an organization - that would be responsible for promoting packaging. The possibilities range from a part-time officer in the public sector, through an industrial organization, an export promotion or trade agency, to a fully operating packaging institute. Whatever agency is established, it should stimulate action by international organizations such as UNIDO, the UNCTAD/GATT International Trade Centre or the Food and Agriculture Organization of the United Nations (FAO). Until such an agency is established in a country, very little can be accomplished in developing packaging resources.

Such an agency would be responsible for: collecting, collating and disseminating information of all kinds relating to packaging; training; providing consulting services; testing and standardization; quality control; carrying out marketing studies; maintaining a liaison with government bodies; promoting good practices in packaging; organizing activities such as seminars, exhibitions, contests; and carrying out applied research and development in packaging technology where required.

Progress and development in the packaging sector of a country, no matter what the initial focal point, will depend eventually on the establishment of some type of forum for collective action. The type of institution or association that is required will depend very much on the social, political and economic conditions in the country, as well as on conditions in the export markets. In some instances, bodies such as chambers of commerce or industry may be pressed into service for a time, but eventually a packaging institute of some kind should be established.

Packaging institutes fall into the following three categories:

- (a) Professional association. Such an association is composed of individuals who have banded together in the first instance to exchange ideas, opinions, and other pertinent information concerning packaging. Later the association undertakes other activities such as organizing conferences and training and educational programmes;
- (b) Organization supported by industry. This type of organization is established to promote good practices in packaging through training programmes for workers and management. Its objectives are usually quite similar to those of the professional association, but the means of financing is different;
- (c) An institute established by the Government or by industry alone, or a combination of the two, carrying out all previously mentioned activities and equipped with a laboratory capable of testing and developing packaging materials and containers of all kinds. The laboratory may expand its responsibilities to include applied research in packaging production.

In many of the developed countries several organizations may be engaged in packaging activities. In the United Kingdom of Great Britain and Northern Ireland, such organizations include the British Institute of Packaging, a professional association; PIRA, the Research Association for the Paper and Board, Printing and Packaging Industries, a testing centre which also carries out applied research; the British Standards Institution, which establishes packaging standards; a professional institute that covers mechanical handling and distribution; and several bodies that carry out

other functions such as education and training in packaging. The needs of any country naturally determine the number and form of the institutions carrying out packaging activities.

No matter what the origin or composition of a packaging institute or packaging organization in a country, one important responsibility is to make the Government aware of the contribution that proper packaging can make towards improving health, sanitation and the general standard of living of the population.

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Education and training programmes in packaging should be organized for the following five types of participants:

- (a) Government officials and planners, who need to appreciate the importance of packaging to marketing so that they can formulate rational economic policies on taxes, subsidies and tariffs. (The importance of the Government's role in the investment policy for the packaging field cannot be over-emphasized.);
- (b) Top-level executives, who need to become aware of the advantages to be gained by releasing employees for training in packaging and by creating an environment within their company that will enable the trainees to use the knowledge they have acquired:
- (c) Those engaged at the middle-management level who are, for example, responsible for purchasing materials or equipment. These individuals are not necessarily packaging technicians;
- (d) Supervisors and foremen engaged in day-to-day packaging operations, who need a thorough general knowledge of packaging;
- (e) General packaging specialists, who may need instruction in specific packaging techniques.

A number of training programmes are in operation in various areas of the world. In general, they are based on the "Blueprint for Packaging Education" produced originally by the European Packaging Federation and adopted by the World Packaging Organization in 1967. The Group felt that this blueprint provided an excellent basis for training in packaging.

Assistance to the packaging industry in developing countries has consisted mainly of sending experts to a country to study the country's packaging problems and to draft a report. Fellowships have been granted to individuals from developing countries for study of various aspects of packaging in developed countries. Laboratory equipment has also been supplied to packaging institutions in developing countries.

This assistance through the work of individuals has been beneficial to developing countries, but it is believed that it would be more expedient to

adopt a team approach. For example, a packaging institution in a developed country could be contracted with to carry out a study of a developing country's specific needs and to report its findings and recommendations. This approach would permit a team to work in whichever way it judged best and would shorten the time required for devising solutions to the problems.

When an institution in a developed country provides training for fellows from a developing country, the experts in charge of the training should be familiar with the developing country's problems. If possible, they should have worked in that country.

## III. RECOMMENDATIONS

## A. Recommendations to UNIDO

The Expert Group agreed that before any assistance could be given to a developing country a packaging focal point would have to be established within that country. UNIDO should take all possible action to contact the packaging focal point in each developing country as soon as possible.

Through the distribution of this report, UNIDO should make all Governments aware of the services it can provide in the packaging sector and should encourage developing countries to request assistance in formulating their packaging policies.

UNIDO should continue the activities and projects that further the progress of packaging in developing countries and should explore other ways of meeting packaging needs, such as contracting with institutions as suggested previously.

The Expert Group recommended that technical assistance activities of UNIDO in the packaging field take into account the specialized interest and facilities of other agencies in the United Nations family which also carry on packaging activities. FAO, for example, frequently includes food-packaging advisers in its field projects, and the UNCTAD/GATT International Trade Centre may provide for a consultant on the packaging of exports in its field-based export-promotion projects.

Bearing in mind the training programmes of such bodies as the World Packaging Organization and the European Packaging Federation, UNIDO should explore the possibility of obtaining contributions from Governments and local and international organizations for financing the production of handbooks, centralized information services and training aids that could be used in UNIDO oprojects.

UNIDO should produce a brochure indicating the possibilities for promoting the packaging industry in developing countries with technical assistance from UNIDO and the benefits to be gained thereby.

### B. Recommendations to Governments

The Expert Group agreed that Governments of developing countries should recognize the vital role that packaging plays in the life of a country and should place the responsibility for developing the packaging sector at the ministerial level. Packaging enables food and other products to be shipped hygienically and economically and thus affects the well-being of the population. It is also a most important factor in promoting exports in competitive world markets.

Governments of developing countries play an important role in the packaging sector through their investment policies. They should take advantage of UNIDO assistance so that planners and officials may become fully aware of the importance of packaging as a part of marketing, and thus be able to formulate rational policies with respect to taxation, subsidies and tariffs.

Governments of developing countries should encourage any packaging focal points that have already been established within their countries to make maximum use of the specialized technical assistance programmes of UNIDO and other international organizations such as FAO, the UNCTAD/GATT International Trade Centre and the Inter-American Export Promotion Centre (CIPE) of the Organization of American States. Each Government should take the necessary steps to establish an organization, or packaging focal point, if none exists, for communication and distribution of packaging information and should arrange for this organization to contact UNIDO, FAO and the UNCTAD/GATT International Trade Centre as soon as possible.

Governments of all countries, developed and developing, should assist UNIDO in exploring means of financing the production of handbooks, centralised information services and training aids.

### Annex I

### ACENDA

- 1. Registration, opening of Meeting, and election of the Chairman and of the Rapporteur
- 2. Lectures and discussions

The growing role of packaging in the process of industrialization Establishing national packaging institutions in the developing countries:

- (a) Establishing national packaging institutions in planned-economy countries
- (b) Role and functioning of a national packaging institution in the countries of a free-market economy

Education in packaging - forms and methods

Experience and problems of making packaging an export-promotion factor

Local production versus import of packaging materials and ready-made packages

Critical review from a developing country's viewpoint of the reports presented to the Expert Group Meeting

UNIDO technical assistance to the developing countries in the field of packaging

Review of and recommendations on the UNIDO programme of technical assistance

Latest developments in packaging techniques

- 3. Visit to the Austrian Packaging Centre and to the Packaging Laboratory for Food-stuffs and Beverages
- 4. Presentation of extracts from the World Packaging Organisation's education programme
- 5. Adoption of recommendations

## Annex II

## LIST OF PAPERS PRESENTED TO THE MEETING

| ID/WG. 104/1       | Aide-mémoire   |
|--------------------|--|
| ID/WG.104/2        | Agenda and programme of work   |
| ID/WG. 104/3       | The growing role of packaging in the process of industrialization H.H. Munte, Federal Republic of Germany                                |
| ID/WG.104/4        | Experience and problems of making packaging an export promotion factor P.J. Turner, United Kingdom of Great Britain and Northern Ireland |
| ID/WG. 104/5       | Local production versus import of packaging materials and ready-made packages J. Selin, Finland  |
| ID/WG.104/6        | Education in packaging - forms and methods P.J. Louis, France  |
| ID/WG.104/7        | Latest developments in packaging techniques F.A. Paine, United Kingdom of Great Britain and Northern Ireland                             |
| ID/WG.104/8        | Establishing a national packaging institution in planned-economy countries  S. Krobulski and B. Czerniawski, Poland                      |
| ID/WG.104/9        | Role and functioning of a national packaging institution in a free-market economy country L. Sicre, Spain                                |
| ID/WG. 104/10      | Brazil - Development of the packaging industry M. Vieira, Brazil   |
| ID/WG.104/10/Add.1 | General comments on current main problems of the Brazilian packaging industry N. Vieira, Brazil  |
| ID/WG.104/11/Rev.1 | List of participants   |
| ID/WG.104/12       | UNIDO's technical assistance in the field of packaging UNIDO secretariat   |
| ID/WG.104/13       | A critical review N.V.R. Lyengar, India  |
| ID/WG. 104/14      | Development of packaging in Hungary<br>Endre Iván, Hungary   |

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