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Centre for Industrial Development

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EXPERTS GROUP ON SECOND-HAND MACHINERY FOR DEVELOPING COUNTRIES, 7 - 24 December 1965

THE USE OF SECOND HAND EQUIPMENT IN DEVELOPING COUNTRIES

SUMMARY OF COMMENTS AND SUGGESTIONS ON THE CHIPME'S PRELIMINARY PAPER OF "USE OF SECOND HAND EQUIPMENT" IN DEVELOPING COUPPRIES

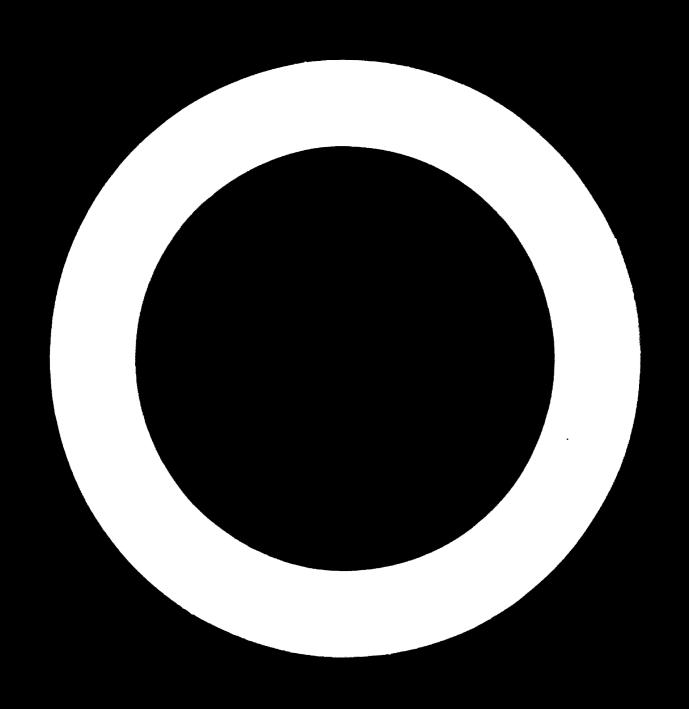
and

REASONS FOR IMPORT RESTRICTIONS

propared by the

Technological Division

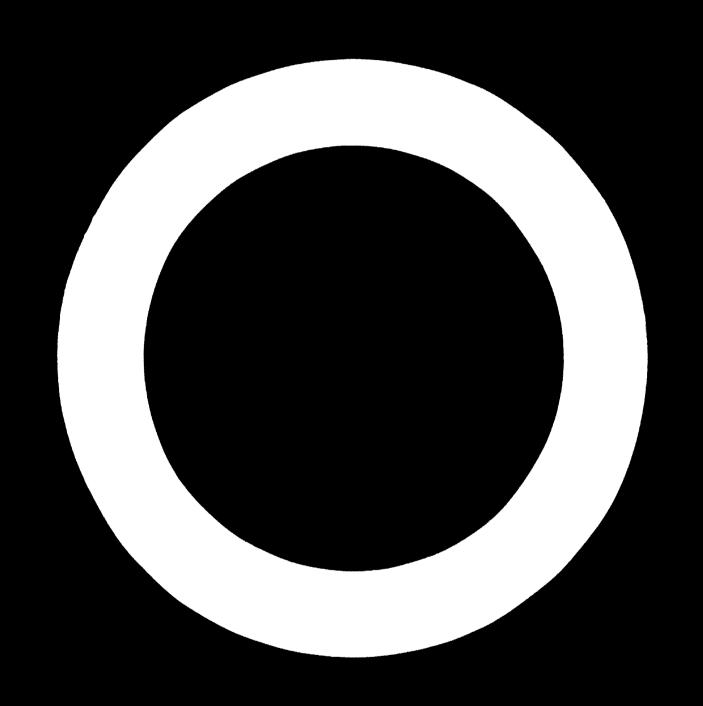
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THE USE OF SHOCKED-BAND EQUIPMENT IN DEVELOPING COMPTETES

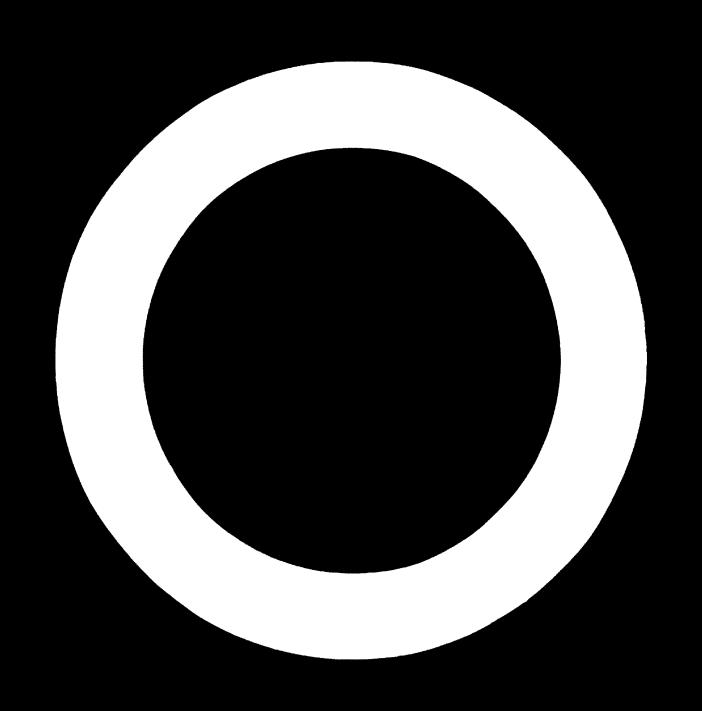
1. Introduction

The Centre for Industrial Development, awars of the important role which second-hand machinery and equipment from developed countries could potentially play in the industrialisation of developing countries, prepared an introductory paper outlining some of the major issues.

This preliminary study summerised the situation regarding the prevailing definitions, classifications, and framework for procurement of second-hand equipment, and also raised questions with regard to its rele for the industrial growth of the sconomies of the developing countries.

The preliminary study on "The Use of Second-Hand Equipment in Developing Countries" was sent to a selected number of institutions and experts. The purpose was to obtain their comments and suggestions on the subject. The letters, although limited in number, reflect the points of view of several international institutions and of experts which have previously dealt with, or are interested in, second-hand equipment and its potential use in the industrialisation of developing countries the institutions represented in the answers to the request for comments are the following:

- (a) The Pan American Union
- (b) The United Nations Bosnowic Countesion for Latin America
- (c) The United Nations Recordic Commission for Asia and the Par East
- (d) International Labour Office



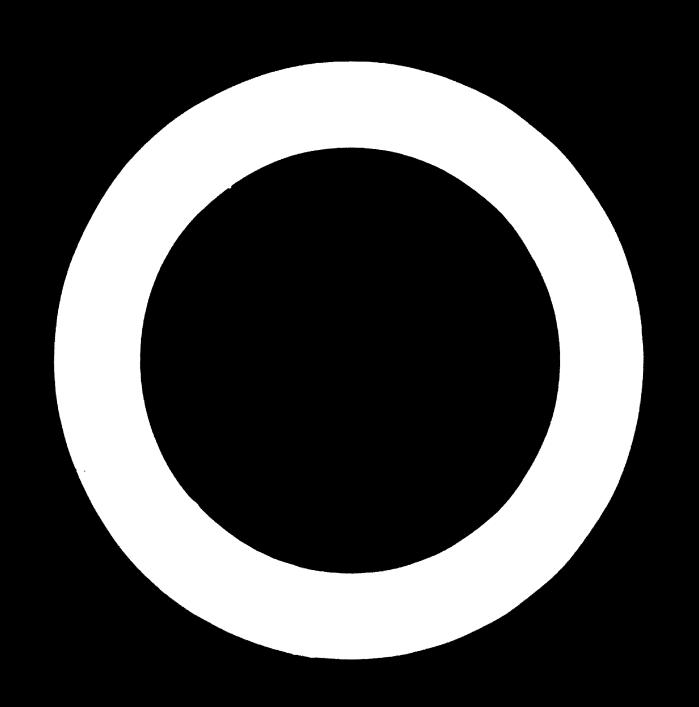
- (a) UMPSSCO
- (f) Agency for International Development, USA
- (g) Industrial Co-ordination Bureau, Sweden
- (h) Mational Institute of Science and Technology, Philippines
- (i) Industry Institute, Lebanon
- (j) "Tools for Freedom", USA
- (k) Machinery Dealers National Association, USA

This report summarises the information received in these letters and includes their whols texts as an appendix. The purpose of this summary is to facilitate the task of analysing the comments and suggestions received.

2. General Comments

The reliminary paper undoubtedly touched points of great interest to the institutions contacted, as expressed in their letters of transmittal. The complexity of the subject was also noted in several of the answers received. Jut in general there was a consensus of opinion that the paper had dealt with the major issues involved in the subject.

Almost all the answers agreed that the problem was one where every case should be considered on its own merits. Although there was also agreement that certain general steps were also necessary to facilitate location, selection and transfer of the equipment, the Organisation of American States, which had previously prepared a study on the subject and suggested reliable ways of procuring and transporting second-hand equipment in the form of joint ventures, said that their proposals were sharply criticised by the Latin American Covernments (see letter) quoting "the fear of competition for their products" as the reason expressed by



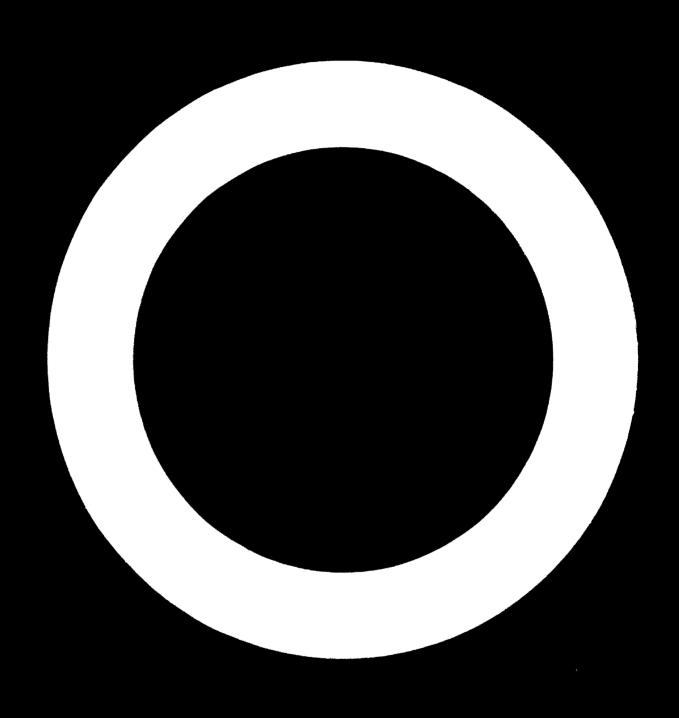
the more developed of the developing countries, and "to the past experience of serious problems in the use and procurement of such equipment" as the reason stated by the less developed of the Latin American countries. Hevertheless, the OAS foresees possibilities for second-hand equipment but it was felt that there was no need for governments to take the initiative - "it was felt that the private sector itself would have to take the responsibility to protect its own interest."

3. Cleanification

The acceptance of a recognised "scale of description" was also emphasised in several of the comments received. The UNISCO suggested that, taking as a basis the classification or condition coding used by the General Services Administration and the Agency for International Development of the USA, the only conditions that should be considered for developing countries are:

- F-1 (Nov-Macollent)
- 3-2 (Nov-Good)
- B-1 (Veed-Recentitioned-Recellent)
- B-2 (Back-Boomditioned-Good)
- 0-1 (Seed-Scable without Repairs-Procilegt)
- 0-2 (Bood-Suchle without Repaire-Good), and
- 3-1 (Good-Repears Required-Recollect).

On the other hand, the International Labour Office economic suggest. What the terms and definitions established by the Hackinsay Dealers Notional Association in the USA suffice, and could even be used in Harape, where to their insuledge the second-hand equipment market is not so developed as it is in the USA. Mith regard to the classification



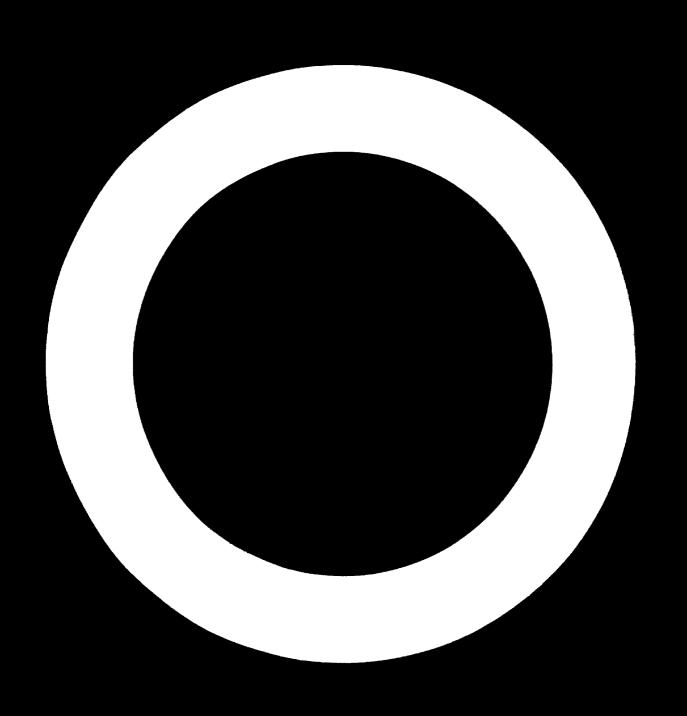
used by the General Services Administration and the US Department of Army, they believe that it is more suitable for the disposal of large quantities of equipment rather than for use as a guide for purchasing limited quantities of diversified equipment.

There are also those who believe that a classification as suggested by the United Mations preliminary paper would be of little practical importance. Mr. Hans Langenskiöld from the Industrial Co-ordination Rureau, Sweden, suggests that "no second-hand plant could or should be exported without giving the prospective buyer an opportunity to examine the machines before shipment." In any way, as stated by the Machinery Dealers Mational Association of the USA, there is a consensus of opinion that, under all circumstances, not a single piece of equipment should be shipped to any of the developing countries in condition "as is" whether it comes out of storage, a liquidation sale, or an auction sale. This opinion is also supported by the UNESCO in its letter to the Centre.

There was also a comment by the Industry Institute of Lebanon that the classifications mentioned in the United Nations preliminary paper give no information as to the age of the equipment. The reason why this is considered relevant is that the age has a bearing in spare parts availability.

4. Advantage and Disadvantages

The preliminary paper cited a number of advantages and disadvantages on the use of second-hand squipment vis a vis the use of new equipment. The majority of comments received stress that the main advantage is lower price. The UNINGCO states that "the only advantage which could really be recognised as such are the possible lower initial cost and savings in

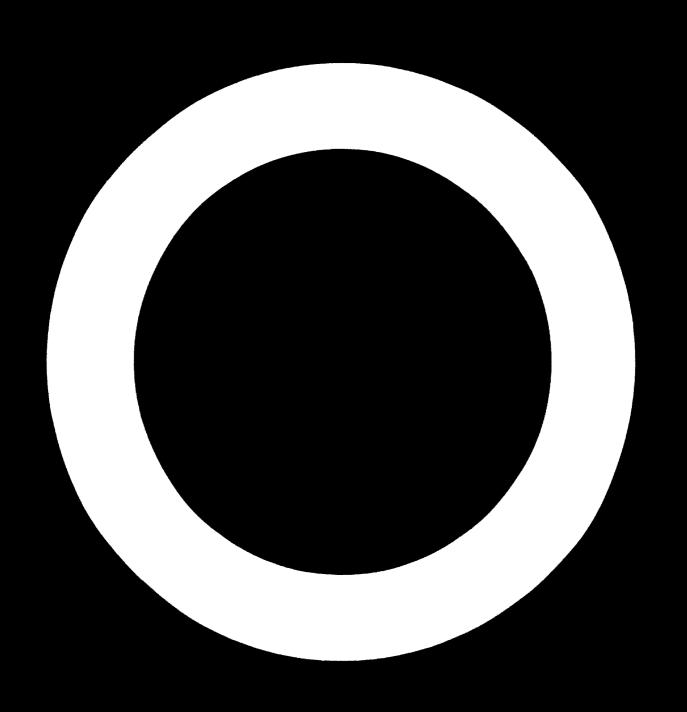


foreign currency, while all other quoted advantages such as lower operating cost, small-scale operation, easier maintenance, greater labour intensity, etc. are somewhat artificial, not really valid, and easily questionable."

On the other hand, some comments include limitations to the ") were price" advantage of second-hand squipment. This is mentioned by Mr. Robert Morrow from "Tools for Proedom": "In simpler machines such as basic small lathes, milling machines, shapers, drill presses, etc the prices (for new equipment) from other sources such as Spain very closely approximate the second-hand price of the second-hand equipment svailable in the USA." Mr. Frank Laurens from the Machinery Dealers Mational Association also shares this point of view stressing the similar costs of export boxing and freight for both new and second-hand equipment; he recommends that only those machines where a considerable price difference can be obtained should be considered. In his opinion this would automatically exclude all machines with a new value (USA) of about \$6,000 or less.

The other advantages or disadvantages quoted on the preliminary paper have had several degrees of support by many of the institutions and superts contacted; additional ones have also been added to the ones already enumerated in the paper. Some experts have taken the trouble of analysing each of the main advantages and disadvantages so is the case of Mr. F. Laurens from the Machinery Dealers Mational Association. His letter as well as all others received are appended to this Report.

The International Labour Office suggested that under the section "Advantages and Disadvantages" on the preliminary paper a paragraph may be included. This paragraph should be concerned with the particular impertance of second-hand equipment for small-scale industries in developing countries. They believe there is reason to believe that the



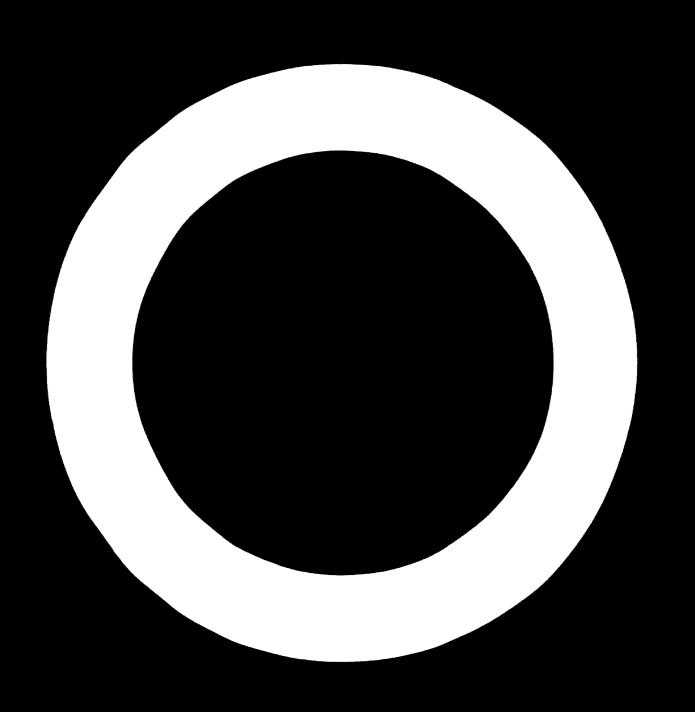
empension of a particular branch of industry (installation, maintenance and repair activities, manufacture of parts and components) could be greatly accelerated if the inflow of second-hand equipment from industrialised countries could be expanded.

The Booncaic Commission for Asia and the Far Bast also suggested that "the use of second-hard machines and tools may perhaps be promoted more vigorously in the smaller countries for use in small machine shops which are primarily suggested in the repair of simple machines and equipment used on farms and in the building trade." Another important area where second-hard equipment could be advantageously used is in vecational training. This point is supported by ILO which believes that the use of second-hand equipment could "reduce considerably the costs of equipment for vecational training projects." ILO latters discuss this application extensively.

This point of view is not shared by Mr. F. Laurens from MEA. who believes that the equipment moded by trade schools, such as small lather, milling machines, skapers, etc., would have to be purchased now as the cost of complete rehabilitation would, in most cases, bring such equipment installed in another opuntry very close to new equipment as for as ultimate price is concerned.

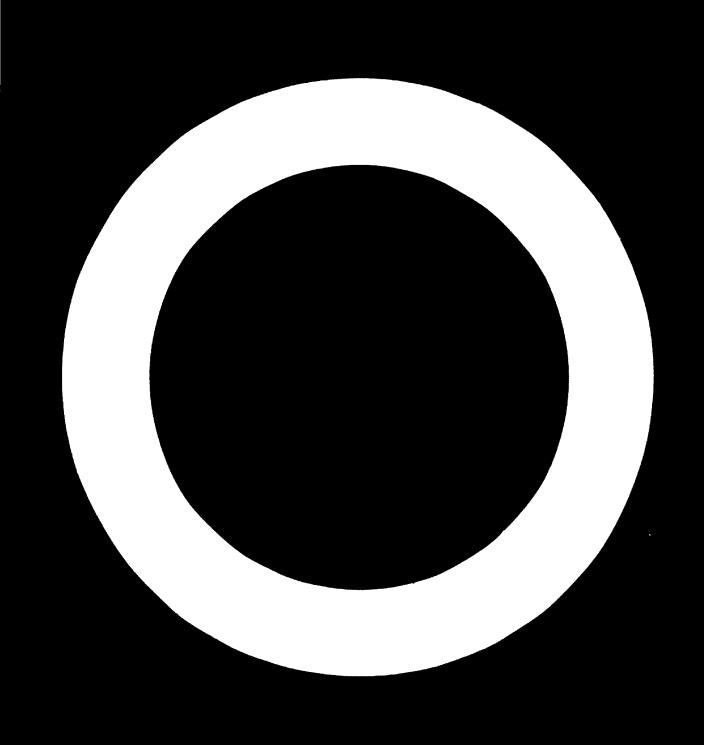
5. Institutions on the line of Second-line Bestmant

An aspect frequently discussed in the comments submitted is the speciature, "plicegy" and apprehensions in the use of second-hard machines and equipment. This is the case in many of the small countries, as sawtioned in the letter from the United Sations Seconds Commission for Ania and the For Shot. This apprehension sometimes is encouraged by professional committents who are relustent to advocate the purchase of



This general apprehension based sometimes on single and prohas provoked restrictions and prohibitions in several dectargeter on the importation of second-hand equipment. The restriction on the importation of second-hand equipment have been separately in striggter by the Centre for Industrial Development in the form of a latter to developing countries known to have such restrictions. The enter, the answers and comments to it are included in the Appendix as a separate section of this Report. A "narrowing of the market for second-hand machinery is partly attributed to this prohibition by the governments of many developing countries, as commented by the United Austrian Iron and Steel Works Corporation.

Many experts recognise that many of these restrictions have
"a detrimental effect on the industrialisation process of the developing
countries." The International Labour Office states in its note to the
Centre: "There is no dead that the present government policies in
developing countries which generally tend to prohibit or at least
seriously restrict the inflow of such equipment limit the industrialisation
process in these countries." The need to investigate appropriate
technologies was emphasized by the Industry Institute of Lebenon stating
that "often these (i.e. appropriate technologies for developing countries)
are not the most modern." This point of view is also supported by
H. B. Saunders of the Industrial Development Corporation of Zembia Ltd.
who states: "The modern prejudice that the best equipment is the best,

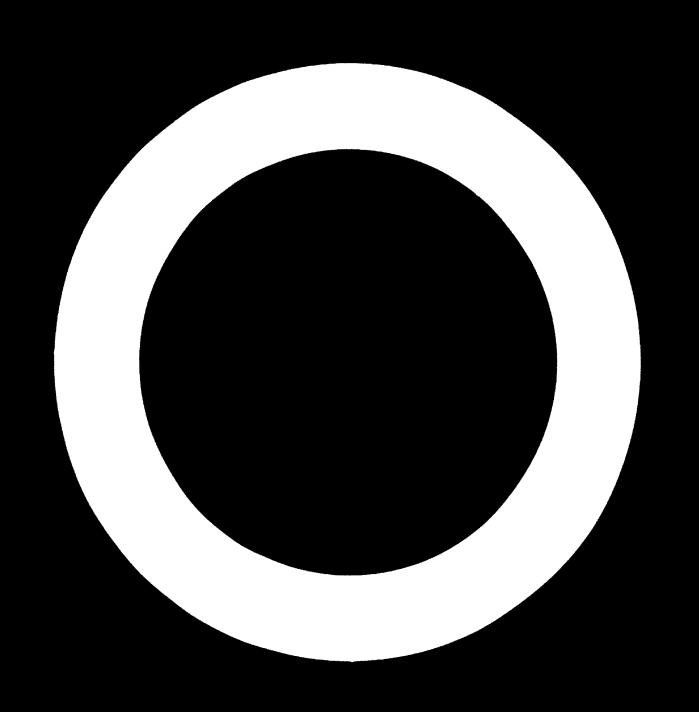


irrespective of circumstances, is shown up as might have been expected as a gross error. It is the circumstances that decide that as the best and it is the principal task of every developing country to apply a technology that is really appropriate to its circumstances. The letter from the International Labour Office goes one step further in quoting a description of "Appropriate Technologies"

Mr Hans langerskidld of the Industrial Co-ordination Bires, of Sweden, an organisation primarily interested in promoting private enterprises of small and medium size, believes that there is a distinct lifference between the approach of a private entrepreneur and that of a governmental or semi-governments; body when it comes to the usage of second-hand machinery. "For the former the prestige aspect is less relevant as he is mainly interested in how such money he can economise by buying second-hand machinery. I consider that in most cases it would be fruitless and even unfitting to try to persuade government bodies to install second-hand plants."

To help slucidate the performance of second-hand vie a vie new machinery and to help "study, verify and demonstrate some valuable possibilities" is the subject of A. Stargaard Rasmussen's letter, a Danish professional consultant who advocates the use of second-hani equipment. He believes that specially chosen "experiments" could be started as theoretical transplantations of practical existing plants to chosen places under full control from the United Nations. These would be transplanted as gifts to the developing countries. These specially chosen experiments would

- "(1) show that the obtained advantages probably may be still much bigger and
- (2) indicate how aretematic international efforte could improve the results considerably."



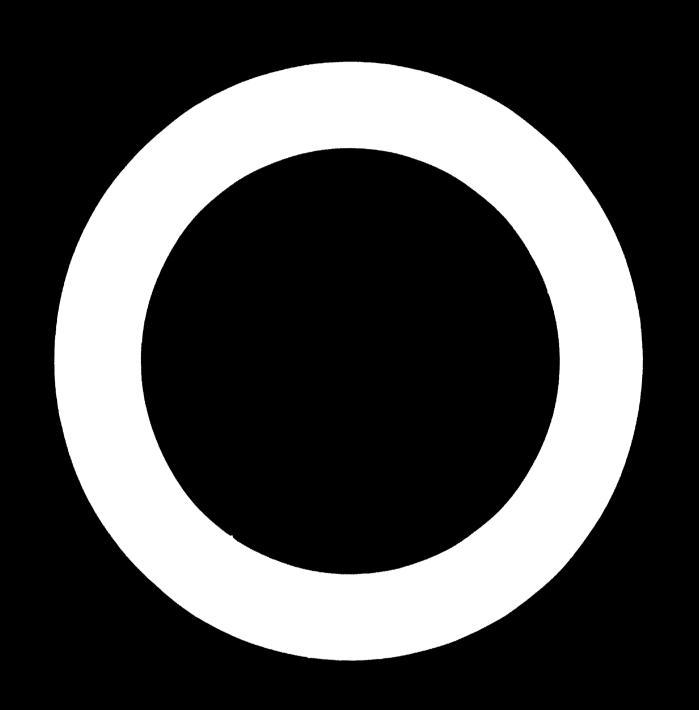
6. Procurement and Transfer

One of the points that stimulated many comments and suggestions was the one concerning procurement and transfer of the second-hand equipment. According to P. Laurens of the Machinery Dealers National Association, the difficulties in procurement do not only arise for the buyer but also for the supplier. This situation arises when buyers request a machine and they find out that the machine is not suitable for their needs, either upon studying the dealer's quotation or after they receive the machine.

"If this is true in industrialised countries, it will be much more of a problem in countries where the person in charge of purchasing is, more likely than not, unfamiliar with makes and models, and may only have seen a few oatslogs."

To facilitate the job of locating the equipment several suggestions have been made. These include action from developed and developing countries and the United Nations. To Albert Waterston of the International Bank for Reconstruction and Development, "the crucial problem has to do with the evolution of a system or systems whereby

- (a) within the ad anord countries the most useful and usable compensate among the large assortment of used machinery and equipment could be selected and prepared for use in developing countries, and
- (b) within the developing countries appropriate organisations could be established to ensure that the right equipment is acquired and then used ef.loiently.

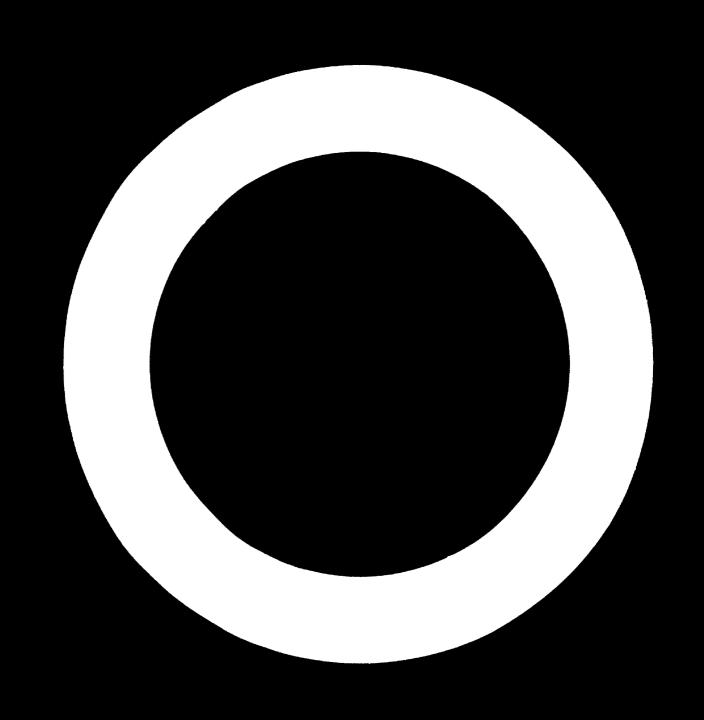


The majority of the suggestions have coincidentally followed this course of action suggesting ways on how to achieve these purposes. Robert Morrow, Vice President of "Tools for Freedom" of the USA, suggests that a central organisation could be set up or an established organisation be used to achieve this. The creation of a body to conduct specific studies and surveys in a particular country to determine the organisation of advantageously using second-hand equipment is also suggested by M. H. Saunders from the Industrial Development Corporation of Lambia 1td

It has also been suggested that the Centre for Industrial Development "would be the logical organisation to publish a monthly gasette, and maintain a card file, in which suppliers having equipment of this kind to dispose of, could have it listed, either free or at a nominal charge." This suggestion by Francis Godwin, Director of the Sudan Industrial Research Institute, presupposes the understanding that the UE/CID would not take the responsibility for the reliability of the equipment or the parties concerned, but merely function to help bring a prospective buyer and seller together.

C. Manuel, Commissioner of the National Institute of Science and Technology of the Philippi as, also agrees that a sort of separate directory or catalogue containing, among others, definitions, classifications and condition codes of all available second-hand equipment in the world markets, costs, list of reputable dealers and procedures should be prepared.

On the other hand, Mr. Godwin does not believe that the United Mations can ever help in determining the reputability of individual suppliers. He believes that it might become competent to do this with the help of various banks, associations, credit bureaus, etc. in the



Europe St. C. L.

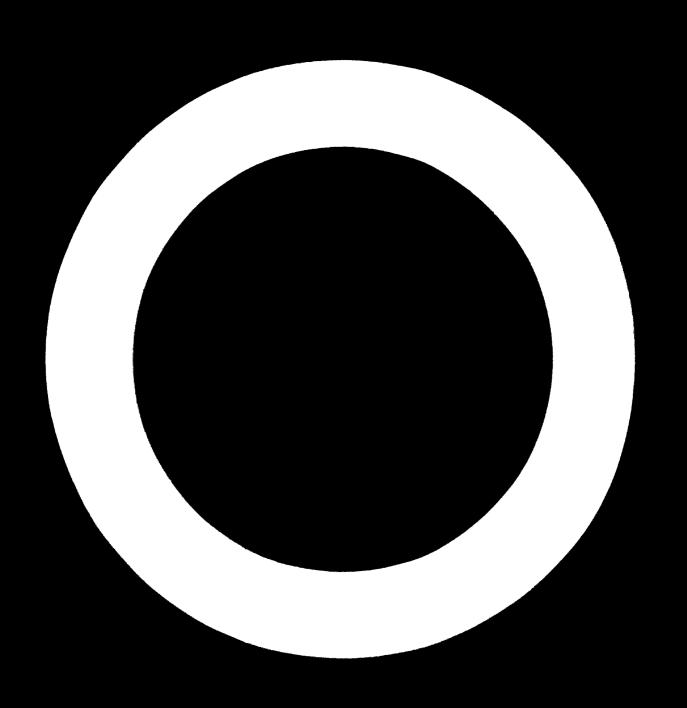
private sector, but he adds "it is uselses to think about it because it would never do it for obvious political reasons."

Mr. Hens Langenskiöld of the Industrial Co-ordination Bureau of Sweden also suggests the idea of creating a system to distribute information about the offers for complete second-hand plants to private entrepreneurs in the developing countries. He believes that the ICB could be used, when he states: "There are in most of these countries branch organisations, industrial associations, development banks, etc. that could be used in this commexion. The ICB network of contacts might serve as an embryo for the creation of such a system."

The UMRSCO is also in favour of establishing a source of information, as stated in the letter to the Centre. "It would also require the establishment of one or several sources of information, that is a continuous cataloguing of the equipment, as it becomes available, with full specification and accepted classification grading describing its condition. This must be supplemented by an impartial and independent consulting service, to ensure the high standard of quality and reconditioning (if any)."

The Industry Institute of Lebanon also believes that the United Sations and other international or regional organisations "could certainly be of great assistance in this field by acting as catalysts and sources of information to interested governments (catalysts insofar as they can help bring the successful practices of the one country to the attention of the other)."

In any way, the effectiveness of any organization in supplying the information on availability of second-hand equipment is believed to be impaired by the time differential between the moment equipment becomes



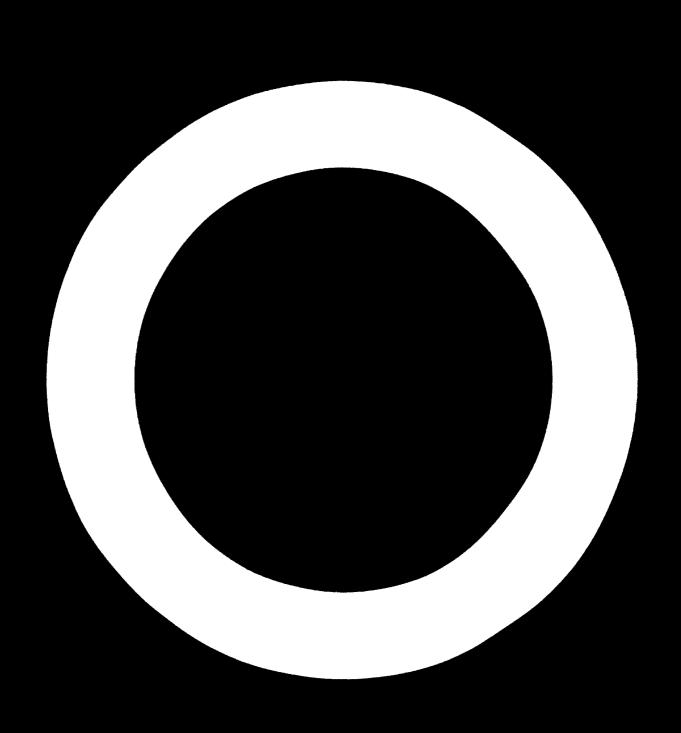
available and the time this information reaches the potential buyer, it. R. Morrow of "Tools for Freedom" emphasizes this point when he says, "We know from our experience that companies want to move equipment used in their manufacturing processes very rapidly. They do not want to keep a machine unused on their floor but want to get it out of the way as soon as possible in order to use the space for some other purpose. Thus, the system has to be set up so that a long period of time is not necessary to approve the shipment of the equipment."

To anticipate which type of equipment will become available as well as what equipment will be needed, it is suggested that lists of specific needs as generated in the developing countries be worked out, and that compatition from local users of used equipment in developed countries should be taken into account to determine what specific types of used equipment are in demand. A constant search for basic changes in processes in the developed countries should also be carried out.

With respect to the transfer of the equipment, it has been pointed out that the matter of obtaining guarantees on the condition of the squipment is very important, as is the securing of skilled technicians to dismantle, install and assemble the used machinery.

Mr. Hans Langenskiöld believes that the establishment of some etandard contract form for joint ventures should be worked out to facilitate the often difficult negotiations between the two parties.

Mr. F. Laurens of the Machinery Dealers National Association of the UMA believes that "guarantess are meaningless and that the only criterion should be the proportion of price and quality, whereby quality has to come first because even a 30-day money back guarantee as offered by the MDMA to customers in the USA or, as far as that goes, any



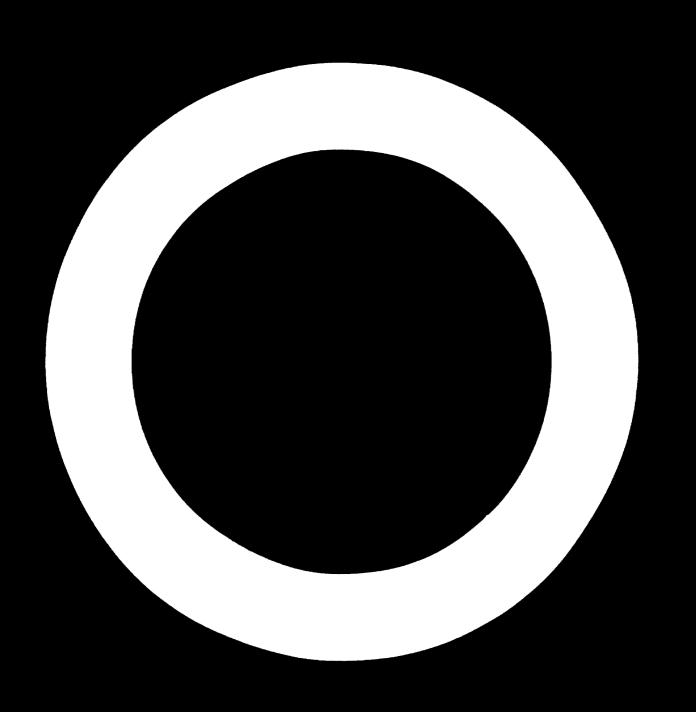
money-back guarantes does not help a oustomer in a remote location, because he cannot, with prevailing freight costs, afford to send a piece of equipment back to the United Status."

Mr. Laurens also includes some suggestions on the co-operation of the MDMA in his letter appended to the Report, but his conclusion sums up the general consensus when he says: "When to buy new equipment and when to prefer used equipment is a question which cannot be settled generally, and none of our customers has ever attempted to establish guidelines along these generalities. I feel that equally benevolent consideration should be given to used equipment as is given to new equipment, and every case should be judged on its own merits. I feel that a general policy which excludes used equipment in all cases can mean, more often than not, that countries which can ill afford it are forced to throw money out of the window."

7. Restrictions on the Importation of Second-Hand Equipment to Developing Countries

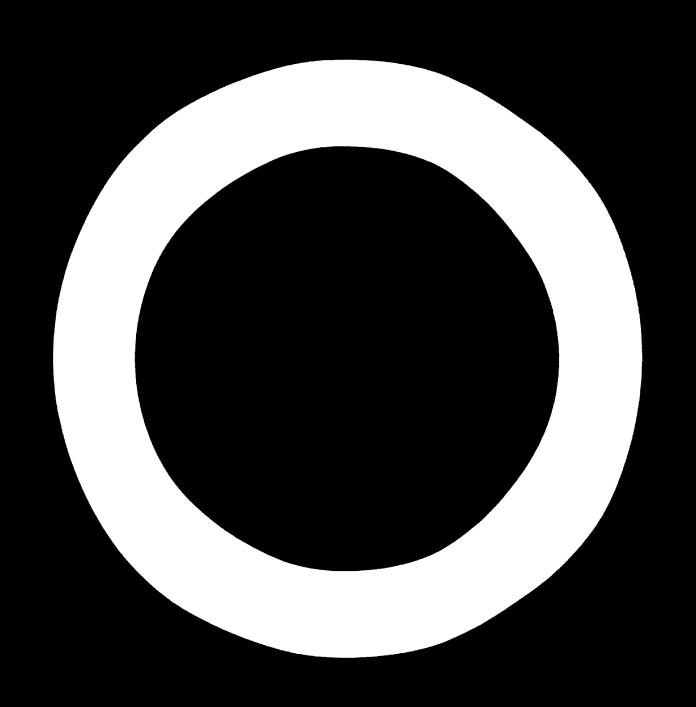
The Centre for Industrial Development, aware that several developing countries have imposed restrictions or have prohibited the importation of second-hand equipment, sent a note to the Missions to the United Nations of those countries known to have such restrictions. Only five countries replied giving information on the reasons why these restrictions were implanted. Nevertheless, the answers gave a good indication of the motives which have guided the Governments to take such measures.

The lack of technical experience in the acquisition and evaluation of second-hand equipment was cited as being one reason for prohibiting the importation of at least certain types of equipment. Maintenance problems and non-evailability of spars parts was quoted as another

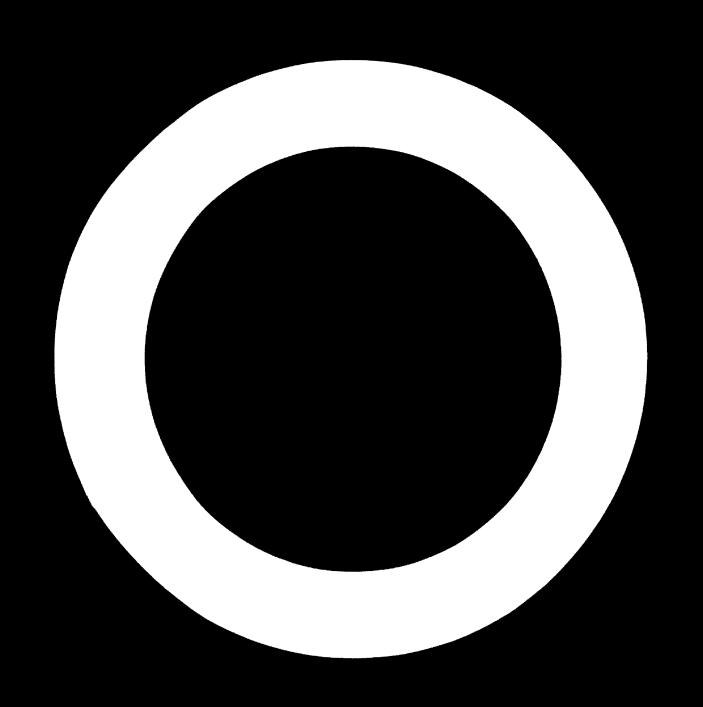


reason for restrictions on the use of second-hand machinery and equipment. It was also mentioned that the possibility of "emuggling out" foreign currency and the difficulty to obtain information regarding the technical and sconomic aspects of the second-hand machinery and its market were major items in determining the restrictions on the importantion of such equipment.

In spite of these objections the doors have not been closed completely to second-hand equipment. In some countries, each case is considered on its own merits as is the case of Argentina; in some others where the doors have been closed, there is still a belief that second-hand equipment could be very useful in accelerating industrialisation in developing countries. Some, as is the case of the Syrian Arab Republic, believe that the Centre for Industrial Development could take the initiative in solving the problems involved. "This may be done by studying the possibilities of execution of industrial projects in the developing countries based on second-hand equipment and recommending same with necessary technical specifications and guarantees. This will facilitate the promotion of the use of second-hand equipment and help bring confidence in them." The complete texts of the letters on import restrictions to the Centre are included in Appendix II.



APP NDIX 1



Minute Brown in

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

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ACTION

Acknow!

March 10, 1965

Mr. R. C. Desai, Chief
Industries Section
Contre for Industrial Development
United Nations
New York, N.Y.

Dear Mr. Desai:

EC 331 (62 (8)

I have read with much interest the preliminary paper on "The Use of Second-Hand Equipment in Developing Countries" which was sent to me with the letter of 11 February 1965, reference number EC 331/2(17-1).

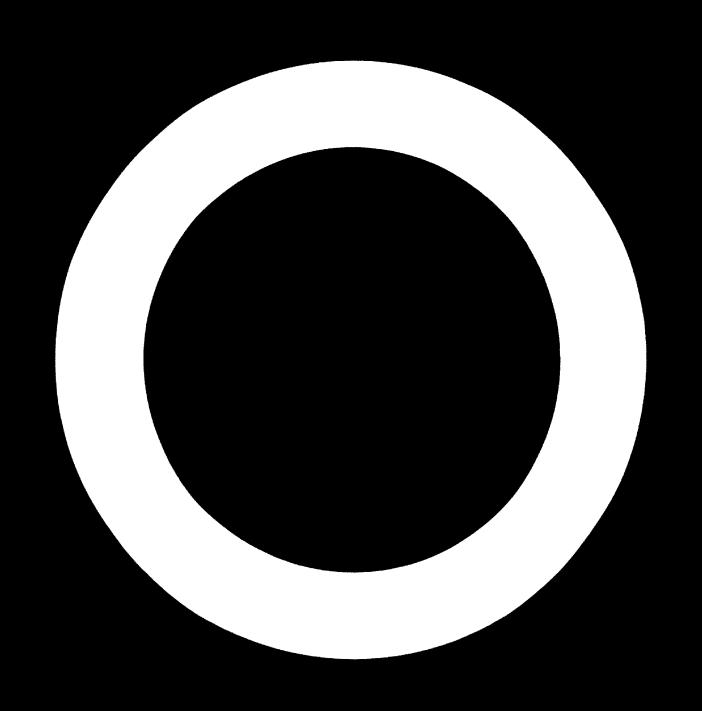
I delieve the paper lays out the major problems very well and I find myself in agreement with the conclusions and suggestions on pages 33 and 34. I have only two points:

- but the paper is mostly concerned with machinery. I think it might pay to clarify the extent to which the revised paper is concerned with machinery as against other equipment and that the discussion make the kinds of distinction needed. Sometimes, what applies to used machinery does not apply to used equipment and vice versa. It is therefore undesirable to lump the two in the discussion and preferably, frequently, to treat them separately.
- 2. I missed discussion of only one important problem in the paper. It is, in my view, the crucial one and has to do with the evolution of a system or systems whereby (a) within the advanced countries the most useful and useable components among the large assortment of used machinery and equipment could be selected and prepared for use in developing countries and (b) within the developing countries appropriate organization could be established to ensure that the right equipment is acquired and then used efficiently. Of course, they are the really difficult problems to solve; but they must be solved if reports are to be converted into action. You are, I am sure, well aware of this and it may be that you would prefer to leave consideration of these knotty questions to a later stage in your studies.

bilicerety yours,

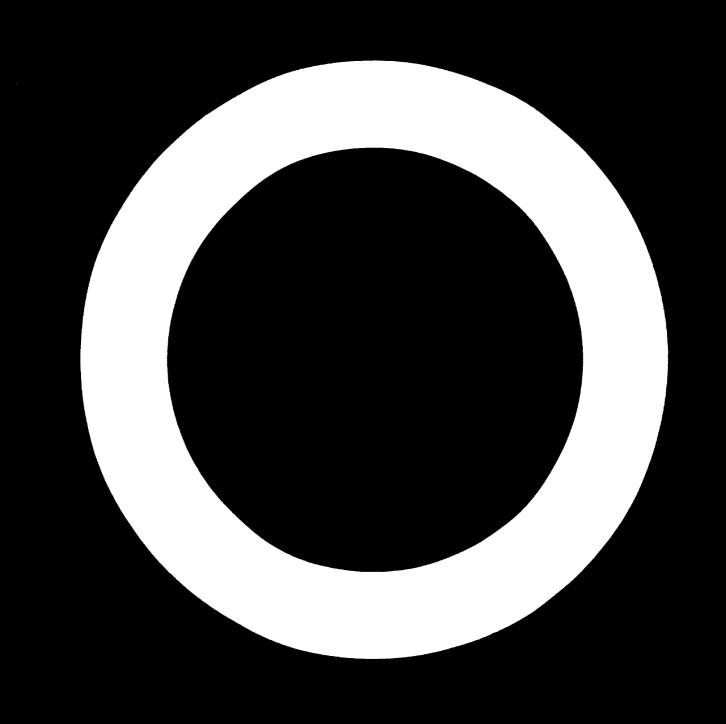
Albert Waterston

P. S. May I call your attention to a typographical error on page 157 The reference in the first paragraph to my work on used machinery is given as a book; it was only an article published by the United States



Department of Commerce for the U.S. International Cooperation Administration (predecessor of the Agency for International Development)
Vol. I, No. 6, July 1961. A condensed version of the article was also published in Finance and Development, the Fund and Bank Review. I enclose a copy of the Review, as well as a mimeographed copy of the full length article. You may also wish to make appropriate additions to references to my article in the list of Selected References given on the page after page 34.

Bolosures (2)





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March 19, 1965 EC/33/-62(8)

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For Freedom

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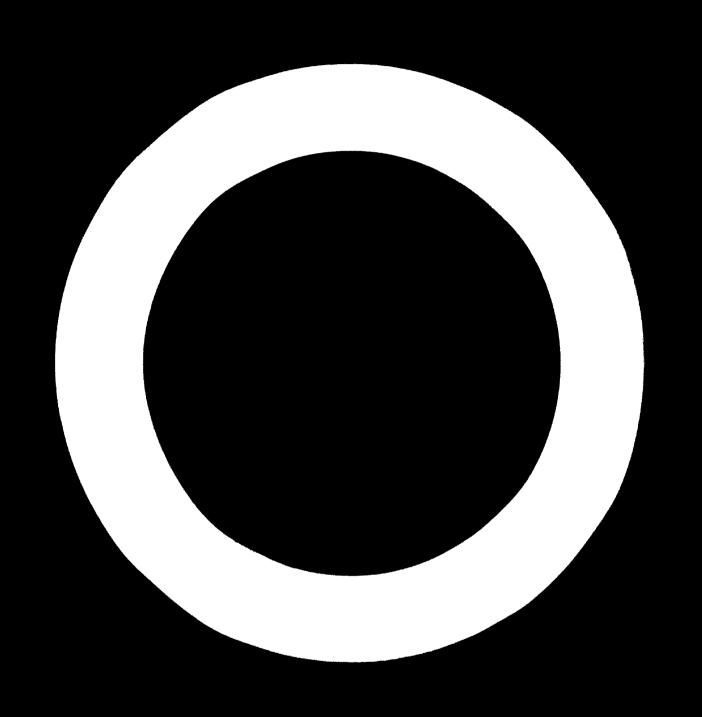
Dear Mr. Desai:

Thank you for your letter and study of February 11, 1965, (Reference EC 331/2 (17-1)).

I have previously sent in comments on the questionnaire that you circulated many months ago.

My comments on the complete study are in no special order, but are the following:

- (1) In buying a second-hand manufacturing line or process from a manufacturing company, a critical part of the "package" in almost all cases would be the sending of technical personnel from the selling company to assist in the physical setup of the equipment at the new site and ensuring its getting into operation smoothly.
- (2) In the overseas country, could there be some central reporting group (possibly a trade organization or United Nations productivity center) that could weed out the majority of inquiries that have very little basis for being realized. There is a great deal of work in searching for proper used equipment and if only ten per cent of the inquirers are actually in the position of purchasing this equipment, the supplying companies will not make as careful an effort as they would if they knew the prospects were quite probable.
- (3) Evaluation by some national body to ensure the feasibility of equipment the use is important in large undertakings. There are several examples in Latin America of entire automotive assembly or fabricating plants being shipped over and lying today in warehouses because

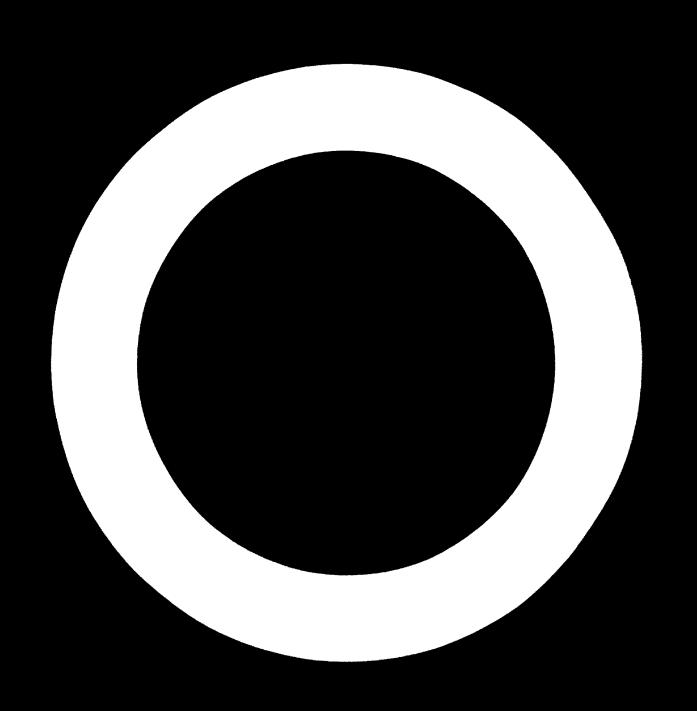


Mr. R. C. Desai -2- March 19, 1935

of lack of proper feasibility studies before shipment.

(4) In simpler machines such as basic small lathes, milling machines, shapers, drill presses, etc., I think you will find that the prices of, for example, Spanish machinery in this line, very closely approximate the second-hand price of the U. S. equipment.

- (5) The competition from local uses of used equipment should be taken into account, and it would not be too difficult to realize what specific types of used equipment are greatly sought for by U. S. concerns. (Automotive repair equipment, for example) and who equipment which has little or no demand for locally)
- (6) If a central organization is set up or an established organization is used, then the staff must keep on the lookout for basic changes in processes in the industrialized country. For example, the Tools For Freedom program was, about two years ago, offered a large number of aluminum rolling mills because of a new practice in which aluminum pellets were rolled in a continuous process instead of having to use breakdown equipment for billet rolling.
- (7) We know from our experience that companies want to move equipment used in their manufacturing processes very rapidly. They do not want to keep a machine unused on their floor but want to get it out of the way as soon as possible in order to use the space for some other purpose. Thus the system has to be set up so that a long period of time is not necessary to approve the suipment of the equipment.
- (8) This brings into mind the importance of working from lists of specific needs as generated in the developing nations. To instead develop lists of available equipment and then to solicic these in developing countries takes such a tremendous time lag that you will find that most of the equipment will either have been sold to local sources or otherwise disposed of before an answer can come back from the developing countries.
- (9) I cannot agree more on your strong point of having highly qualified personnel check the equipment, preferably in the plant and set-up. To cut down time lag, it would be necessary for an organization or personnel here, acting on behalf of the developing nations. Several of the larger nations have kept personnel here permanently, but this would be an extremely expensive factor and would not really be



applicable for anything other than a government purchasing agency. I feel this is one area that the United Nations could assist by having an inspection team available and at the service, for a very modest price, to private and governmental purchasing offices of all the United Nations developing countries.

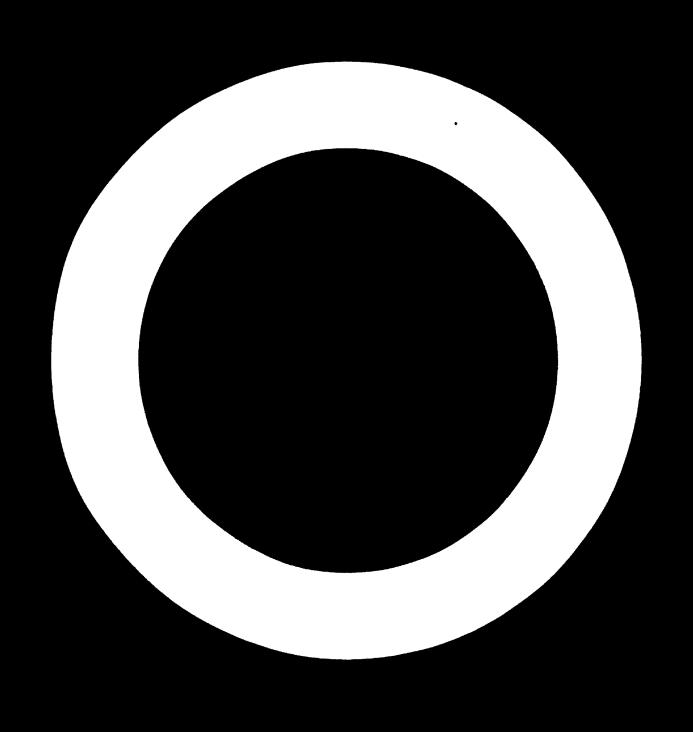
(10) I don't see any role for the U. S. Government in this except possibly in extending their financing agreements to better cover purchase of second hand machinery. We don't particularly like the United States Government indulging in commercial business of this type.

Very sincerely yours,

Morrow Morrow

Robert Morrow Vice President

RM: sh





united nations educational, scientific and cultural organization organisation des nations unies pour l'éducation, la science et la culture

place de Fontenoy, Paris-7e

telepnone : 783-98.70, 783-86.60, 705-99.66

câbles Unesco Paris Iéles 27 602 Paris

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Ec 331/62 (F)

29 March 1965

ExCLOSURE ATTACT

Dear Mr. Crigoriev,

We were very interested in the study made by your Centre on the role and use of second-hand equipment in developing countries, a question frequently tackled and never solved satisfactorily. The problem is indeed difficult but we have tried to summarise our thoughte in the attached note.

With kindest regards,

Yours sincerely,

J. Zanobell

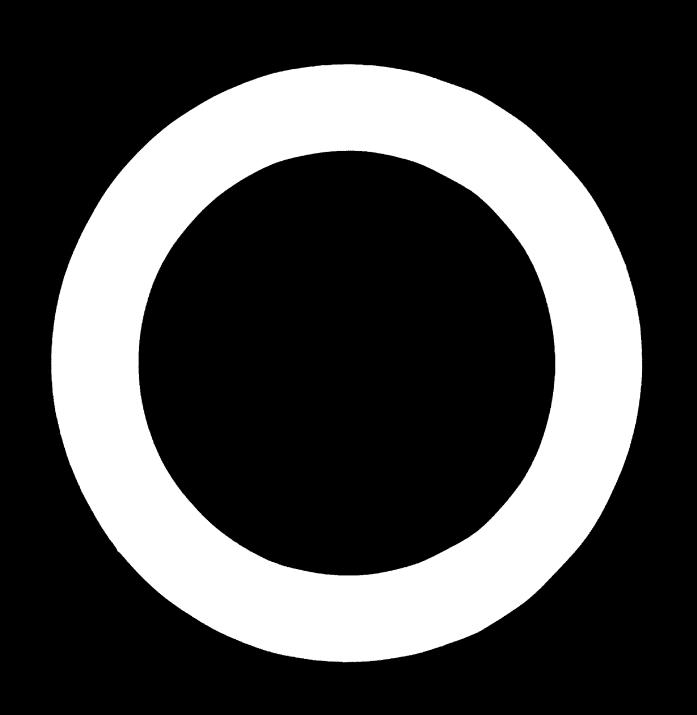
D. Zanobetti (Prof.)

Director

Division of Engineering Studies,

Research and Training

Mr. W. K. Grigoriev,
Director,
Technological Division,
Centre for Industrial Development,
United Nations,
New York 17, N.Y.,
Etats-Unia



Comments on a study made by the United Nationa Centre for Industrial Development

THE USE OF SLCOND-HAND EQUIPMENT IN DEVELOPING COUNTRIES

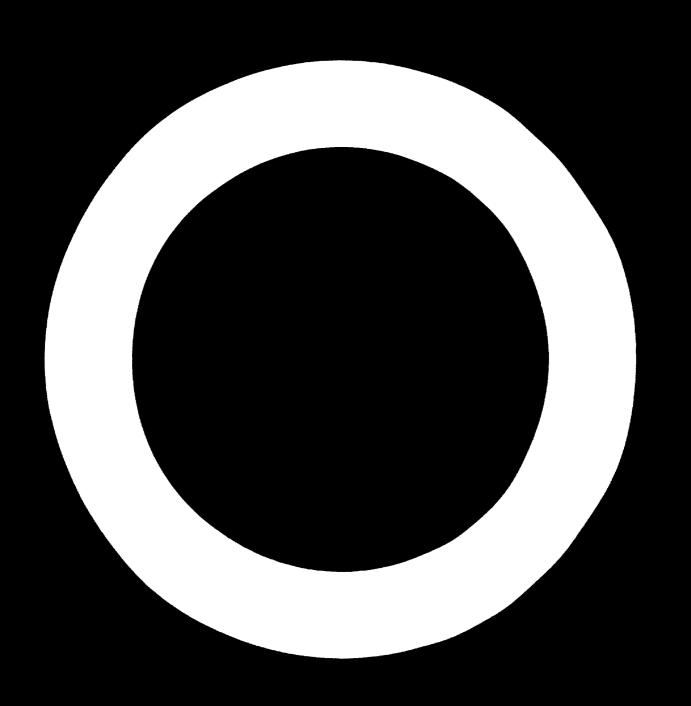
The use of second-hand equipment in developing countries has long been debated, mostly by the international agencies for Technical Assistance and by the various national or trade agencies connected with them. The present report goes one step further in that it is partially based on the actual experiences with the use of second-hand equipment in developing countries.

In the report (see page 15, etc.) a number of advantages are being claimed for the use of second-hand equipment. The only advantages which could really be recognized as such are the possible lower initial cost and saving in foreign currency, while all the other advantages enumerated, such as lower operating cost, small scale of operation, easier maintenance, more labour intensity, less skill needed for operation, otc. are somewhat artificial, not really valid, and could easily be questioned.

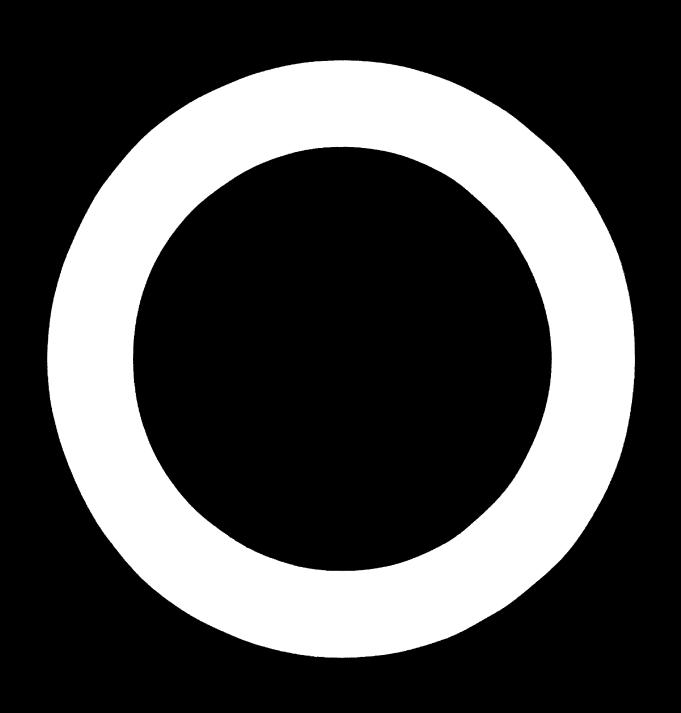
On the other hand all the disadvantages enumerated are quite real. Some of them would even appear to raise great obstacles in the way of using second-hand equipment, especially the risk of obtaining machines in unsound technical condition, and the difficulties in locating the precise machine needed.

There has always been a latent and strong suspicion in the doveloping countries that such a scheme may be employed for dumping unusable equipment on them. This psychological resistance could only be overcome and effectively countered by a guarantee of quality. The first pre-condition for such a guarantee is the accoptance of a recognized scale of description, that is a standard international classification. Accepting for the moment the condition coding used by the General Services Administration and the Agency for International Devolopment (AID) (see page 11 of the report), it is here suggested that in any second-hand equipment scheme there should be included only unite grades as N-1 and N-2, E-1 and E-2, O-1 and O-2, and R-1.

If this scheme were ever to succeed, it would also require the establishment of one or several sources of information, that is a continuous cataloguing of the equipment, as it becomes available, with full specification and accepted classification grading describing its condition. This must be supplemented by an impartial and independent consulting service, to ensure the high standard of quality and reconditioning (if any). Second-hand equipment described in the American way "as-is" should never be offered under this scheme.



Another important matter is the problem of what kind of equipment could suitably or advantageously be covered by such a scheme. It appears that the most suitable items would be single units of high cost, such as ships, locomotives, or earth-moving units; alternatively, whole plants, such as for example, a coment factory with rotary kilns and crushing plant, saw milling equipment, and whole workshops. On the other hand, it would be almost impossible to include in such a scheme the provision of a great variety of special machinery. This remark leads back to one of the disadvantages mentioned in the report, namely, the difficulties in locating the precise machine needed or, more generally, the difficulties in matching supply and demand.



FROM: H. H. Saunders	2645 4 42 4067
Rep:	DATE 26th April, 1965.

SUBJECT: UNITED NATIONS (Study of Second-hand Equipment)

There is, in my opinion, no reason why selected second-hand equipment should not be used by developing countries for all types of industry with which I am acquainted. On the contrary, there is an excellent 'prima facie' philosophy for encouraging its use in support of which I quote extracts from a Background Paper on Intermediate Technology read at Cambridge in 1964:

'It must never be forgotten that modern technology is the product of countries which are 'long' in capital and 'short' in labour; and that its main purpose, abundantly demonstrated by the trand towarde automation, is to substitute machines for men. Hence could this technology fit the conditions of countries which suffer from a surplus of labour and shortage of machines?'

and

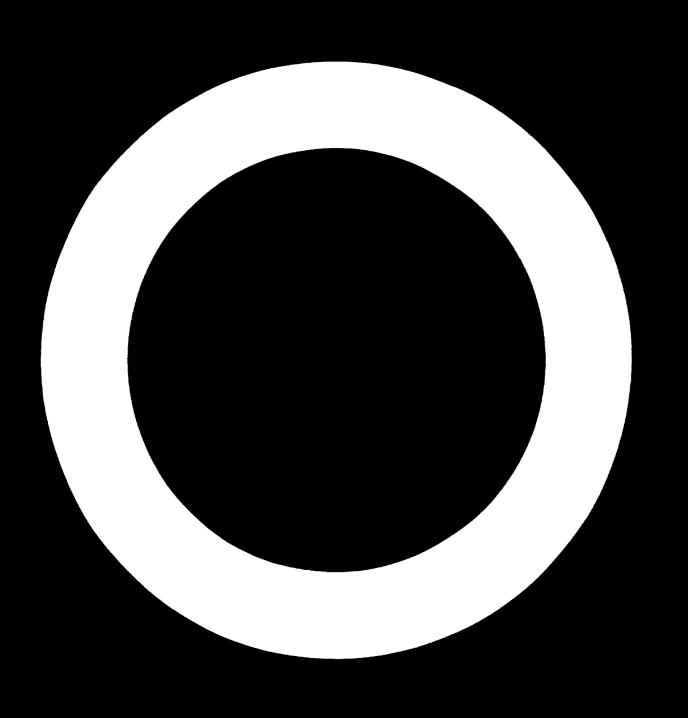
"It might help to remember certain fundamental truths such as the undeniable fact that 'capital' consists primarily of tools and machines, the purpose of which is to save work or to lighten it, and to enable people to accomplish more through it. A lack of capital, therefore, should not mean less, but on the contrary, more work for people - more work, albeit less production work. Even work of low productivity is more productive than no work at all. Why should we accept that 'lack of capital' makes unemployment inevitable? Lack of capital means lack of modern machinery. Was there mass unemployment before the advent of modern machinery?

- Finally -

The modern prejudice that the best equipment is the best, irrespective of circumstances, is shown up - as might have been expected - as a gross error. It is the circumstances that decide what is best and it is the principal task of every developing country to apply a technology that is really appropriate to its circumstances. That a technology devised primarily for the purpose of saving labour should be inappropriate in a country troubled with a vast labour surplus could hardly be called surprising.

If the basic concept underlying this philosophy is true, namely that the application of modern Western technology to the developing countries is destructive and not constructive, then there is every reason for the use of sound second-hand equipment against which the major criticism is that it is too labour intensive.

The means by which suitable eccond-hand equipment can be brought into operation in a developing country are not simple. The organisation(s) for collection, classification, reconditioning and making such equipment available to intending users forms only a part, and probably a minor part, of the operation. The more important decision by far is to determine what is to be bought and how and where it should be used. This is a decision which only the developing country itself can make on the basis of local conditions and requirements as defined by its own knowledge, amplified by such



investigations and surveys into specific industries as may be dessed necessary.

To summarise therefore, I consider:

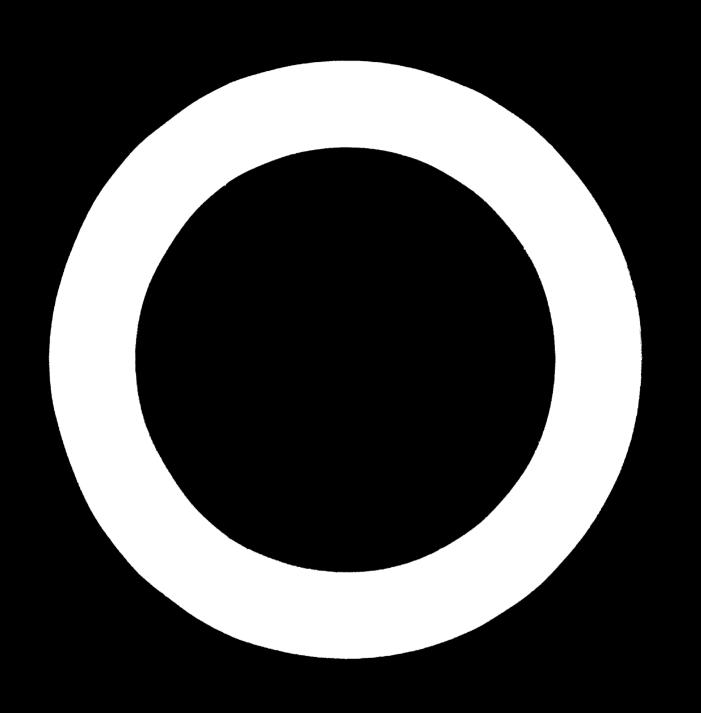
- 1. That the use of selected second-hand equipment could, in many cases, be more beneficial to a developing country than expensive new labour-saving equipment.
- 2. That the main problem lies, not in making available such equipment, but in deciding how and where it is to be used.

I would suggest, therefore, that any efforts the United Nations contemplate in advancing the use of second-hand equipment in developing countries must necessarily include specific studies/surveys in the particular country of the opportunities of advantageously using such equipment. Possibly a special body could be set up for this service and could draw upon the advice and facilities offered by such organisations as the Rural Industries Bureau, U.K.; The Tropical Products Institute; The SIET Institute Hyderbad. Findings and recommendations resulting from these investigations would then be submitted to the Government in question for action.

egd.

H.H. Saunders

HHS/MRB



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ORGANIZATION OF AMERICAN STATES
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ORGANISATION DES ETATS AMERICANS

APR 29 1965

PAN AMERICAN UNION

Washington 6, D.C., U.S.A. Cable address: PAU WASH DC

TO LEVEL

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ec 331/6

April 27, 1965

Dear Rajni:

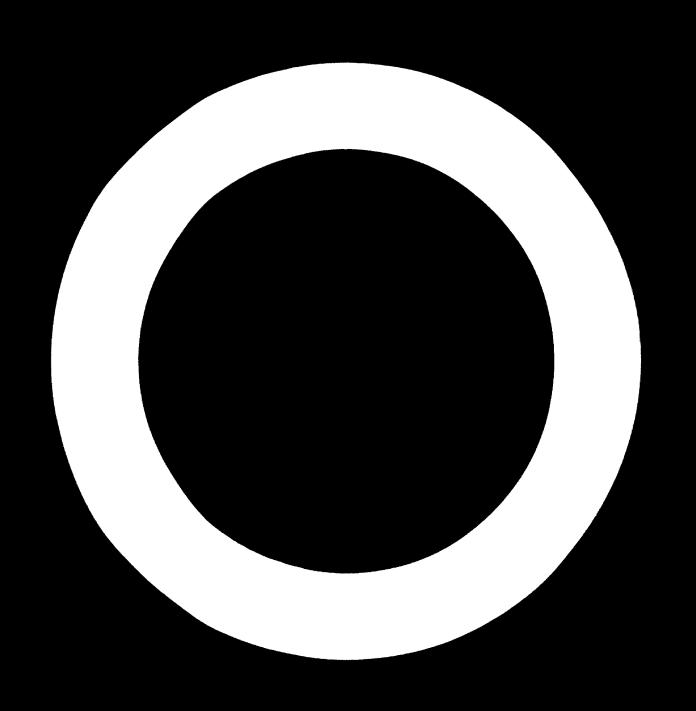
I am writing to you with regard to a letter dated 11 February 1965 from Dr. Grigoriev to the Department of Economic Affairs concerning the study on the use of second-hand equipment in developing countries. Your letter has been sent to this unit since we were responsible for the proposals made in 1963 for an OAS project in the field.

I am sorry I have not written to you earlier but we recently completed a meeting in Mexico City which required all our time for the last three months. I hope that the comments which I shall now make will, nevertheless, be of some interest to you.

Our proposals, were, to put it frankly, sharply criticized by most of the Latin American governments. On the one hand, the larger countries which have hopes of being suppliers of simple industrial equipment did not like the possibility of competition. On the other hand, the smaller countries felt that in the past there had been serious problems with respect to the usefulness of such equipment in their countries, particularly since these generally required substantial maintenance and the necessary skills were often in short supply. As a consequence our proposal was politely but firmly turned down and we have not seen fit to revive this work.

By the way, this is not to say that some countries did not recognize the possibilities. But in these cases it was felt that there was no need for governments to take the initiative. In such instances, which would be restricted generally to smaller scale operations, it was felt that the private sector itself would have to take the responsibility to protect its own interest.

Mr. R. C. Desai, Chief Industries Section Centre for Industrial Development United Nations New York, N.Y.



I therefore feel that this is a difficult problem for an intergovernmental agency, such as yours or ours, to consider. One point which esemed to be in the back of the minds of many delegations which discussed this project, was that the excess of equipment available among the industrialized countries reflects in great part the change in armament technology which has made certain lines of equipment, particularly machine toole, obsolete.

In any case I would be very much interested in the results of your work. While at the present time it is not possible for us to consider any project in this area, this situation could obviously change very quickly.

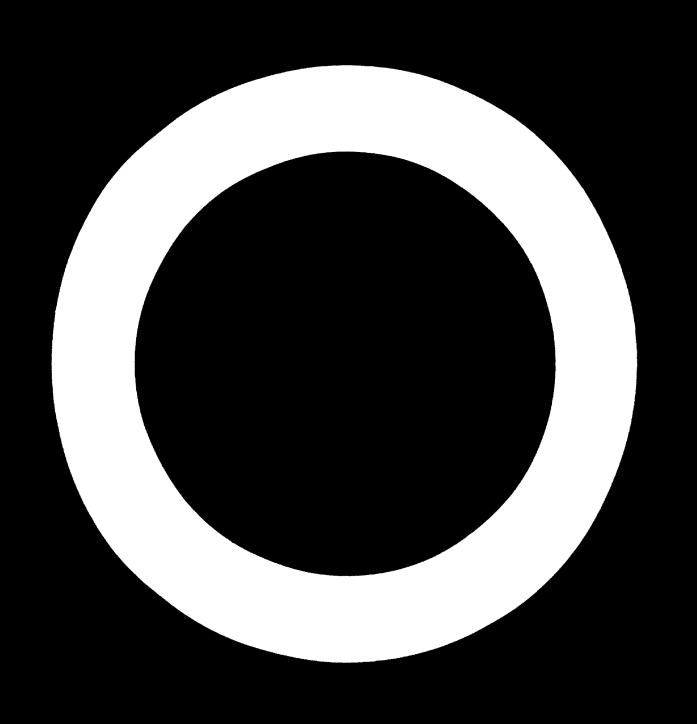
Hew are things going with you otherwise? I hope that your family is well. We here are still very much enjoying Washington and our work in Latin America. Please give my regards to everyone in New York. If you should come to Washington try to let me know in advance and we will arrange to get together. I had hopes of visiting New York this spring but I am afraid that it may not be possible. If I do come, I will certainly get in touch with you.

With best personal regards.

Sincerely yours,

Zu

Irvin Backind Chief Industrial Development Unit



REPUBLIC OF THE PHILIPPINES NATIONAL SCIENCE DEVELOPMENT BUARD NATIONAL INSTITUTE OF SCIENCE AND TECHNOLOGY

P.O. Box 774

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May 14, 1965

Dr. R. C. Desai
Chief, Industries Section
United Nations Centre for Industrial
Development
New York, N. Y.
U.S.A.

Consisted

Siri

This refers to your letter of April 8, 1965 and its enclosures, the preliminary paper on "The Use of Second-hand Equipment in Developing Countries."

I have gone over the preliminary report and found it well-organised, clearly written and broad enough to cover all the necessary information on the subject matter of the report.

If I may suggest, it would perhaps be more handy and useful if a sort of separate directory or catalogue containing among others, definitions, classifications and condition codes of all available second-handequipment in the world markets, costs, list of reputable dealers, and procedures for procurement, be prepared aside from the report.

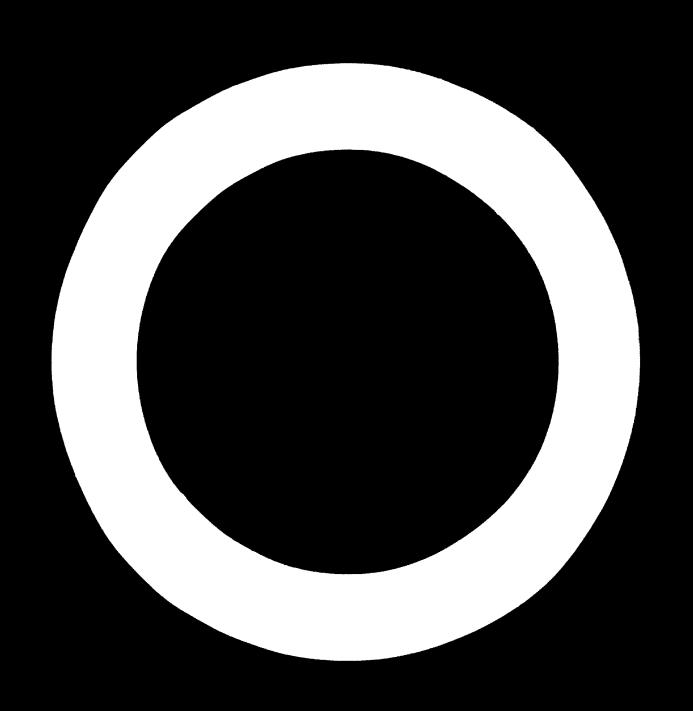
Government research institutions in the Philippines, like this Institute, do not venture out into industrial or commercial production, but mainly undertake research - basic, applied and up to the development (pilot plant) scale only. Hence, these agencies are not in a position to acquire or make use of second-hand industrial equipment. However, there are quite a number of small-scale and expanding industries throughout the country who may be involved in this study and who may be contacted for your questionnaire thru our Department of Commerce and Industry or thru the Philippine Chamber of Industry.

I fully agree with the objectives of this study and report of the U. N. Centre for Industrial Development and I hope this could be finalised seen for worldwide distribution, especially to the developing countries.

Very truly yours,

Commissioner

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INDUSTRY INSTITUTE

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May 15, 1965

MAY 211

Mr. R.C.Desai
Chief, Industries Section
Centre for Industrial Development
United Nations
New York
U.S.A

TO Les Desar | Constitution | Consti

Dear Mr. Desai :

Thank you for your letters of April 7 (received on April 16) and of February 11 (received on April 20) on second-hand equipment and its use.

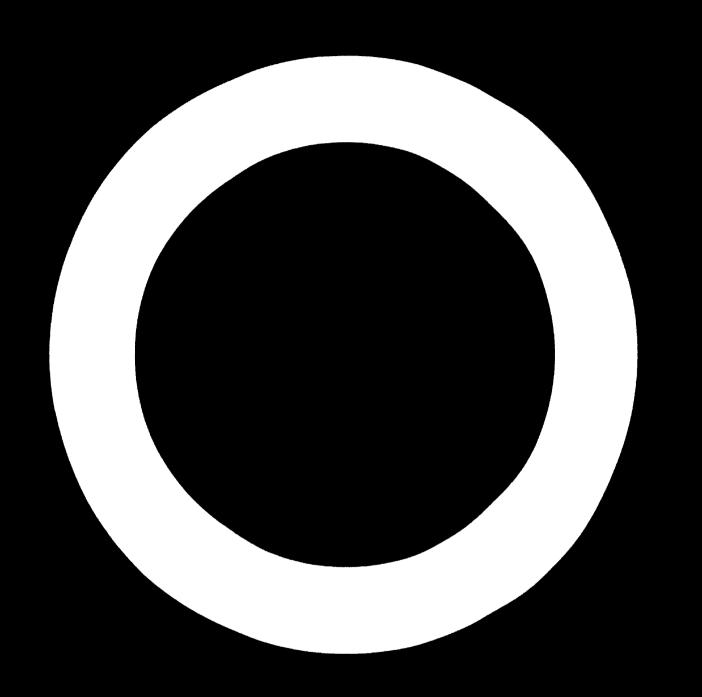
I should like to say at the outset that our experience at the Institute and in the area in this particular field has been rather limited. However, the following comments are offered on the study transmitted with your letter of February 11.

- (1) It seems to me that machine tools are over-emphasized in the paper as a whole. Other equipment should also be used for illustration of principal points.
- (2) The term standard definitions and classification of the condition of second-hand equipment would be preferable.
- equate complexity with new equipment and simplicity of operation with second-hand equipment. Given the various classifications suggested for second-hand equipment, this is certainly not necessarily so. The reverse mightwell be true (see Section V). Also, in certain instances, the term "used equipment" is employed (see p. 18) whereas second-hand equipment is the subject matter.

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DUSTRIAL RESEARCH AND CONSULTING SERVICES
DIECT STUDIES - PLANT LAYOUT AND DESIGN
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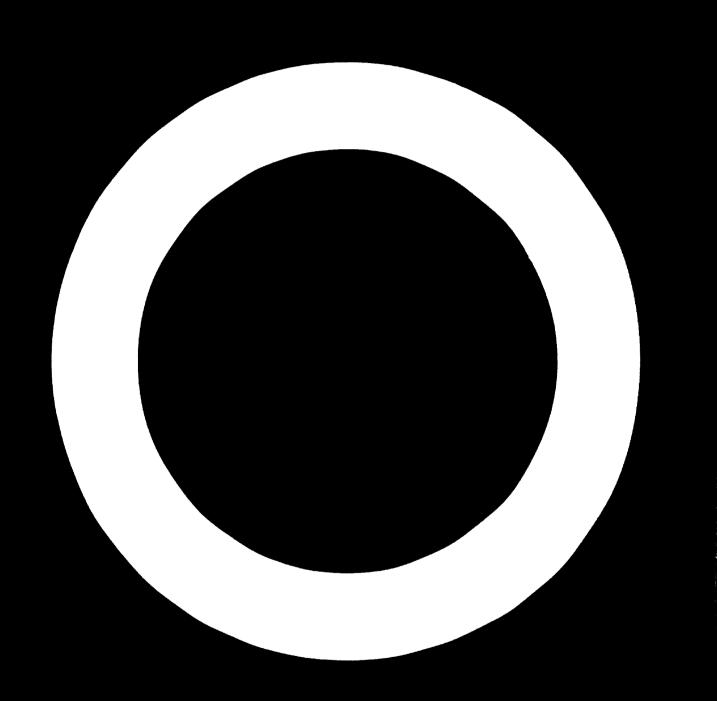


- 2 -
- (4) A main principle which it would be well to bring out clearly in such a study is that developing countries need to investigate and adopt the most appropriate technologies and that often these are not the most modern. A decision to purchase second-hand equipment should thus be based on availability, adequacy and relative economic viability with respect to new equipment.
- (5) The classifications proposed give no information as to the age of the equipment. This has a bearing on spare parts availability. It is not necessarily true that spare parts for second-hand equipment are easier to obtain because more easily manufactured or machined in the country of destination. Spare parts are usually more sasily purchased direct from manufacturers for the newsr equipment.
- (6) In Lebanon, importation of second-hand hoilers is prohibited.

 Prohibition can be justified with equipment which can constituts
 a safety hazard such as boilers and pressure vessels.

With the respect to your request for an opinion as to actions to be expected or recommended from or to Governments, the U.N. and others, the following is offered:

- (a) Governments of developing countries certainly need to be encouraged to formulate clear policies with regard to importation of second-hand equipment. Such policies need to be flexible and based on level headed appraisal of the technoeconomic aspects of the problem. They should also help provide information on the subject in their documentation centers.
- (b) Governments of developing countries could do two things:
 - (i) With regard to their own technical aid programs, they could establish or improve existing clearing houses for use of second-hand equipment in their development assistance programs. With second-hand equipment it is essential that adequate information should be documented and circulated quickly and efficiently to countries with potential interest in such equipment. Quite frequently in our Lebanese experience, information on U.S. Government surplus equipment used to be received after the equipment had been sold slsewhere.



- 3
- (ii) With regard to the activities of the private sector in this field, governments could certainly assist by making available directories not only of exporters of second-hand equipment but also of inspection agencies, export packers and financing establishments whehere prepared to extend credit for purchase of such equipment.
- (c) U.N. and other international or regional organizations could certainly be of great assistance in this field by acting as catalyste and sources of information to interested governments (catalysts in so far as they can help bring the successful practices of the one country to the attention of the other).
- (d) Professional associations etc.. should certainly become better informed on the subject to better advise industry.

Obviously, with the advent of the Common Market and the rapid advances in technology and market demand in the industrialized countries, there is going to be generated a vast surplus of second-hand equipment in these countries. It is in the interest of the governments of these countries as well as their private sectors to seek to dispose of this surplus. There is perhaps no bigger market for such equipment than the developing countries. This interchange needs to be rationalised and put on a sound footing for the benefit of all concerned. It is therefore most fitting for the U.N. to take an interest in the subject.

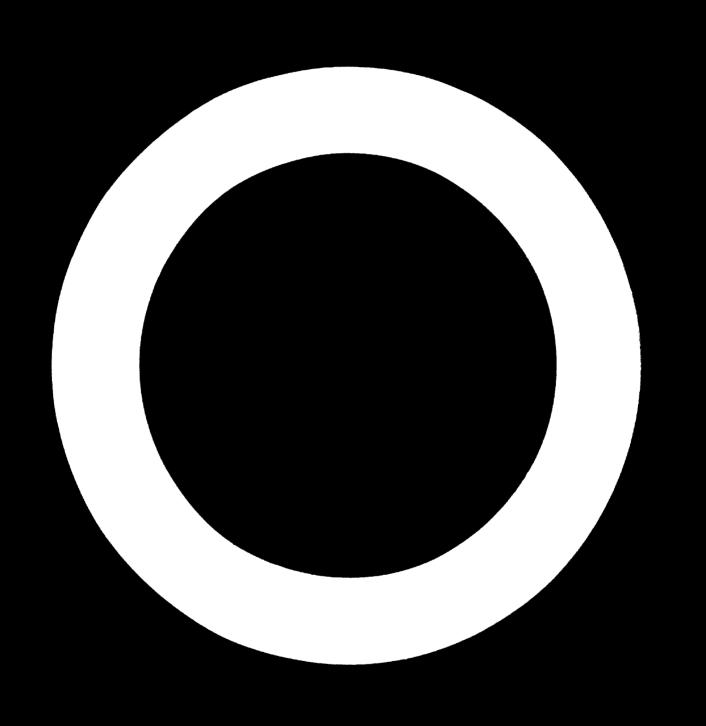
Hoping that the above proves useful,

Very truly yours

K. N. Saad

Head, Department of Technology

KNS/ec



H. Setergaard Rasmusäen Ternsvej 2.B, stuen t.v. Copenhagen P

15 May 1965

MAY 20 1985

Centre for Industrial Development Industries Section United Natione New York, N.Y.

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Attention: Mr. R.C. Desai, Chief

Regarding transplantation of used technical equipment to the developing countries (your reference/EC/331-62(8))

Dear Sir,

According to your letter of 7 April I am here giving my first comments to your preliminary etudy: "The use of second-hand equipment in the developing ocuntries", for which I thank you.

Of course you have in this already dealt also with matters, which I previously have touched dealing with the same subject, and among such I have with special interest noted, that some of your remarks apparently are aiming rather directly, at what I have previously called standards of evaluation.

At the start I think, however, that you would be specially interested in having new suggestions added to the sesential material, you already have collected, and I therefore will try to give such.

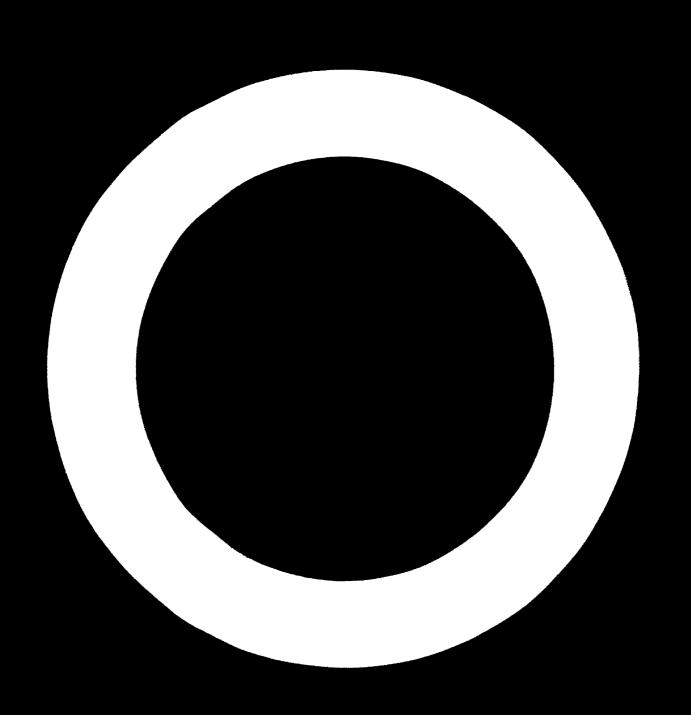
I would propose, that parallell to the continued efforte to get in as much empirical inforeation and estimates as possible, also some <u>direct experiments</u> on limited scale should be started up with subjects specially chosen for the purpose, in order through school examples to study, verify and demonstrate some valuable possibility (c).

I think such experiments would be very important, just in similar way as it is important to study the value of machines, not only through the results obtained under many, highly different practical conditions, but also through test results obtained under certain "ideal" test conditions.

That Not unimportant advantages through use of second-hand equipment have been obtained, I think your preliminary study already shows sufficiently, but I also think that specially chosen experiments could

- (1) show that the obtained advantages probably may be still much bigger
- (2) and indicate how <u>systematic international efforts</u> could improve the results considerably.

The "experiments" could be started as theoretical transplantations of practical existing plants to chosen places and purposes with



theoretical calculations of the obtainable profits, but of course it would be wanted to realize specially promising projects as soon as possible (and of course under full control from UN).

By such experimental realisations, I think it would be advantageous if the plants in question were transplentated as gifte to the developing country (countries).

Thie was proposed to me by Mr. Ivar Gudmundsson - now Karachi - when I in 1956 proposed to make such experimente with some Danish electricity works, which had been euperfluoue through extensions of the primary high-tension networks.

I think that such procedure would

- (a) be in good accordence with the propaganda for increased contributions to the developing countries
- (b) make it possible with the ease ecconomical efforte to give en essistance, which could really be felt
- (c) and eliminate the suspicione (also mentioned in your study) which the developing country might have in the beginning, if they had to pay for the plante themselves (when they first had seen fine results, such euspicione would of course disappear).

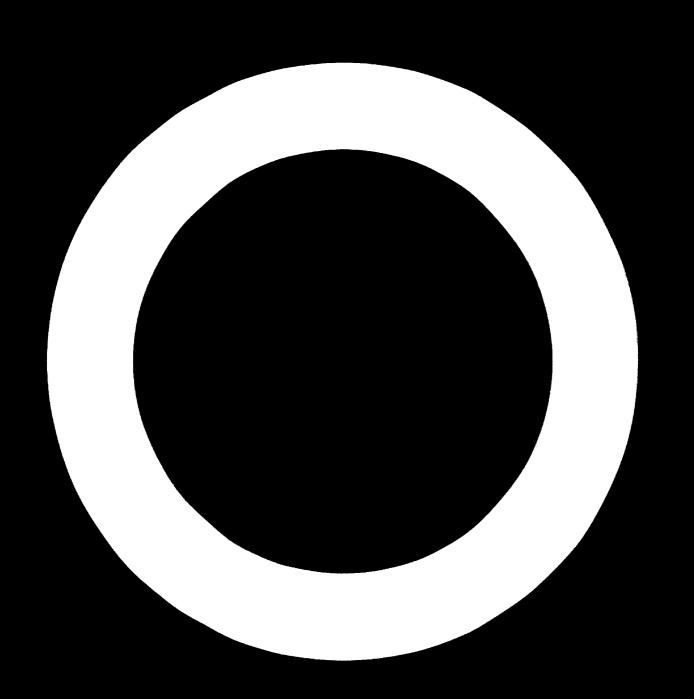
I think the first "experimente" could also be chosen and arranged such that the expenses could be kept low (sometimes good plants can be found at ridiculous prices), and efter the first experimente has been carried through, it should be possible to get a good idea about the total format of the whole matter (which I personally suppose would be very big).

Provided that you agree with my suggestions, which I of course should be very interested to hear about, your questione a-d in your letter of 11 Februery would have to be considered in details in this connection, as well as the question about possible special Danish available subjects suitable for studying at present, as well as other matters - but in order not essentially to exceed the time at which you wanted me to answer, I will conclude for this time.

Toure very truly

H. Sstergaard Rasmussen

oe: Mr. H. Williams, UNIC Copenhagen Mr. I. Gudmundssen, UNIC Karachi F. Johngard Roman



Proms Prancis Godwin

To: R. C. Degai

EC 331/62(8)

21 May 1965

south Jesus.

RE: Paper, "The Use of Secondhand Equipment in Developing Countries" on Completed

On my roturn from upcountry I found the replacement copy of this impressibility sent by Mr. Molinari in response to my letter. A couple of days agrantates finally received the original copy, sent 11 February and apparently by surface mails. Finally now gone through it and am in a position to offer some comments as you request.

The general request for comment that went out with this document was addressed to a wide assortment of readers outside the UN. I would like to assume a dual roles as an industrial devolopment specialist with regard to the paper's content, on the one hand; and with regard to presentation, on the other hand, as an insider or United Nations colloague interested in seeing us put our best foot forward — for I assume that there is to be a further paper, and perhaps further action, to help the developing member nations in this matter.

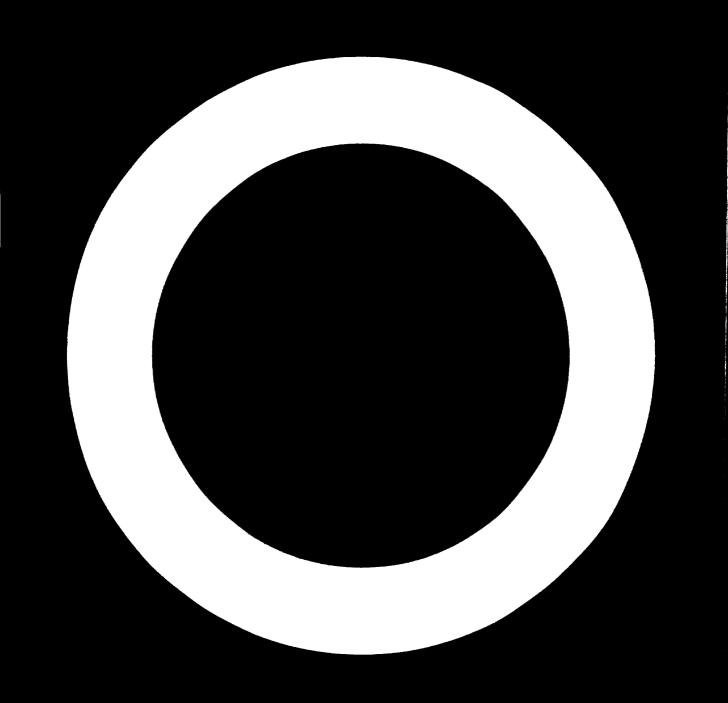
There is a good bit of meat in this paper. Without doubt the doveloping countries can often profit by taking proper advantage of secondhand equipment opportunities. The UN will render them a service if it cans

- (1)- convince them that this can be true in appropriate instances but just as often not and that the decision should be made by competent, dispassionate calculation in each case rather than by blanket policy, irrational pride or, conversely, undue emphasis on the seeming first cost only;
- (2)- help them, in the manner of a Better Business Bureau, to know how to make the decision, and how to protect themselves;
- (3)- do anything really concrete to help buyers locate such equipment.

The paper makes a good start on (1). I think it could do more, especially by using more examples as at the top of p. 16, to illustrate not only "first cost" but some of the other points as well (scale, operating cost, maintenance, skills required, etc.). A new publication on this line might usefully show, side-by-side, a couple of illustrative computations bringing in all the factors on pp. 27-29; one should show the benefit in choosing certain secondhand equipment in a specific case, and the other the reverse under slightly different circumstances, possibly even in the same industry. It may be possible to borrow such examples from some of the literature cited. Real examples would be more convincing than hypothetical ones.

Noxt, if the Centre expects all this to have any effect, it must get the information around widely to the right people. It is not enough to publish a standard UN-type paper that can be obtained from a UN Sales Office, or that is circulated to a list of UNTAB field offices and ministers of economy. You might as well bury it under a tree. Try to get something published in magazines that people read widely, or at least in trade journals, or furnish feature articles to local newspapers free (already translated). But to do any of this it will have to be written in an easy, readable style, or nobody will publish it on any terms. I will say a little more about this later.

The paper also makes a start on (2), at least to the extent that it lists both the advantages and disadvantages, puts forth a useful classification code, and offers an evaluation checklist. But in the "Better Business Bureau" function a lot more can be done, such as dealing more fully with the dangers and pitfalls, unscrupulous practices etc. You may fear that to emphasize these would only further discourage interest in secondhand equipment. I think it would have the opposite effect. People are more afraid of what they don't know or don't understand. If they are alerted to the tricks, bad motives etc., I think they are more likely to feel they can protect themselves and not be taken in, and thus may be more willing to consider the equipment when armed with good professional advice.



Why not call a spade a spade, and state plainly that some companies or even some governments have not been above unloading industrial plants on unsuspecting countries when these plants can no longer be competitive in any sense? It may be a way of getting back a salvage price to help pay for the new modern substitute being built, or it may be even a "gift" — with no danger to their export trade because they know they can land the finished product in the recipient country cheaper than the old plant can make it anyway.

The buyer is not always protected just because the exporting company has a financial interest in the overseas operation, as mentioned on p. 21. I know of a case where the exporting company, participating heavily in the new concern in partnership with local capital, put up its equity mainly in the form of the secondhand equipment (some of it was billed as new, but later found to be used, moreover). Along with the equipment came a large contingent of experts, graciously provided to get it running, but billed to the local concern at rates that would soon return the exporting company's investment whether the plant ever made exponses or not. I daresay this happens more often than we know.

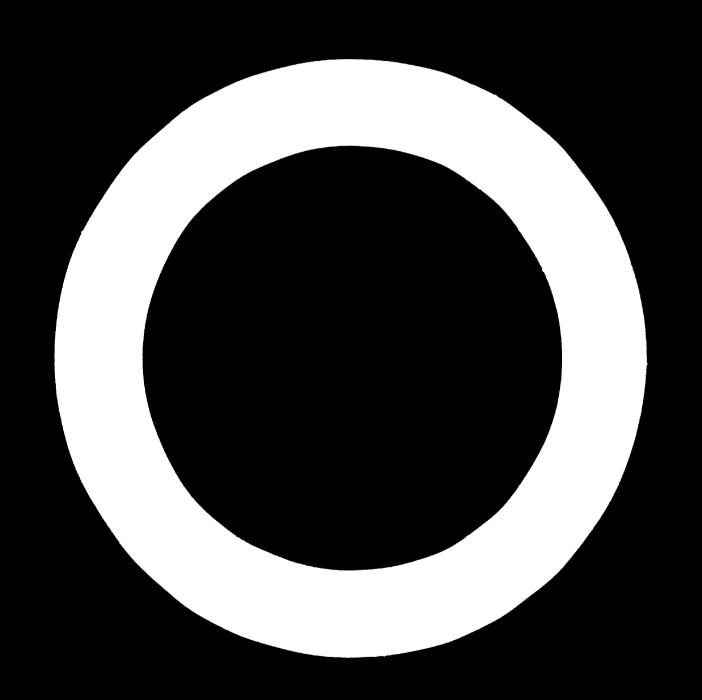
Unfortunately, desirable as it might be, I don't suppose the UN can ever help in passing upon the reputability of individual suppliers. It might become compotent to do so, with the help of various banks, associations, credit bureaus etc. in the private sector, but it is useless to think about it because it would never do it, for obvious political reasons. We might conceive of it being done privately, however, by a group of the world-wide "service clubs" like Rotary, Kiwanis, Lions etc. if a way could be found to cover the expenses, but I'm not even sure of that. Nobody wants to go out on a limb in such a matter.

On (3), however, the UN can do somothing really useful.

Many years ago chemists, research institutions etc. had an equally difficult task to locate the small amounts of unusual chemicals needed from time to time in their work. These chemicals very often existed somewhere, either as special preparations that had been made in some university or research lab, or even as commercial products of some small, obscure chemical company. At the Armour Research Foundation Dr. Martin Heeren conceived the idea of a National Registry of Rare Chemicals, and Armour undertook to finance and operate it. Paul Golong can probably bring you up to date, but it ran with success for many years and probably still does. Many of the scientific journals gave it free advortising space, and when there was an inquiry for a chemical not found in the plant card index at Armour, the request was advertised in the journals. Armour (or the Registry) took no responsibility for supplying chemicals, but only for telling the inquirer the names and addresses of those who were listed as having such a chemical.

The Centre for Industrial Development would be the logical organization to publish a monthly gazette, and maintain a card file, in which suppliers having equipment of this kind to dispose of could have it listed, either free or at a nominal charge. Perhaps the gazette would list only whole factories, and also companies or governments overseas that were looking for such factories. The card file would include also individual machines and "less-than-whole-plant" lots. It would be clearly understood (in print) that the UN/CID took no responsibility for the reliability of the equipment or the parties concerned, but merely functioned to help bring prospective buyer and seller together. It is hard to determine how big a thing this might turn out to be, but it might be run for a short trial period to see. Anyway, given the problem as it now exists, something like this would seem to be the only solution if we really want to do anything except discuss it. AND IT WOULD HAVE TO BE WIDELY ADVERTISED TO WORK 1

Along with this, if it dares, the UN should be prepared to offer in each country a panel of names and addresses of engineering inspection firms qualified to report to the prospective buyer on the condition and worth of the equipment in question. It is not



enough merely to say that there are such firms; somebody has to say who, and until this is done we haven't really said anything.

There are a few scattered points of substance that I have marked in going through the paper. First, p. 16, it mentions that a more labor-intensive older machine may be more economical in a developing country because of the difference in wage rates. This is often true, but equally sometimes it is not. The factor of labor quality also comes in. Many times a more labor-intensive machine, because it depends more on the laborers' skill or care, is actually less economical to operate where bungling can ruin the product. I have seen cases in developing countries, completely lacking in industrial tradition, where for certain kinds of work it would take longer to change the ingrained habits and standards of the labor than the expected useful life of the machine; in such cases an automatic machine may be the first answer, and the simpler type later when the economy of a lower wage rate can actually be realized.

Also on p. 16, I think you could make much more of this matter of scale. It is a most significant point, and dealt with entirely too briefly as though it were purely incidental.

On p. 17, delivery periods for secondhand equipment are sometimes shorter than for new equipment. For very large and specialized machines it may be universally true. European manufacturors — to judge from delivery dates — generally seem to start making anything only after they have a firm order; but in the U.S. there is an effort to stock many kinds of equipment for immediate delivery, often already boxed for shipment, while the used itom may have to be unbolted, inspected, reconditioned, tested, dismantled and crated. I wouldn't be too sweeping in the statement here.

On p. 18, top, it is perhaps generally true that parts for an older, simpler machine stand a better chance of falling within the capabilities of a local repair shop. But (a) they may prove quite expensive being made on special individual order instead of by mass production, and (b) sometimes with an older machine a certain part may be too difficult for local fabrication and also unobtainable abroad because it has been discontinued.

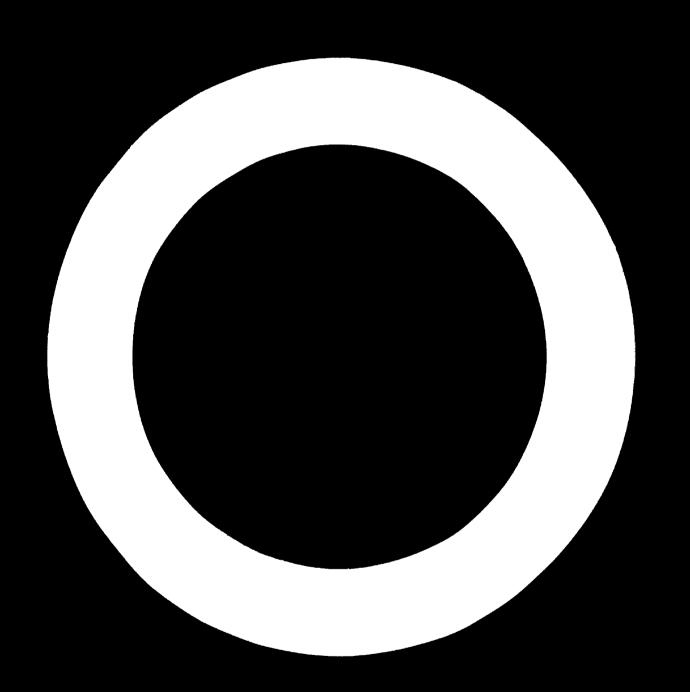
Also on p. 18, bottom, the shorter economic life is listed under "disadvantages" but the paragraph goes on to indicate the opposite normally. As this question is in fact the hub of the whole matter, around which the entire paper revolves, hadn't we better straighten out what we want to say here? I doubt that the economic life can be properly classed as either an advantage or a disadvantage except in the individual case.

On p. 23, "The selection of equipment for a particular job will not be considered in this paper as the question is independent of whether the machine is new or secondhand". Perhaps selection need not be considered here, but isn't the statement rather at variance with what is said on p. 7 (Obsolescence) about new jobs for old machines?

On pp. 24-25, about reassembling complex groupings: likewise, many simpler machines must be accurately adjusted after installation. Does the buyer know how? A booklet comes with a new machine, but may not be obtainable for an old one — or the correspondence necessary to get it may offset the time saved by finding an old machine readily available.

Coming to "Conclusions and Suggestions", p. 33, Item 5: Is this question pertinent? . Just what good will it do to draw up lists of industries that might use secondhand equipment? Any of them might; who is to say which ones can do so most "efficiently"? How we do love to prepare lists in the UN! Let's not list this item among the questions to which answers "must" be found (line 11).

On p. 34, Itom 3: What's this about drawing up procedures to assist experts in evaluating equipment? Other people may need this, but certainly not experts, if they are experts. Do we happen to have some inexpert characters ready to tell the experts how to do their job, or what is the meaning of this?



On p. 34, Item 7: Checking on breaches of contract would certainly be useful, but not unless the checking organization were prepared to warn against unreliable suppliers by name. I trust there is no implication that the UN could do this, for of course politically it would be quite out of the question when the chips were down, as we have already noted above.

The second part of this item, alleged to be "urgently needed", is the collection of statistics. Like Item 5 of the preceding page, this looks more like something Parkinsonian that we would enjoy doing. To imply that the use of secondhand equipment in developing countries necessarily awaits the collection of statistics (or the listing of industries either) calls for a better explanation than is offered in this paper. As it stands it looks untrue, and makes the reader wonder about the validity of the rest,, and so weakens the whole case.

On the chance that the Questionnairs might be used again, I have a couple of points. First, one wonders in what way the items in C-1 form a separate category from those in C-4; except for foreign exchange, they all seem to deal with the user's costs. Second, answers to E-3 have little significance, because under the various problems of factory work in developing countries they do not too often manage to operate even new equipment at full rated capacity.

BERKE

Now, if I may, a word about presentation. Somebody worked hard at this paper and deservos a lot of credit for its meaty material. But much of its impact is lost by the way it is presented, I think you will agree. I am part of this organization, and I want to be able to take pride in it. So nobody should take offense, for if we believe in UN Assistance and want it to survive the growing attacks, we are going to have to be ruthlessly self-critical and pull up our socks. A document that is circulated like this is part of our public relations, much more than anything bearing the stamp of the Public Relations Office.

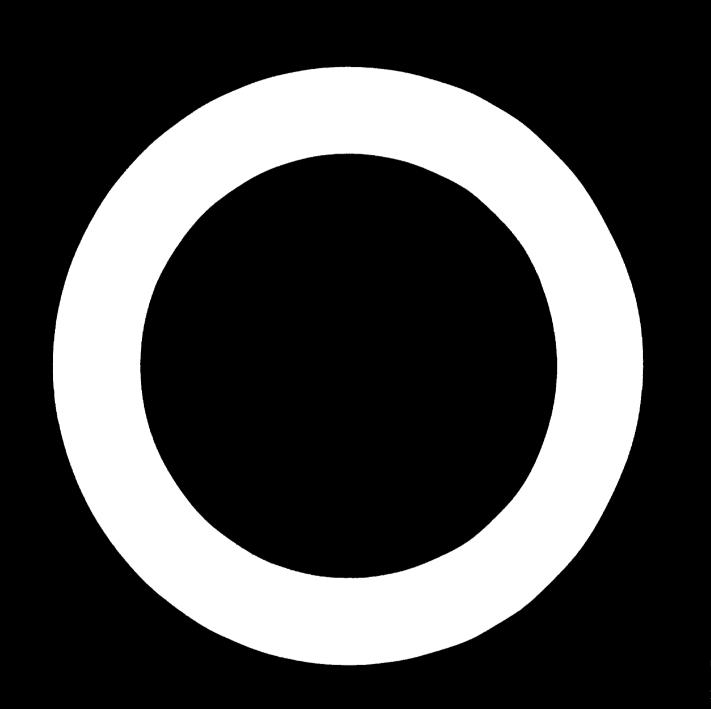
The reproduction is atrocious. Mr. Grigoriev's accompanying letter is neatly done by Multilith; why not the article too? Or else why not Mimeo? It takes no longer to cut a stencil. Or if for any reason we must use Ditto, with a little ordinary care the machine is capable of a lot better than what is here. Don't we care? Portions of some of the pages are almost illegible, and the same troubles are in both of my copies, as if the machine were out of adjustment.

A few typos are likely to creep into anything, but they are harder to spot and correct in a bad reproduction. If you re-use this material, note "unconditioned" for "reconditioned" at the bottom of p. 15 text; and p. 24, penultimate line, "of" for "if", and delete "and". (Here it would also improve the writing to delete "the secondhand machinery or equipment" and simply substitute "it").

Did anyone read through this thing, either before or after reproduction? One is struck by repetitions. "Secondhand equipment" is said so often in pp. 4-5 that the resder wants to scream. Pages numbered 20 and 21 are separately typed, occur in both my copies and probably in all copies, but duplicate the same text with different spacing. The bibliography seems to be part y a repetition, references occuring both in footnotes and Appendix; but to make it more confusing, different numbers are used for the same references.

Furthermore, the references have not been checked for standard practice. Waterston's book is mentioned in both places, but in neither case is there enough information for a reader to order the book without a search. I haven't examined all the others.

Evon more important than all this is whether the article flows smoothly and interestingly enough to hold the reader. It has been wisely said that what goes down on paper is less important than what comes off it.



I suggest that, first of all, the abovementioned matters all annoy the reader by stealing his attention from the subject of the paper itself. So does the Outline Form, which is often O.K. for a final summary of a chapter but not for the whole body of text. And the reader's attention is badly interrupted by forcing him to stop and read the precise details of a system of classification (pp. 10-14) at a moment when he is thinking about the broad principles of the problem instead; I think it would be better to discuss the general problem of classification and pass on smoothly, putting the lengthy example of the GSA system in the Appendix to be studied when he is ready for it.

One trouble with the Outline Form is that it may give the impression that the writer has first arranged his headings, and then feels he has to say something under each one whether there is really anything to say or not. Take an example like "H" on p. 18, in which the heading is clear enough by itself and if there is anything more to be said, it has already been said under "B" anyway. Thus the tendency is to make the article seem padded.

The Questionnaire and all of the details about its use, lists of countries and industries replying etc. should be in the Appendix, where indeed they are. But any of the significant findings should, I think, be incorporated as supporting material here and there in the text, as each aspect is discussed, to add human interest and to help make the various points.

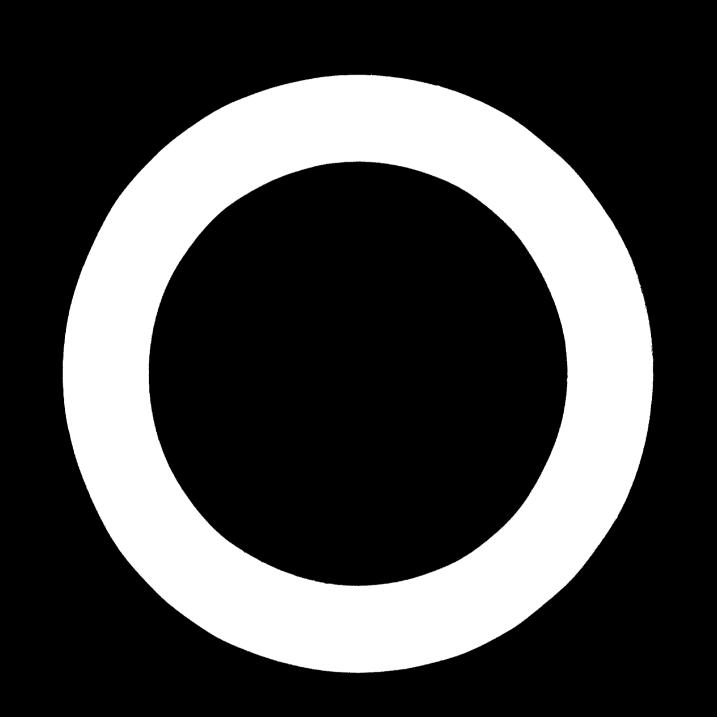
I have saved for last the thing that troubles me most: the use of Officialese. We must remember that Officialese was never designed for communication, but for obscuring. By now, everybody in the world knows that, however, and its only effect is to discredit anything written in it. If the UN as a body would abandon Officialese, respect for its work would be doubled everywhere within the week. Let's pick some examples here:

- p. 3 "There is not yet a sufficiently large cadre of ..." (There are not enough)....
 "to solve the problems involved in selection, shipment, installation, operation and maintenance of such equipment" (to select, ship, install, operate and maintain such equipment). This may be QAS language, but why perpetuate it?
- p. 4 "The reduction in cost attendant upon the use of...etc. etc." Instead of this entire paragraph we need only say, "The lower cost of secondhand equipment also conserves scarce foreign exchange".
- p. 8, middle: "deactivization" is as typically Officialese as the iron-clad rule that all possible words must be used in a form ending in -ion, but it represents the corollary rule that ordinary words (like deactivation) must be lengthoned at every opportunity, and to hell with the dictionary. See also "localizing" (locating), p. Q-3.
- p. 8, lower: "utilizes". See above. What's the matter with "uses ?
- p. 18 "shortage of supply of skilled labour" (shortage of skilled labour); also "the industrialization process in" (the industrialization of); there is sometimes a place for "industrialization process" when we are discussing the process itself, but I think not here.
- p. 18 "greatest bottleneck". This classic of Officialese has appeared as a joke in Readers Digest (around World War II). The idea is that we become so preoccupied with jargon clickes that we even lorget what they mean. A bottleneck that restricts most is the narrowest (most serious), not the greatest. Right?
- p. 23, top: Another rule of Officialese: never use an active verb, or any verb at all if it can be avoided by using only nouns. What's wrong with saying:
 - (1) detormine the machine....
- (3) know the condition ...

(2) locate the

- (4) evaluate the use ... ?
- p. 24 "Adequate preservation and boxing ..." Of course. But is there anyone who doesn't know this ? What do such fatuous statements add to a serious article ?

*** No offense intended **



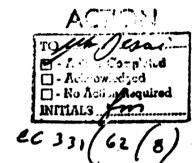
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Mr. R.C.Deeai, Ohief Industries Section Centre for Industrial Development United Nations New York U.S.A.



Stockholm, May 21, 1965

Dear Mr Desai,

Some time ago I received your preliminary etudy regarding the use of second-hand equipment in the industrialization of the developing parts of the world. Please accept my apologies for my late answer.

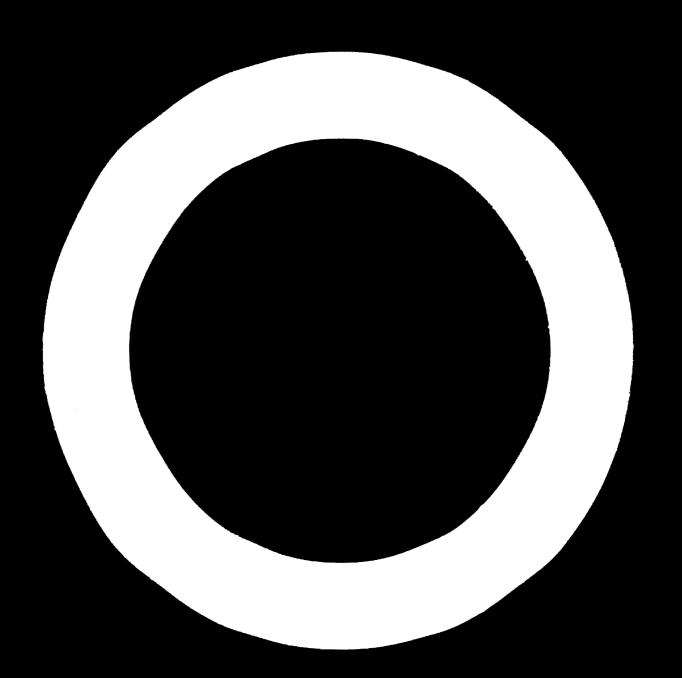
Enclosed you will find a short memo with my comments on the subject. It does not follow the index of your study as I wanted to focus the attention on the issues that I believe are the most important ones, after having worked actively with the problems over the last five years.

If I can be of any more assistance please, do not heeitate to let me know.

Osinoproly,

Made Langenskield

Busan



In the UN preliminary study regarding the use of second-hand equipment in developing countries the various problems related to such usage have been carefully examined and outlined.

Industrial Coordination Bureau (ICB) which I represent has been working for the last five years to promote the creation of new industries in the developing countries through the transfer of complete second—hand plants from economically more advanced countries. Our experience has partly been described in the report made on our account by the Economist Intelligence Unit (EIU) and referred to in the UN study. To the observations made in the EIU report I would like to add the following observations on some of the basic problems in the carrying out of the proposed activity.

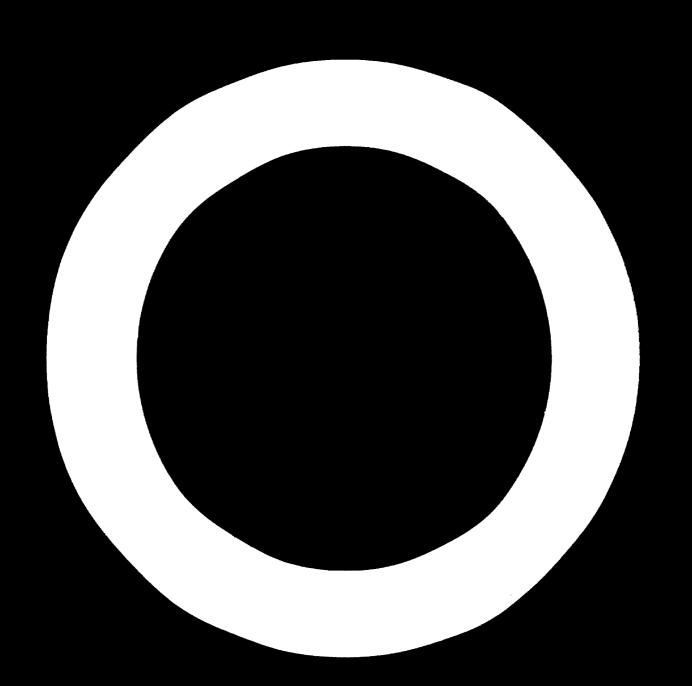
A clear distinction must be made between the transfer of individual pieces of equipment and complete plants. For the former, channels of distribution are already established and it would probably be outside the coope of activity of the UN to suggest methods to reorganize the trade in old machines.

As regards complete plante I believe that the euccese of any program to use second-hand machinery in the industrialization of the developing countries depends on the interest and active support of already established industries that possess the necessary technical skill to get the machines working again.

The system of classifying ecoond-hand machines as suggested in the UN study would, I believe, be of little practical importance as no eccond-hand plant could or should be exported without giving the prospective buyer an opportunity to examine the machines before shipment. The transfer of eccond-hand plants from industrialized to developing countries should be based on a personal contact between the industry that has been using the machines and the foreign entrepreneur. To improve the chances of success the transactions should preferably be made on a joint-venture basis. I also believe it to be of importance that machines are not given away, as the receiver would then probably have less interest to see to it that the machines are properly installed and put into production without undue delay.

In ICR we have been interested to promote only private enterprise of small and medium size. I believe there is a distinct difference between the approach of a private entrepreneur and a governmental or eemi-governmental body when it comes to the usage of second-hand machinery. For the former the prestige aspect is less relevant as he is mainly interested in a) how much money he can economize by buying second-hand machinery and b) what guarantees he will have that the machinery will operate properly. If he can get a satisfactory answer on these two questions the chances are good that he will prefer second-hand machinery. I consider that in most cases it would be fruitless and even unfitting to try to persuade government bodies to install second-hand plants.

We have experienced no difficulties in finding buyers for complete second-



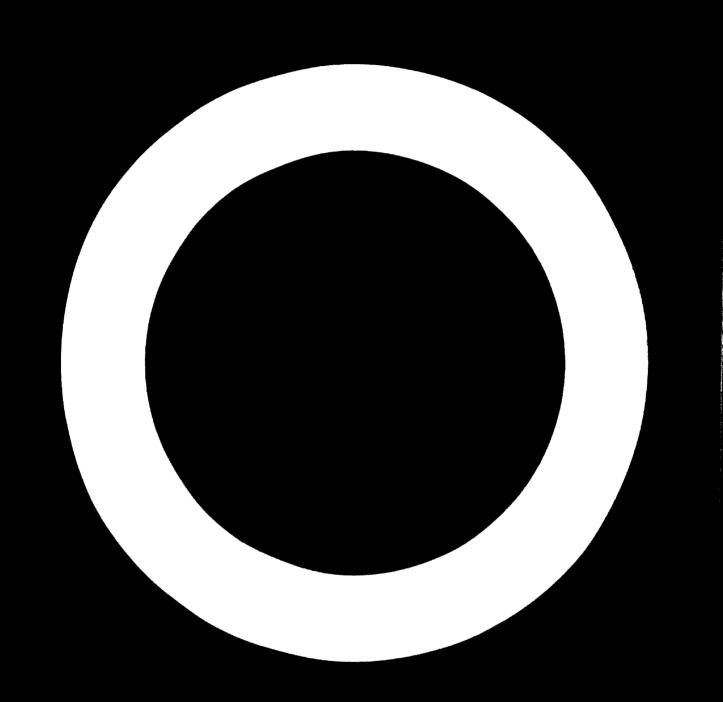
hand plants, even if it has turned out that only a very small percentage of the enquiries received has been serious and the buyere in possession of adequate means to go ahead with their proposed schemes. On the other hand we have found almost no interest on the part of already established industries to sell their obsolete installations. Among the reasons herefor can be mentioned:

- a soaroity of technicians to dismantle, install and assemble the used machinery again,
- a lack of tax incentives to sell machines that are already completely written off in the books of the sellers,
- a sense of frustration in doing business with the developing countries because of difficulties in the form of red-tape, slowness in correspondence and final decisions, delays in payments, etc.,
- a feeling of that there is no reason to spend coaroe time trying to drum up business in far away parts of the world when oustomers from neighbouring countries are knocking at the door.

As the success of transferring complete second-hand plants to the developing countries depends on the active and interested support of industry in the seconomically more developed countries, the purpose of any action of the UN should be directed towards raising and guiding such support.

Below I am listing some of the steps that I believe should be taken to achieve this end:

- the launching of a campaign by industrial branch organizations in Europe, North America and Japan to stress the importance that complete second-hand plants in good condition that for different reasons become obsolets are made available to entrepreneurs in the dsveloping countries before they are scrapped and/or the machines scattered. To be of any use the information of the availability of such complete production units must be circulated at least six months before the machinery has to be disposed of. Presently the decision about how to dispose of obsolete machines is usually taken only a few weeks before the machines are taken out of production, making the time in most cases too short to locate an eventual buyer. The solution to this problem would be to get the idea accepted by industry that when ordering new machinery or planning to discontinue a certain line of production the possibility of offering the obsolete machinery as a complete production unit to start a new factory in some developing country should be a serioue alternative,
- the creation of a favourable atmosphere for the sale of second-hand machines to developing countries by making the profits tax free,
- the establishment of some standard contract's form for joint-ventures to facilitate the often difficult negotiations between the two parties,
- the creation of opportunities for skilled workers, foremen etc., proferably

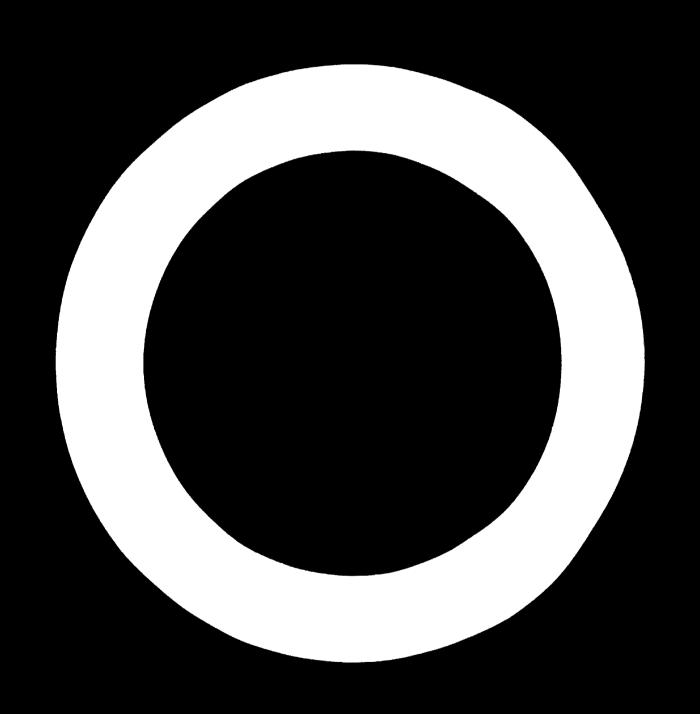


those reaching retirement age, to go abroad for the time necessary to install and put into operation the machines that they in many cases might have been working with before,

- the creation of a system to distribute information about the offers for complete second-hand plants to private entrepreneurs in the developing countries. There are in most of these countries branch organisations, industrial associations, development banks etc., that could be used in this connection. The ICB met-work of contacts might serve as an embryo for the creation of such a system.

Stookhelm, May 14, 1965

Hene Lemmenskiild



UNITED NATIONS

ECONOMIC COMMISSION FOR LATIN AMERICA



NATIONS UNIES

COMMISSION ECONOMICUS POUR L'AMERIQUE LATIN

NACIONES UNIDAS

Av. Providencia 571 Casilia 170 - 8. BANTIAGO, CHILE

REFERENCIA

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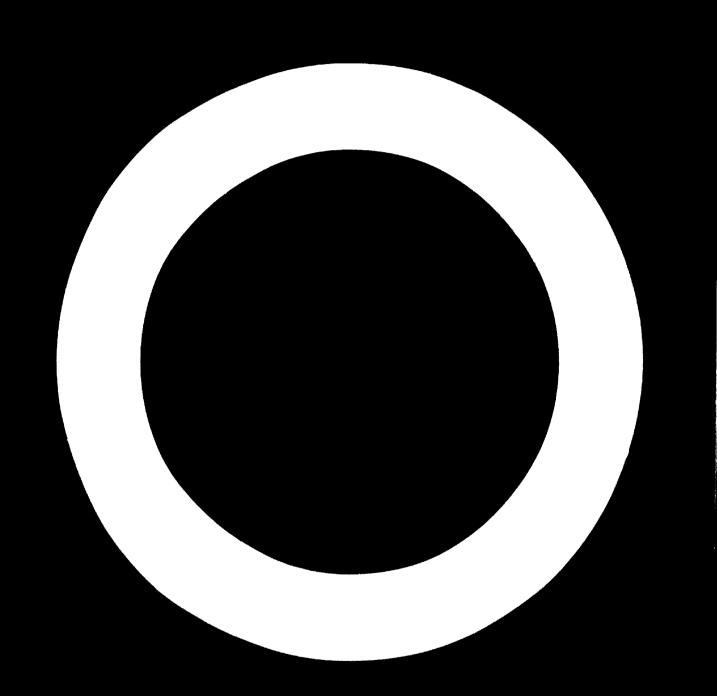
Dear Mr. Grigoriev,

I refer to your letter of 17 February concerning the preliminary paper "The Use of Secondhand Equipment in Developing Countries". I would like to congratulate the Centre for this initiative and for the excellent analysis of the issues involved. In addition to the possible saving of foreign exchange, in the process of industrialization, which can be achieved by the use of secondhand equipment, there is the problem of the likelyhood that the use of such equipment may result in a better utilization of the resources of the developing countries - abundant labour and scarcity of capital. Unfortunately, this latter problem is something about which we also have very little systematic knowledge and it is Mr. Figueiredo's intention to have the Division spend some time in its study in the near future. If it is carried out at ECLA, it might well be of advantage to introduce the analysis of the possible contribution of the use of second-nand equipment in the theoretical study of the better adaptation of technologies to the availability of resources in our countries.

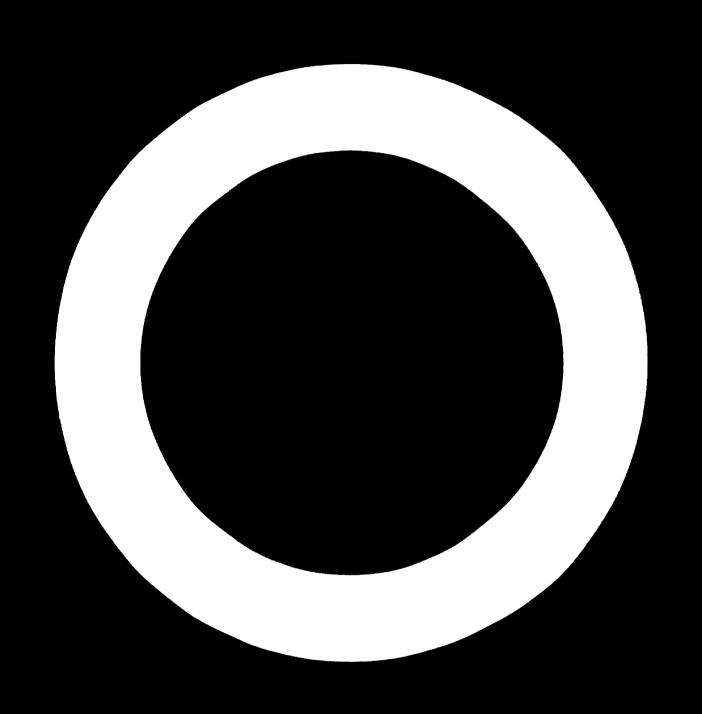
Before commenting on the paper itself, I would like to say a few words about the selection of the Latin American experts to whom the preliminary paper has been sent for comments. First, Messrs. Romi and Villaseñor. The former is a machine tools' manufacturer and probably strongly biaised against the use of secondhand equipment, while the latter is, according to my knowledge, decidedly a champion of its use. Then, Mr. Mario Pinto, who is one of the best known consultants in industrial planning and engineering in Brazil. Since he is, in addition, a shrewed businessman, his opinion should be of great weight, unless he is biaised by some bad experience with imports of used equipment. Noriega-Morales and Deschamps have had considerable experience advising industry but I do not know whether they have ever had anything to do with specific projects involving choice between new and used equipment.

Coming to the paper itself, I would like to make the following comments and/or suggestions:

Mr. N.K. Grigoriev
Acting Commissioner
Centre for Industrial Development
United Nations
New York, N.Y.



- a) when rewriting the paper, I feel that a special point should be made of the fact that many, if not all, the developing countries apply the same import duties to secondhand equipment as well as to new equipment. The implications of this fact seem to me to be very far reaching and detrimental to the extension of the use of secondhand equipment. Depending on the size of the tariff, such a policy may be important enough to completely offset any price advantage of used machinery. Evidently, a United Nations action to change these conditions, where they prevail, may be an important step to increase the applicability of secondhand equipment in developing countries.
- b) in addition to the long onnumeration of possible disadvantages of the use of secondhand equipment which appears in the preliminary paper, there seems to be another source of potential trouble which might possibly, be considered when writing the final draft. It is the need to foresee possible changes in the market of the developing countries once they decide to buy used machinery. I will mention a specific instance which is familiar to Mr. Jack Miller. In 1956/57, the Huachipato steel plant in Chile decided to scrap their old mechanical sheet rolling mill which, incidentally, was sold to Colombia incomplete and has never operated at Paz del Rio. The choice of new equipment for the small Chilean market (which they have expanded to a certain extent by selling the steel at a very high price within the country and dumping some of their production out), was either to buy a few stands of a semi-continuous mill with a view to add more stands in the future, when the market warranted it, or to install a reversing mill of the Steckel type. This problem was discussed at ECLA Steel Meeting in São Paulo in 1956 and each one of the experts present recommended that a semi-continuous mill be installed. Unfortunately, nuachipato got an offer at a somewhat smaller price, for a used Steckel mill, which was installed. As long as the plant was to operate only for the Chilean market, the result of this choice has been:
 - i) that steel prices in Chile are very high. For example, cold rolled sheet of 0.6 mm thickness is sold by Huachipato at some 250 dollars a ton, compared with international prices of 150 to 170 dollars:
 - ii) that the plate and sheet produced in the Steckel has only 1 metre width and, furthermore, is of uneven thickness. Thus they are compelling the users to use this inadequate material in all possible applications, through a prohibitive tariff protection. But if the Latin American steel market is opened for other regional plants, in the best of cases, the Huachipato flat products will be some 30 to 35 dollars per ton more expensive than San Nicolás, Volta Redonda or Mexican plate and sheet. We have prepared projections, with all necessary reservations as to their value, and find that the present Huachipato Steckel mill has sufficient capacity to supply the internal Chilean market for flat products until 1975, having, during most of the years, a surplus capacity which they will be unable to use for experts.



Now, mistakes of this type also may occur when installing completely new equipment, but in this case, there is no doubt that if the secondhand mill had not been offered, the problem could not have arisen and a semi-continuous mill would have been installed in all probability, the blame for this mistake will not be put on Huachipato's management, which probably did not realize the serious difference in production costs, but on the fact that the mill was a secondhand ones

- c) I feel that the statistical foundation on the basis of the few replies to the questionnaires, for drawing conclusions about the problem is rather weak and I think that the Centre should, wherever possible, go out of its way to have the number of specific replies increased at least two or threefolds
- d) it strikes me that there is a very interesting field to explore on the negative side of the problem, by establishing the reason behind the interdiction of secondhand equipment imports by some developing countries. There may be several reasons for such a policy and some of these may complement each other. In the case of Chile, for instance, the reasons are two: first, a bad experience with the Government (Corporación de Fomento) which sponsored construction of the cement plant "Juan Soldado" at La Serena Coquimbo. This plant was purchased secondhand during World War II and it turned out:
 - 1) that the equipment was in very poor condition and needed considerable reconstruction and
 - ii) the flotation process was not adequate to the limestone that had to be used. Although some of the engineers who were responsible for this failure are no longer alive, it might still be possible to establish exactly what happened and why. A trip to Serena, 500 km north of Santiago may be necessary for this purpose.

second: in some instances, buyers of secondhand equipment have declared it to be new and requested from the exchange control the foreign exchange necessary to buy a completely new unit, and have kept the cost difference abroad in their personal accounts. Prohibition of import of secondhand equipment would thus be a way of tapping a possible leakage of scarce dollars.

I hope that these few notes are of use for the clarification of some of the issues involved and also, that the Centre may find the time and resources necessary to further explore this extremely interesting avenue for facilitating industrial development in developing countries, possibly using technologies more adequate to the available resources.

Sincerely yours,

Bruno Lousehner

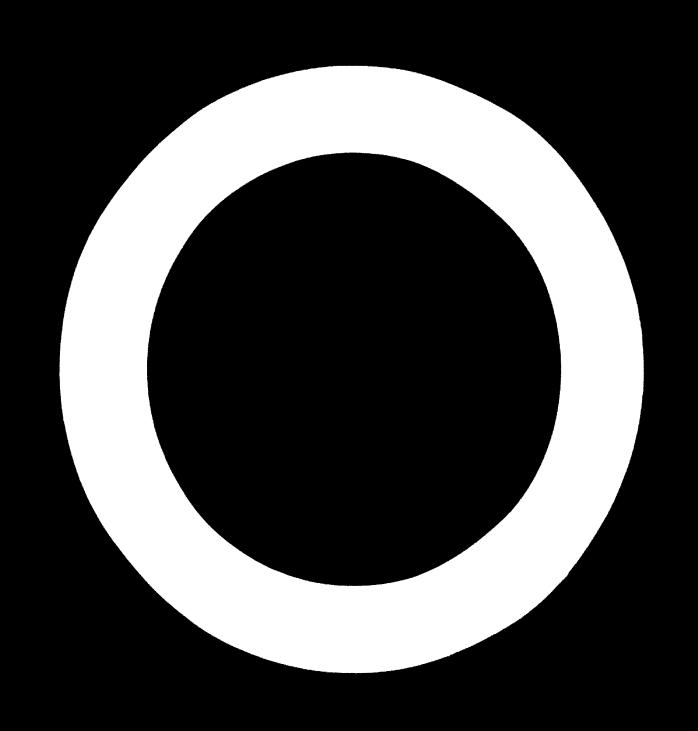
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MAY 27 1965

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Mr. N.K. GRIGORIEV Director

Technological Division

Center for Industrial Development c/o UNITED NATIONS

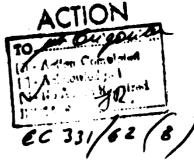
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KY-M/DU/PH 24.5.1965

Motroff.

Dear Mr. Grigoriev,

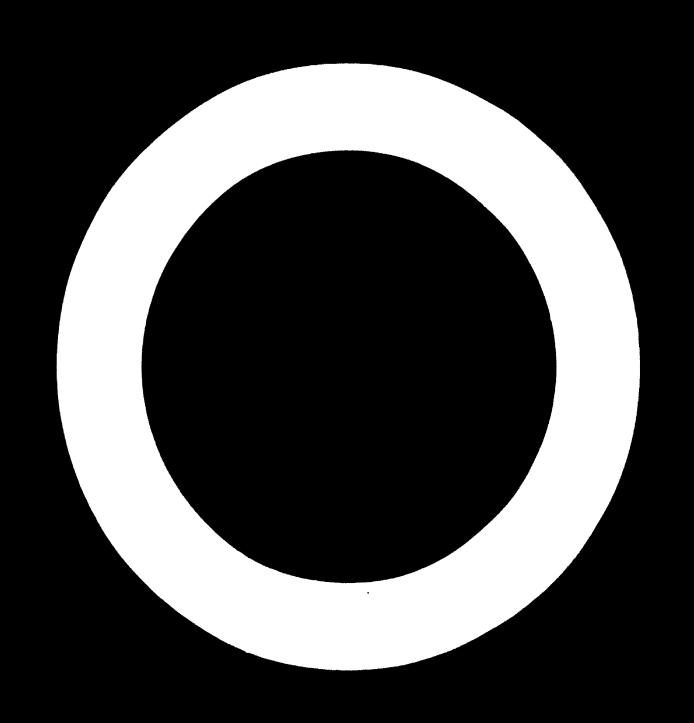
In reference to your letters of ii February and 7 April 1965 we would like to comment on the study " The use of eccond-hand equipment in developing countries" transmitted by your office as follows:

Primarily we want to state that we are engineering, manufacturing and supplying turn-key new
industrial plants of various types and we are
therefore not competent to act as experts for
second-hand equipment. Nevertheless we will try
to see the problem from our point of view.

The necessity of selling second-hand equipment as detailed in your paragraphs (1)-(6) is quite obvious. On the other hand it is extremely important to examine the quality and usability of the machines in question as suggested by you.

continued.....

THE MENTAL OF



We are now-a-days confronted with the problem of second-hand equipment in the automotive markst and are informed about the difficulties arising from these relatively simple goods. Even more important is the practical statement relating the technical usability of used plants.

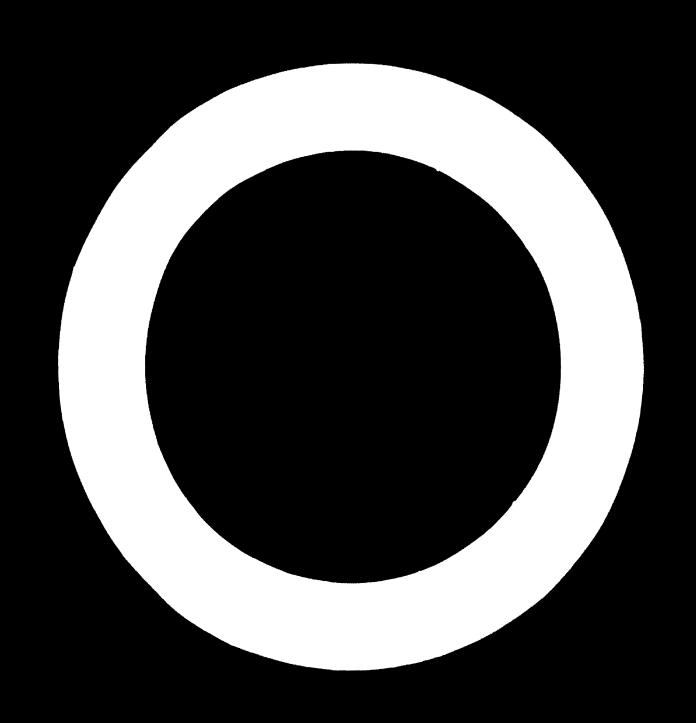
To solve these problems within an international area and to come to an objective conclusion regarding the various industrial plants will be extraordinarily expensive. Troubles will be cropping up by types not produced any longer and lack of spare parts connected therewith.

In this field it seems to be recommendable to strictly examine the remaining efficiency of a machine or an industrial plant and to give attention to the year of construction and the fact whether the machine will be produced furthermore.

We are also well informed about the small interest of developing countries to import plants not manufactured according to the last status of technical improvement, a fact we learnt by discussions with different clients. We personally experienced that, to buy machines or plants not corresponding the last status of development was called "asking too much" though the prime costs were extremely low.

Your comments relating second-hand equipment are quite obvious, but based on a certain industrial experience we believe that it is a mietake to

continued....



prefer second-hand equipment to a new plant because of the low production costs. Certainly the small production capacity stated in your report seems to be advantageous - especially in case of steel production in developing countries - but works out indirectly by raising the operation costs.

Doubtless the terms of delivery of eccond-hand equipment are advantageous.

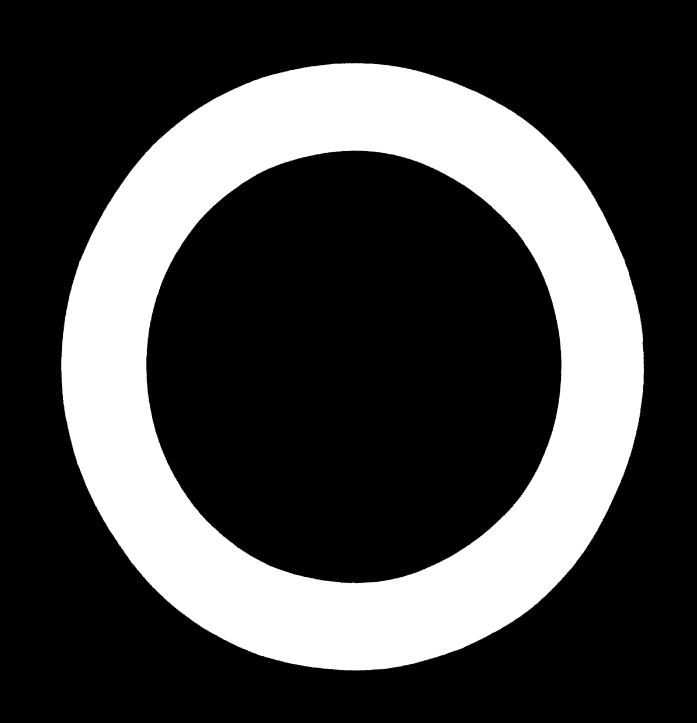
If there are no experts at hand able to produce and substitute spare-parts in those developing countries, the item of simplier maintenance of second-hand equipment compared with that of more complicated machines also becomes negligible.

How to procure respectively arrange the purchase of used plants seems to be the nucleue problem.

For many years we know the market for machines and industrial plants and summarizing we add that placing of anorder is strongly influenced by confiding in a solid and honest producer respectively merchant. This point of view becomes yet more important with second-hand equipment. Therefore it appears to be absolutely effective to manage such business within an international non-mercantile organization (this organization may of course charge an uniform agency-provision).

There must be a close contact between this agency and the technical examination and qualification center concerning machines and service of spare parts, for there is no chance to work profitable

continued.....



if these two main factors are not managed by a central organization able to guarantee the future efficiency of the second-hand equipment in question.

We shall not comment if in connection with second-hand equipment - doubtless sold for small prime costs - there should eventually be agreed to large-scaled financing terms toe.

As a company manufacturing new machines and plants we are sure that the import of second-hand equipment for developing countries will only signify the first step and beginning of industrialization of national markets. Let ue oall it a certain and extended model of training program.

/ The prohibition of many developing countries for the import of second-hand equipment is another problem narrowing the markets.

We hope to have fulfilled your expectations and remain

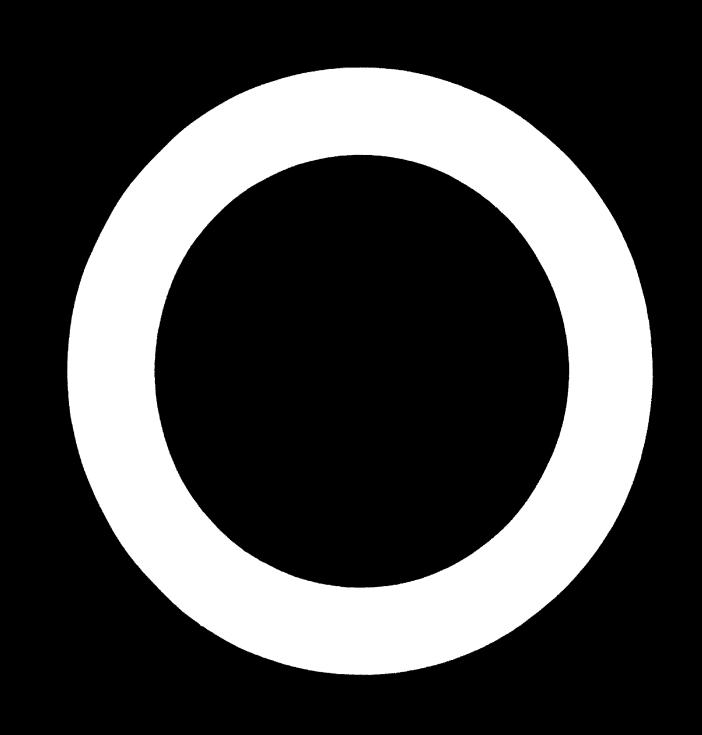
yours very truly

VEREINIGTE ÖSTERREICHISCHE EISEN- UND STAHLWERKE A.G.

(Hiensogh)

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UNITED NATIONS



NATIONS UNIES

ECONOMIC COMMISSION FOR ASIA AND THE FAR EAST SALA SANTITHAN CAMPAGE, THAN AND

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TELEPHONE : 2 4 0 8 0 GABLE ECAPE SANGROR

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INITIALS

Dear Mr. Molinari,

This is to acknowledge receipt of your letter EC 331/62 (8) dated 27 April 1965. We note that the new date for comments and suggestions on the CID paper on "The Use of Second Hand Equipment in Developing Countries" was expected to reach your office last 15 May. Obviously, there was again a delay in routing the letter or in the mail. Whatever may be the cause for this delay, we wish to apologise for our inability to reply to your letter earlier together with our comments on the above mentioned paper.

We had the opportunity, however, to discuss although very briefly certain points of the ClD paper with Mr. A.G. Menon before he left for New York last 15 May. Perhaps he had the occasion to exchange views with you or Mr. Grigoriev on this subject.

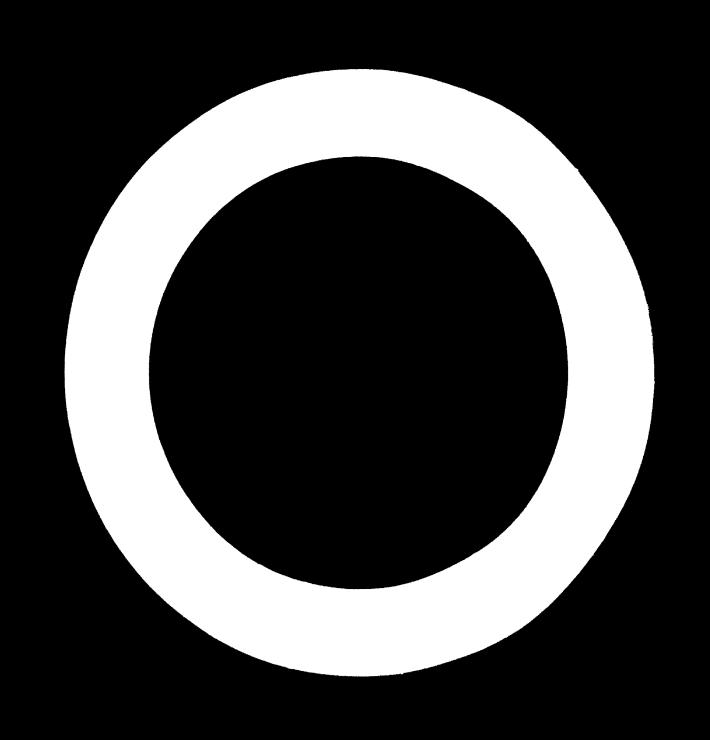
Whatever comments we may make on the paper at this stage might be too late to serve your purpose. We hasten to state, however, that the CID preliminary document regarding the use of second hand equipment and machinery in developing countries, covered generally almost all the important topics, relevant to this subject. It correctly emphasized, among others, the need for a standard international classification of this type of equipment and also the methodology of their procurement. The pros and come for their use by developing countries were emply discussed and enumerated. A thorough perusal of the document, together with the conclusions contained therein will be most enlightening to many countries of the ECAFE region.

From our experience, we might perhaps state that, with certain limitations and together with the assurance of the proper methodology in their procurement, the use of second hand equipment for machinery would be beneficial in some of the developing countries in the FCAFE region. The use of second hand machines and tools may perhaps be promoted more vigorously in the smaller countries for use in small machine shops which are primarily engaged in the repair of simple machines and equipment used in farms and in the building trades.

/These

Kr. Arturo Molinari Associate Economic Affaire Officer UN Centre for Industrial Development United Nations New York

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These shops could use to advantage second hand standard lathes, milling machines, mechanical drill presses, power saws and allied equipment and tools. Second hand tools could also find utility in most of the vocational and trade schools for training purposes.

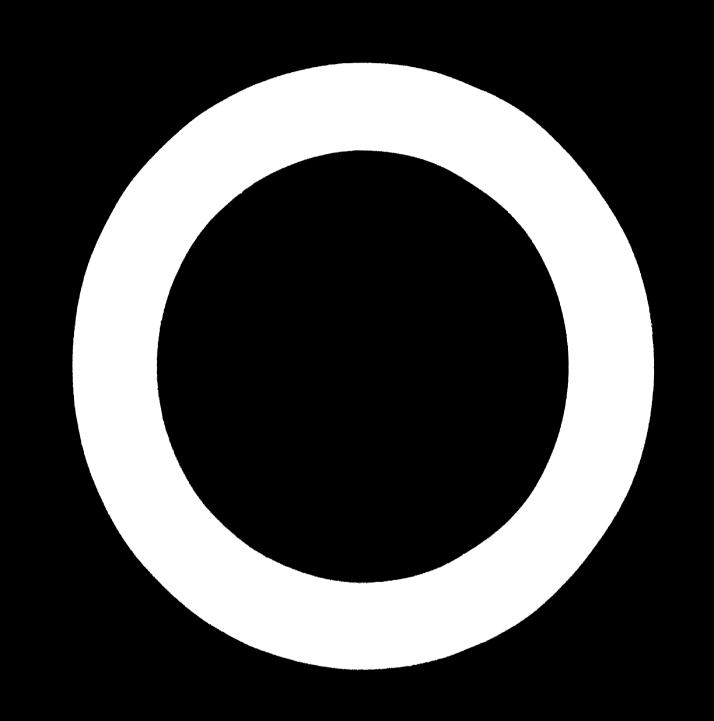
The resistance, "allergy" and apprehensions in the use of second hand machines and equipment in many of the small countries of the region may perhaps be minimized by a campaign through trade channels with the display of these equipment in the various trade centers and industrial exhibits in these countries. These exhibits may be promoted by second hand machinery dealers and suppliers.

There exists also a potential demand for second hand macrines and equipment in the relatively more advanced countries in the region, particularly those which have established some engineering industries in the mechanical and electrical fields, and also for good used heavy equipment for construction and fabrication purposes i.e. hydraulic and extrusion presses, planers, bending rolls, shears and plate and angle straightening machines. Provided that detailed drawings of important parts and foundation planes and drawings required for installation purposes are furnished by the suppliers, the promotion of the sales of this type of equipment would be beneficial in these sectors of industry.

We hold some reservations in promoting the use of second hand machines and equipment in the more sophisticated processing industries such as food processing and chemicals, iron and steel, because of the rapid advances in technology and science. Extreme caution should be used in encouraging eales of second hand facilities in this group of industrial activity. In more cases than one, the cost of dismantling, packing, crating and freight and the cost of reconditioning such equipment and their final installation in the green country results in a more costly venture compared to a new and modern installation.

With respect to suggestions you have requested in your circular letter of transmittal EC 331/2 (17-1) particularly with reference to what action might be expected from or recommendation to governments, UN Agencies etc. we submit our opinions as follows:

- (a) Governments of developing countries: Except in isolated cases, governments may not prepared to formulate policies pro or con in connection with the use of second hand machines and equipment in their economic development. Regulatory licenses may perhaps be formulated through economic pressures from vested groups.
- (b) Governments of industrialised countries: Promotion of sales of second hand equipments and machines if appropriate may be channeled through trade centers and exhibits which are usually undertaken by trade missions or trade centers.



- (e) United Nations Agencies. International Organizations etc:
 The subject of the use of second hand teols/equipment may be taken
 up as agenda items in the appropriate conferences or meetings held
 for certain sectors of industry and participated by member and
 associated member countries.
- (d) Professional Associations, Consulting Firms etc: The subject may be taken up in their respective group conference meetings.

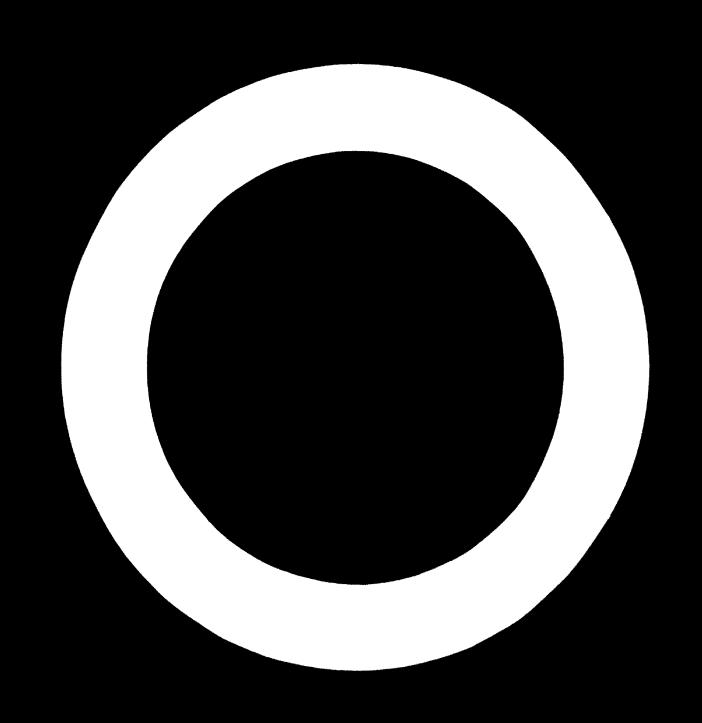
 Interested groups may hold meetings and seminars in the subject.

We conclude our comments and suggestions by stating that all premises considered, there is room for the use of apprepriate second hand machines and equipment in many of the developing seuntries. The basic consideration, however, by interested groups is the over-all price of such equipment/machine delivered to the purchasing country. In most cases, the over-all price should be quoted at "bargain prices" and/or extremely competitive prices.

With kind regards,

Yours sincerely,

O.Y. M. Depute Charge



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Dear Mr. Grigoriev,

C 331/62

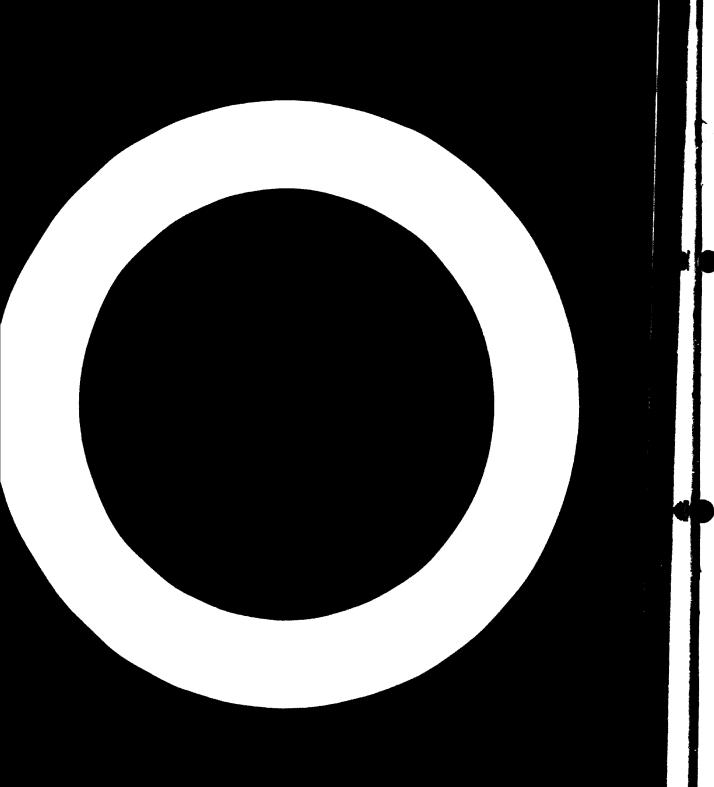
I wish to refer to our exchange of correspondence concerning the draft of the study on the use of second-hand equipment in developing countries, prepared by the Centre for Industrial Development, and I have pleasure in sending you hereunder the comments of the I.L.O. on this document.

First of all, we would like to express our appreciation for this initiative taken by U.N./C.I.D.; as a matter of fact, the research programme for small industries for 1966/67 originally included a similar study especially directed towards the requirements of the small industry sector. subject is of general importance to I.L.O.'s human resources programme in view of the employment creating effect of a greater inflow of second-hand equipment from industrial to developing countries.

Pages 6-9, section III, sources of second-hand equipment. Attention is invited to the fact that there exists not only in industrial but in developing countries as well a home market for second-hand equipment. In the latter countries too modern large-scale industries discard obsolete equipment (mostly on technical but occasionally on economic grounds as well) which are then bought up by and utilised for extended periods of time in artisan and small-scale manufacturing enterprises especially in the metal trades. Even physically deteriorated equipment which are considered unusable and which are sold for scrap in industrial countries (page 9, item 6)

Mr. N.K. Grigoriev, Director, Technological Division, Centre for Industrial Development, United Nations, NEW YORK

(V.L.A.)



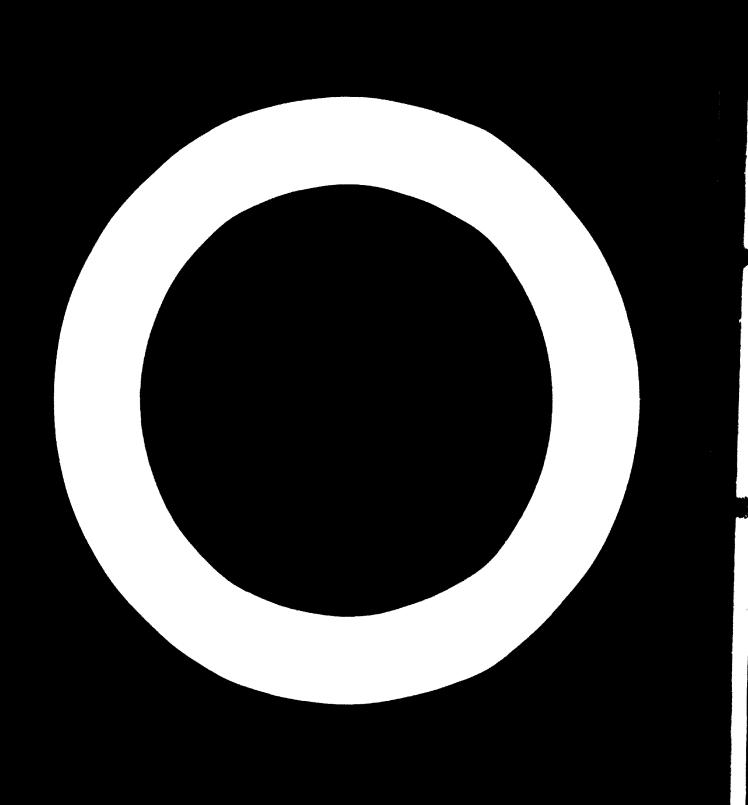
In many instances being repaired, reconditioned and put into operation again in small enterprises. This is possible conditioning and high capital cost which favour additioning and because of the great demand in developing distances for machine tools of the more simple type.

This demand, however, is generally inadequately met on account af import restrictions, ineffective domestic trading arrange—

and in second—hand equipment in developing countries, and the absence of a modern domestic machine tool manufacturing indicatry. The great demand for simple, low—performance machine tools is well demonstrated by the fact that not infrequently depoin on all metal working faithfully copied by and advantageously and in small metal working firms. It therefore would appear that this section of the paper a brief reference may be included concerning the second—hand equipment market in developing countries besides analysing this market in industrial countries.

Pages 15-22, section V, advantages and disadvantages of the use of second-hand equipment. In this section a paragraph may be included (possibly under item C, page 16) concerning the particular importance of second-hand equipment or small-scale industrialisation in developing countries. In most developing countries the metal trades organised on .. small-scale (and dealing with installation, maintenance and repair activities of machinery and household durables, and manufacture of parts and components including occasionally the manufacture of simple capital goods) is probably the fastest growing manufacturing branch in the small-scale sector: and there is reason to believe that the expansion of this particular branch could be greatly accelerated if the in flow of second-hand equipment from industrial countries would be expanded. Liberalisation of international trade in such equipment would equally promote the growth of other branches such as food processing, being a manufacturing branch which because of techno-economic considerations, is very well suited for small to medium-scale production; its importance as an adjunct to agricultural development would give added weight to the case for a liberal import policy on second-hand equipment. Similar considerations apply to the textile weaving industry (in so far as countries with unfavourable land/population ratio's are concerned) and the printing trade.

In the light of the foregoing observations there is no goubt that present government policies in developing countries which generally tend to prohibit or at least seriously restrict the inflow of such equipment limits the industrialisation process in these countries. Considering the built-in advantages of large-scale industries in matters of equipment acquisition (for example their access to suppliers' credit, to national and international finance institutions, their better understanding of applied technologies as compared with affect mainly small-scale industrialisation. Also, much

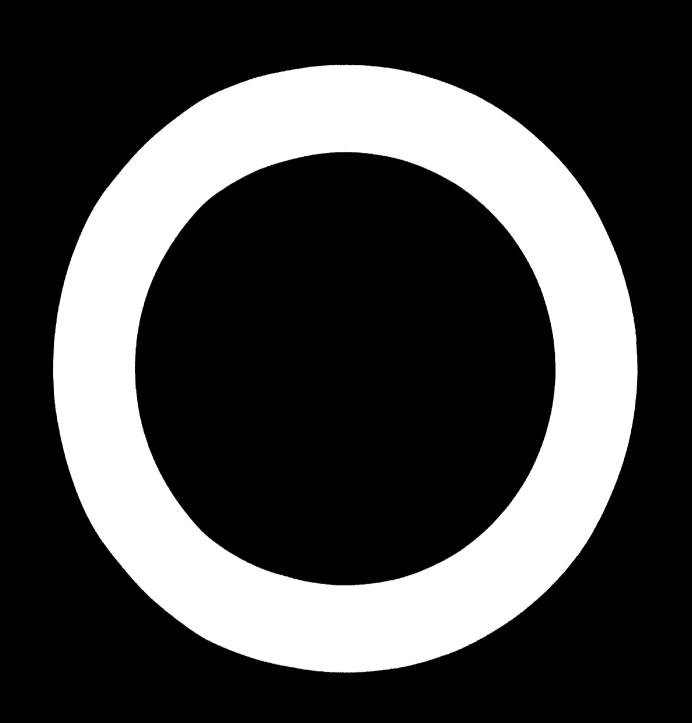


I see divertages of second-hand equipment listed in the paper In A as lower initial and operating cost, easier maintenance, selecture of parts, less skill needed for operation, the less of particular interest to undertakings operating scall-acale; in contrast some of the disadvantages mentioned find the lower ability to hold high precision) are of pull lively leaser importance in smaller enterprises, at leads when producing for a less sophisticated market which As erally exists during the initial stage of a country's Ladustrialisation process. Mention of these considerations to poper may help to give the governments of developing tries, to which the study is particularly directed, a better understanding of the implications of current restricwive policies vis-à-vis second-hand equipment especially so when considering the prominent role in terms of output and apployment, which selected small-scale manufacturing branches play in the industrialisation of developing countries (viz. gauge 20, item H, resistence to the importation of used equipment).

Also, the attention may be drawn to the contribution second-hand equipment may make to meeting the requirements of "appropriate technologies" to which currently attention is being paid to ECOSOC, i.e. the Advisory Committee on the Application of Science and Technology to Development. "Appropriate technologies" have been defined as manufacturing processes which deliberately combine elements of absolute and advanced technologies in such proportions that the evolved applied or "appropriate" technology would be safficiently effective to meet modern market requirements in terms of quality and price while retaining as large a labour content as possible. A judicious use of new and second-hand equipment in the establishment of new enterprises, particularly those on a medium and large-scale, may, therefore, contribute to introducing technologies in developing countries which are more in line with the specific resource endownments of the countries concerned as characterised by surplus labour and scarce capital resources.

As far as selected references are concerned (page 35) your attention is drawn to the study of Arthur E. Mills, Private Enterprise in Lebanon (the American University of Beirut, 1959) which includes a well-reasoned account of the considerable disadvantages for national industrialisation processes of government policies which prohibit or restrict the import of second-hand

With regard to paragraph IV "Classification of Second-Hand Equipment", it is felt that the terms and definitions established by the Machinery Dealers National Association in the U.S.A. are clear, and that they could even be used in Europe, where, to our knowledge, the second-hand equipment market is not so developed as it is in the U.S.A. Regarding the more



Complete classification of used equipment as used by the U.S. Department of Army and General Services Administration, it is believed that they are more suitable for the disposal of large quantities of equipment, rather than for use as a guide for purchasing limited quantities of diversified equipment for our projects.

We will therefore deal mainly with the utility aspects of small industries development workshops.

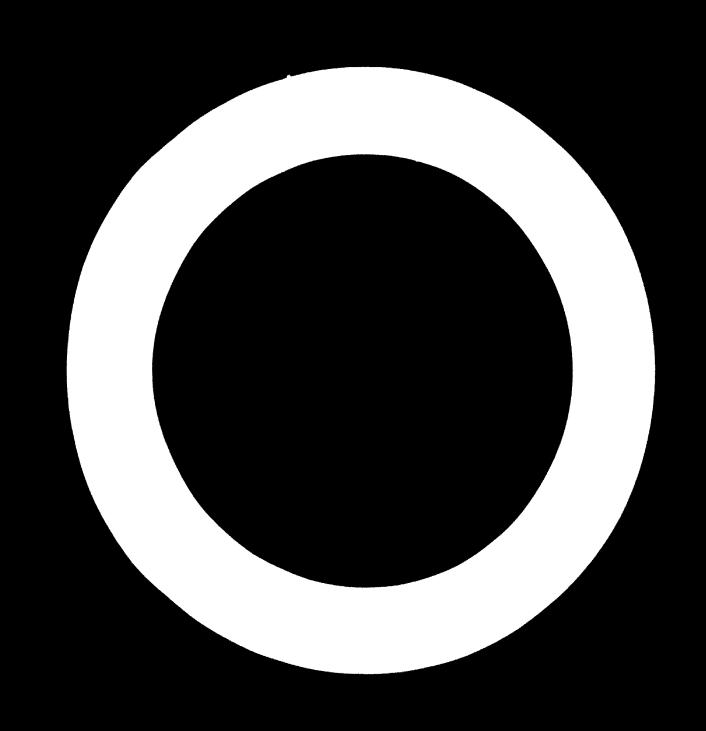
The purpose for which equipment is used in such projecte

- 1. To explain the trainees the functioning of the machine or tool.
- 2. To train people in the operation of the machine.
- 3. To instruct trainees on how the machinee are to be installed, maintained in good condition and, if necessary, repaired.
- 4. To demonstrate better working methods in order to increase the output, to perform the tasks in the proper way and improve the quality of work.

For the above purposes it is obvious that it is necessary to dismount and reassemble frequently the machines. Therefore the output factor is to be considered of minor importance.

In general, it may be said that second-hand equipment, whether it is "industrial obsolete, rebuild, reconditioned" or "as it is", is perfectly suitable for the purposes set for; it is our opinion that there should be no hesitation to use it. In certain cases it would even be more advantageous to prefer second-hand equipment rather than a new one, because it is commonly known that technical teachers, workshop superintendents or small undertakers are generally reluctant to provide unexperienced trainees with brand new or precision equipment; in fact, it does not take much time to spoil a machine definitely.

The basic functions in modern or new equipment, and in older equipment are almost always the same, e.g. a lathe built in 1930 is basically the same as the one built in 1965; several attachments only have been added, such as a taper turning, an hydraulic copying attachment, a quick change gear box and eventually a square turret toolpost, and a better quality steel is used in order to obtain higher cutting speeds, but, in percapt the lathe, the main functions have still to turning tools, threadcutting, etc. These are the tasks in which the traines has to be instructed and for which he has to acquire new machine, or ca second-hand machine.



The same applies for other types of equipment, such as milling machines, grinding machines, shapere, as well as for textile equipment, leather processing equipment, woodworking machines and for other trades.

Some disadvantages should be primarily mentioned:

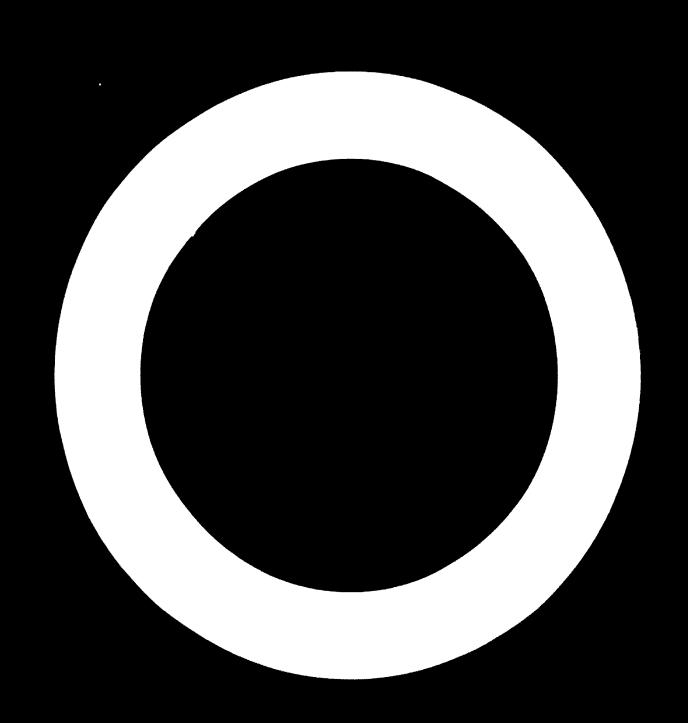
- An extremely careful checking of the technical condition of the machine has to be made, by the buyer himself or his technically qualified personnel; this also requires time and travel expenses.
- 2. Lack of spare parts, especially for machines of more than ten years old.
- 3. Some failures or excessive wear can only be detected, when the machine is dismounted or reassembled.
- 4. Frequent checking is needed when the machine is put into operation and maintenance costs might be heavier than for new equipment.

Against the above, there are numerous advantages, a list of which is given below:

- (m) Lower cost; some good second-hand equipment is sold at prices rating to one-third or one-fifth of the price for new equipment;
- (b) time of delivery for second-hand equipment is often very short; it can sometimes be delivered from stock or equipment is cold in dismantled factories where it can be checked under power;
- (c) with the same equipment credit it is possible to obtain more machines than it should be the case when new equipment was ordered, it is then possible to decentralise the different functions of manufacturing processes, and thus take more trainese at the same time;
- (d) if no spare parts for the second hand machines are available, they could be made locally, thus avoiding the expenditure of foreign currency, and creating at the same time new jobs for local entrepreneurs.

We should also stress the importance of the second-hand equipment for vocational training. Experience has shown that second-hand equipment is appropriate for vocational training in certain cases, for example:

(m) Equipment required as starting equipment in normal courses or basic equipment in preventional courses;



(b) equipment especially required as used equipment for training in a series of trades, such as maintenance, repairs, technical drawing and drafting, moulding, etc.

In the first case, second-hand equipment is needed to reduce damage of new equipment, reduce the costs, and to simplify the instruction in the first stage of training.

In the second case, it is imperative that second-hand equipment be used in order to avoid dismantling of new machines, instruments and apparatus for the purpose of study, design and repair.

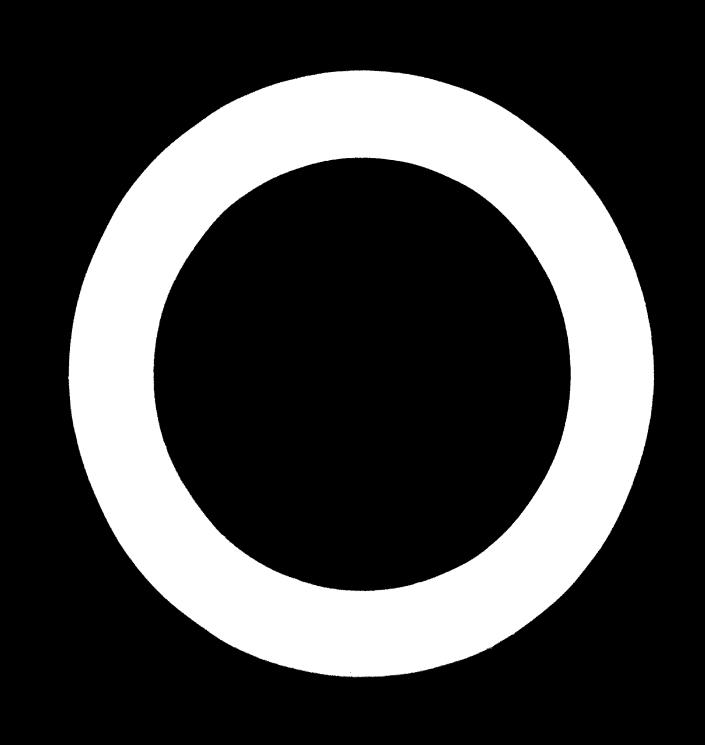
In order to enable an appropriate use of second-hand equipment in vocational training, special norms have to be worked out indicating kinds and conditions of equipment which are good for vocational training as well as trades and levels for which this equipment can be used. If such a document could be worked out and implemented it would reduce considerably the costs of equipment for vocational training projects.

With respect to the classification of used equipment (pages 11-14) it appears to us that more objective and special technical definitions of quality could be worked out for various types of equipment, e.g. the working accuracy for metal working equipment, in accordance with, for example, Schlesinger's norms, optimal electrical specifications for electrical and electronical equipment.

The idea of using surplus used equipment for training projects is a useful one; it is noticed however that the document refers mainly to the use of this equipment for the development of industry generally of a small scale nature.

We should like to add that a perusal of your letter and the report does not indicate clearly whether it is proposed to donate this equipment or whether a charge would be made, but in general the latter seems more likely. In this case several points are pertinent:

- 1. The cost of freight and insurance would be approximately the same on used equipment as new and the actual value landed in the country of use may therefore be excessive compared with the value of the machines.
- 2. In training projects there is a need for a selection of new and used equipment and even damaged equipment could be useful for maintenance training courses, provided the cost of freight and insurance is not excessive. Our experience in the U.A.R. has shown that frequently Government regulations make it extremely difficult, if not impossible, to utilise used equipment for training purposes as no machinery has been developed for selecting and paying for this type of training material. In



one particular case equipment which was going to a training centre free of charge was refused in case at a later date the firm concerned sent an account for the goods.

- There is a particular problem in the maintenance of machinery in most developing countries; even new equipment is frequently out of operation awaiting maintenance or repairs and should second-hand equipment be used we could expect considerable criticism from the instruction staff as any damage due to negligence in use would always be attributed to the worn-out condition of the second-hand machinery supplied.
- 4. The supply of spare parts would also raise problems unless an initial issue was made with the used machinery.
- 5. Very careful selection would be needed to ensure that the equipment was relevant to the type of work being done in the country.

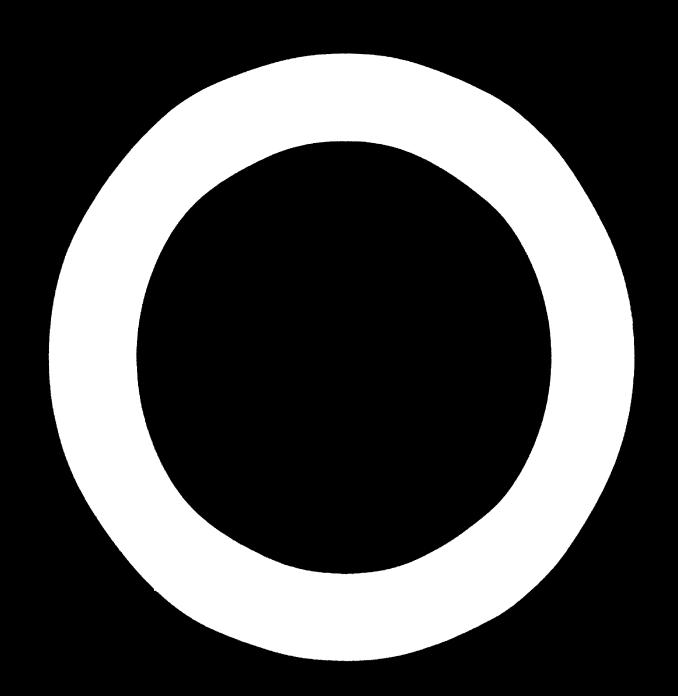
There does appear to be a case for supplying second-hand equipment to some of the larger projects particularly those supported by the Special Fund as the Fund may be prepared to give an additional grant over and above the normal equipment grant for the project, to be utilised for the purchase of used equipment.

I should like to add in reference to ILO Reports N.S. 62, Employment Objectives in Economic Development, paragraph 418, and N.S. 67, Employment and Economic Growth, page 200. Paragraphs 215 to 229 in N.S. 62 are also relevant in so far as second-hand machinery lends itself to more labour-intensive production processes than new machinery.

Finally, as to the question of action to be recommended to governments of both developing and industrial countries, we would require more information and further study before we could express an opinion in the matter. We assume that the present draft in its final form will be circulated among the U.N. member States, and that their views on the study will be invited and examined in order to prepare an additional document on the subject. During the second stage, after the considered views of the governments concerned have been obtained the I.L.O. might usefully co-operate with U.N./O.I.D. as to planning for further

Yours sincerely,

Alfonso Grespo, Ohief of the International Organisations Branch.



Prank Leurene e/o Laurene Bros., Inc. 2780 Highland Avenue Cinzinnati. Ohio 45212

September 7, 1965

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SEP 9 1965

Mr. N. K. Grigoriev c/o Contre for Industrial Development United Nations New York City, New York

Dear Sire

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Action Completed
W. Acknowledged
D. No Action Required
MITIALS

Please let me apologise for writing you only today, after our very pleasant meeting earlier regarding your preliminary report: "The Use of Second-Hand Equipment in Developing Countries".

For the record, let me repeat that the following gentlemen were present:

Mr. Jamba Páth

Mr. N. K. Grigoriev

Mr. A. Molimeri

Mr. Igor D. Radović

Mr. Viedimis H. Vasiliev.

You will find, attached hereto, a few suggestions which we discussed at the time.

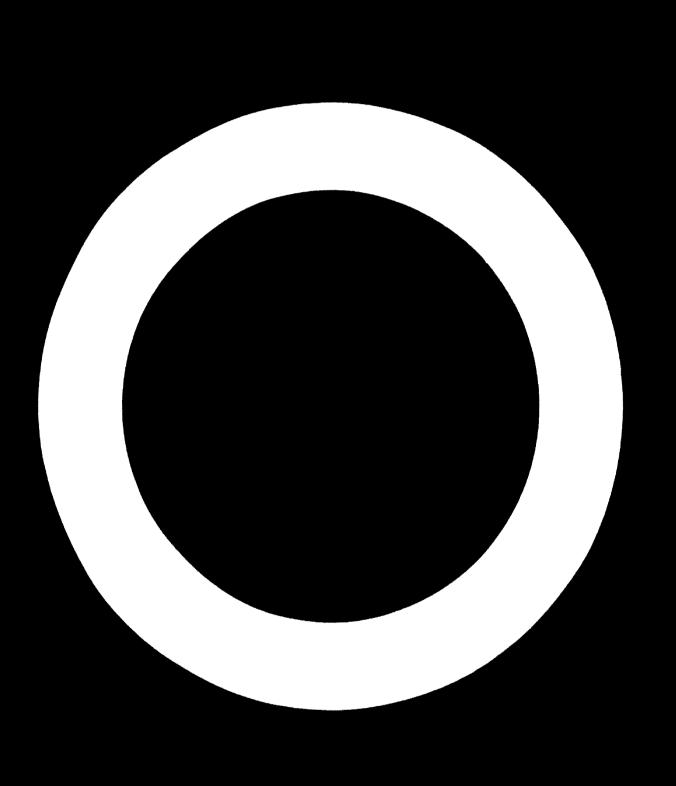
Please feel free to call on the writer at any time, and I shall be more than happy to co-operate with your office to the fullest.

gery truly yours,

Prink Laurens

Chaisman, Poreign Relations Committee, Machinery Posters National Association

Rick



purchase the latest model high priced equipment, which gives them the maximum output per minute, is not at all applicable here.

Most metal-working activities in developing countries will most likely be confined to maintenance of existing facilities, such as sugar mills, generating plants, tractors, etc. I do not think that at this time we can already talk about large-scale production of any industrially produced item. Advantages of the most modern metal-working equipment are: a) Higher productivity, b) Extremely high tolerances. Neither one of these two factors is important in achieving the first steps of industrialization, and neither will they be in the near or foresecable future.

I can foresee that, in addition to maintenance operations, there may also be the need for limited production. In a timber producing country, I can perceive the wisdom of manufacturing saw blad chains for chain saws, but for the time being. I cannot visualize the economic feasibility of manufacturing such gasoline or electrically powered chain saws themselves. This just as one example of many.

One of the few contradictions which I have to your paper is to page 19, where you mention "the risk of obtaining a machine in unsound technical condition".

While it is correct that used machines may be in unsound mechanical condition, if they have been purchased from an unreliable source, it is also true that there have been many brand new machines in the past, shipped by manufacturers all over the world, which were models that had not been sufficiently tested in the field and where many "bugs" still had to be ironed out. I have personally seen such machines many times, and I mention this fact for the sole reason that the purchase of new equipment does not in all cases give a 100 % guarantee of proper functioning either.

Page 19, paragraph D - "Higher maintenance costs":

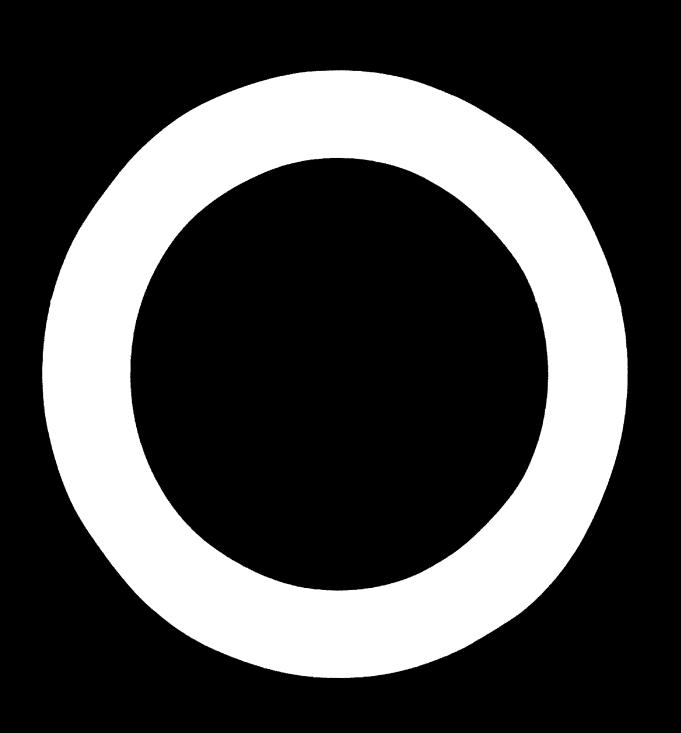
I would like to take issue with this statement, because it is, in my opinion, much easier to even manufacture septain repair parts for a simple machine, such as a somewhat older construction would represent, than to obtain rather complicated repair parts from a manufacturer whose plant is many thousands of miles away from the user's plant. In addition to this difficulty, we would also have to consider the problems of obtaining additional import permits for such parts which cannot be produced locally.

The real problem is pointed out by you on page 20, pagagraph G . "Difficulty in locating the precise machine needed".

The used equipment market is not confined to the recommendation of one particular manufacturer's product, as is the case when consulting gales agents or representatives of manufacturers. It is recommended to tell a possible supplier rather what kind of work has to be performed, than to ask for a specific machine. Every machinery dealer in the world has had experience with customers - and I talk about customers in industrialized countries - who send an inquiry for a particular kind of machine. Upon studying the dealer's quotation they find out that this particular machine is not suitable for their needs, or at times they only find it out after they get the machine. It would be highly recommendable to see to it that a supplier is made fully sware of the purpose for which a machine is to be bought, or even better, that blue prints of work to be performed, if they are available, be supplied. Teday's reputable used machinery dealers have good technical knowledge, and are willing and anxious to advise buyers as to model and size of machine meded, ence they know the proposed purpose.

If this is true in industrialized countries, it will be much more of a problem in countries where the person in charge of purchasing is, more likely than not, unfamiliar with makes and models, and may only have seen a few catalogs.

To repeat, a used machinery dealer's choice of suitable equipment can well be more importial than the recommendations of any manufacturer.



Page 21, paragraph H - "Resistance to the importation of used equipment". I have dealt with this problem in the very beginning, because it seems to me the most vital problem mentioned. . It is no coincidence that used equipment has found much more ready acceptance in the United States than in any other country known to the writer. The reason is that the United States disposes of a vast pool of first rate, excellent used machine tools. The lower the industrial level of a country is, the more we approach the level of "junk" in used equipment which is available on their markets, because whatever is not close to junk is in production. This situation definitely does not exist in the United States; American manufacturers know that highest rate equipment is available, and they purchase it whenever and wherever possible. Last paragraph on page 22 - "It sometimes happens that newly developing countries forbid the trade in second-hand capital goods, not only because of disappointments, but also because it is supposed to be unacceptable from the point of view of national pride". Since this is a strictly emotional standpoint, we cannot deal with it logically. Let me only state that to the best of my knowledge no young king has ever refused the "used" crown of his ancestors or the "used" ancestral palace.

Page 23, paragraph 2 - "Locate the second-hand equipment".

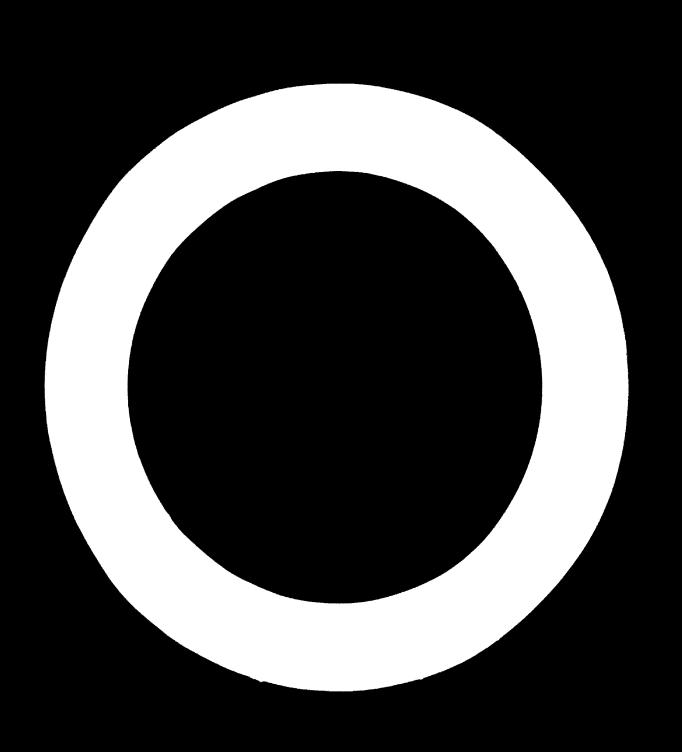
As the writer has pointed out during various conferences, the Machinery Dealers National Association is willing and ready to supply a list of dealers who are willing to co-operate in any program involving sales to developing countries. Exact machinery for such a program has not yet been set up, because we have not reached the point where our industry has been told in exact wordage what procedures would be expected from it. During a Board of Directors meeting of the Machinery Dealers National Association at which Mr. Molinari was present, it was suggested that definite guide lines be set up by the Centre for Industrial Development of the United Nations, that we would then canvass our members, advising them of these guide lines. It would then be up to every individual member to express his interest in such business, thereby automatically binding his firm to follow procedures which are to be set up. This should eliminate the problem "to identify the firms which are willing to undertake one or several of the activities involved".

Page 25, 2nd paragraph - "In a pamphlet published by the S. and S. Machinery Co. of Brooklyn, N.Y., the editors of the American Machinist have made the following suggestions for the prospective purchaser of second-hand machinery: The inspection of a used machine tool should be carried out both by a plant owner or manager and the most experienced technicians available from the plant, who should take with them test equipment such as dial indicators, micrometers and test bars, vernier calipers, surface gage, straight edge, precision level and height gage".

While, of course, every reputable dealer would welcome the arrival of such a customer, loaded down with all this measuring equipment, this should by no means mean that such an inspection releases the supplier from his responsibility. While such procedure will be practicable in the case of a domestic buyer, it becomes completely nonsensical if the customer has his plant in one of the developing nations, all of which are at quite a distance from the United States.

Whatever points are brought out on page 25 and on page 26, through point 11, are jobs which the dealer has to perform, partly when he buys the machine, and partly when he gets ready to ahip it.

If a supplier is fraudulent, then the buyer has not checked his source sufficiently. I do not like the idea of singling out used machinery dealers in connection with foul practices. They exist in every field of human activity, and the same caution will have to prevail in the case of purchase of used metalworking equipment as prevails when building a house, calling a plumber, a mervice man, or whatever trade or profession may be involved.



- 4 -

Therefore, I find the idea that the Machinery Dealers National Association developed totally acceptable. Dealers who wish to participate in such a program can be screened as per their past performance, their facilities to rehabilitate machine tools, etc. Those dealers who would then be found reliable enough and capable enough to supply the above-mentioned kind of equipment will be the ones who are interested, not only in safeguarding their reputation, but also in assuring future business.

Let me point out, however, that rehabilitation of used equipment costs money, and that in this field, like everywhere, the best can never be the cheapest, and the cheapest can hardly be the best.

It should be pointed out to buyers for developing countries that in the field of used equipment the price is totally meaningless. The only criterion should be the proportion between price and quality, whereby quality, of course, has to come first, because even a 30-day money-back guarantee or, as far as that goes, any money-back guarantee, does not help a customer in Africa, because he cannot, with prevailing freight costs, afford to send a piece of equipment back to the United States.

Due to the fact that export boxing and freight of a used machine cost as much as would be the case with new equipment, only such machines should be purchased used, where the price difference of a machine delivered in a foreign country is still considerably below the price of a new piece. This, in the writer's opinion, would automatically exclude all machines with a new value of about \$6,000.00 or less. Machines of which the purchase should definitely be considered from the available sources of used material would include large lathes, vertical boring mills, planers, planer type milling machines, large radial drills, and similar equipment, which is very often needed for maintenance purposes.

Referring to the first paragraph of page 31:

Such equipment as may be needed for trade schools, such as small lathes, small milling machines and shapers, small drill presses, etc. would, in all likelihood, have to be purchased new, because we talk here about comparatively simple machines, and the cost of proper rehabilitation would, in most cases, bring such equipment, installed in a foreign country, very close to new equipment as far as ultimate price is concerned.

With reference to page 32:

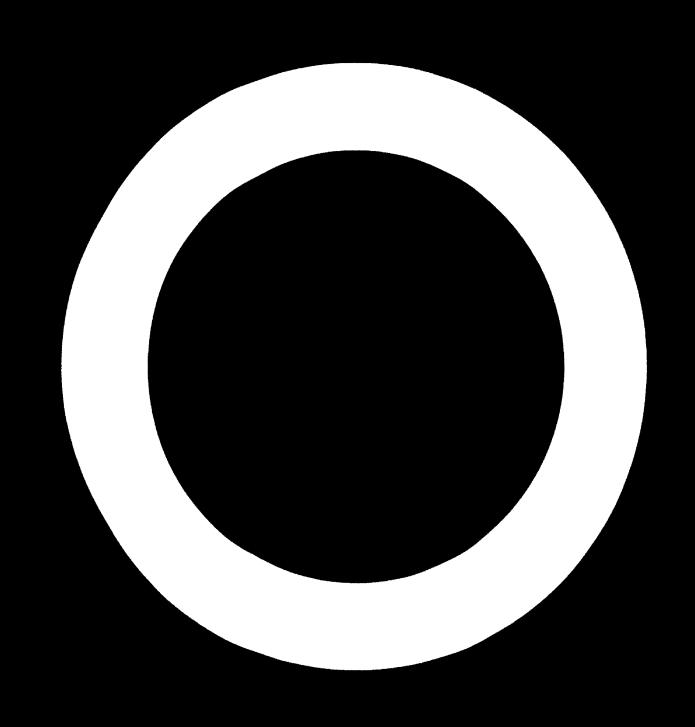
It is quite obvious that manufacturers of new machines are not to be considered impartial in this matter. Of course they prefer the sale of their new products, although many of them sell used equipment from their own plants at rather high prices, and they have also been known to add used equipment to their plants.

Under all circumstances, it is my definite opinion that not a single piece of equipment should be shipped to any of the developing countries in condition "as is", whether it comes out of storage, a liquidation sale, or an auction sale. The only possible exception may be made in cases where a machine can be seen running and actually performing work pieces in the original owner's plant. The fact that a machine runs "under power", but is not actually performing, may be misleading.

In concluding, let me make the fallowing basic suggestions:

1) Members of Machinery Dealers National Association cordially invite potential buyers for developing nations to be their guests at auction sales so they can see for themselves what kind of equipment is on the market, before it has been rehabilitated. That way, at least they will have first hand knowledge of the supply, and will not base their opinions partly on hearsay.

Machinery Dealers National Association members welcome visits of such representatives in their own warehouses to inspect equipment which they have for sale, at which time they can also see how used equipment looks when it is ready to be shipped.

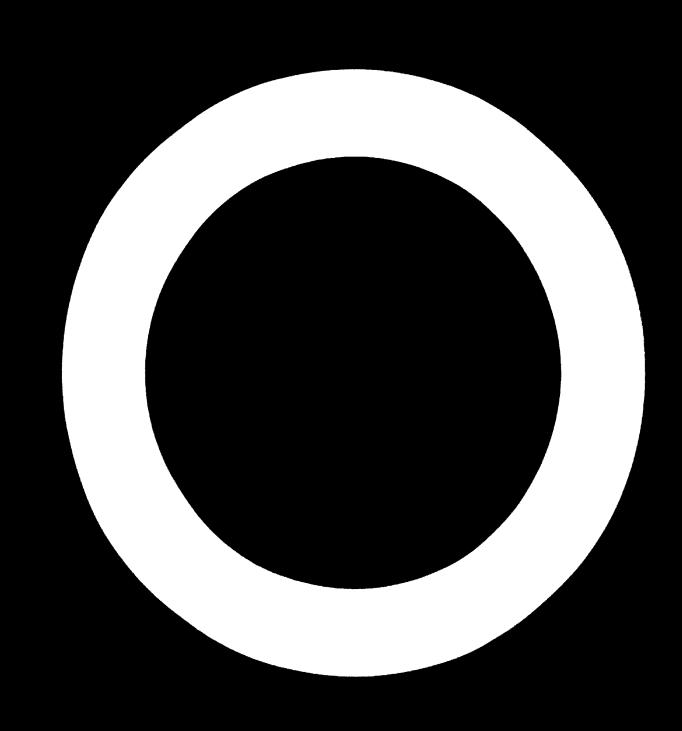


- 2) Concrete and realistic proposals would be more than welcome to Machinery Dealers National Association. These proposals abould include the conditions under which a dealer could be eligible as supplier of equipment for developing nations, and a code of requirements should be issued to him. He can then either accept or decline his general participation in a given program, or it will be up to him to accept any given order, or to decline it if he feels that he is in no position to fulfill exaggerated requirements.
- 3) Machinery Dealers National Association members are willing to participate in a trade mission covering developing countries, together with delegates from the United Nations or any other agency which would be interested. In our opinion, Machinery Dealers National Association members would be able to contribute substantially to the development of a sound program, based on actual needs and problems studied on the spot.
- 4) When to buy new equipment and when to prefer used equipment is a question which cannot be settled generally, and none of our customers has ever attempted to establish guidelines along these generalities. I feel that equally benevolent consideration should be given to used equipment as is given to new equipment, and every case should be judged on its own merits. I feel that a general policy which excludes used equipment in all cases can mean, more often than not, that countries which can ill afford it are forced to throw money out of the window.

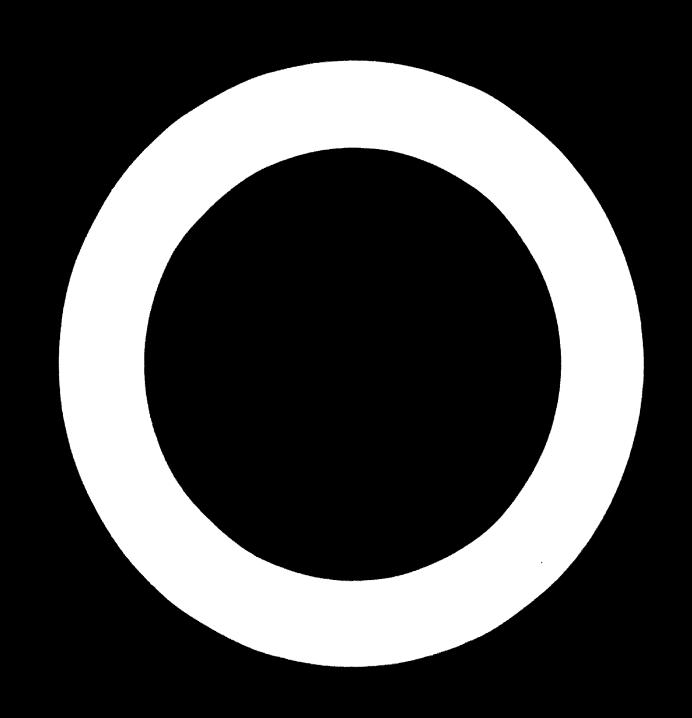
I hope that the foregoing lines have been helpful suggestions, and I am new looking forward to helping you in establishing definite working arrangements for cases in which used equipment is to be purchased.

Frank Laurens

Chairman, Poreign Relations Committee, Machinery Dealers National Association



APPRIDIX II



11.12 EXET # 210

SYRIAN ARAB REFUBLIC MINISTRY OF INDUSTRY النهونة العبار السوائق

الموضوع :

2 1045

وزارة الصناعة

Your Reference: EC/331-2 (17

التاريخ . 1965. DAMASCUS 15th June ، 1965

مدد المستندات

Mr. R.C. DESAI,
Chief
Industries Section
Contro for Industrial Development,
United Nations,
NEW YORK CITY, U. S. A.

JUN 2 1 1965

ACTION TO THE COS

- Action Completed

Acknowledged

- No Action Sequired

DISTAL S

Dear Mr. Desai,

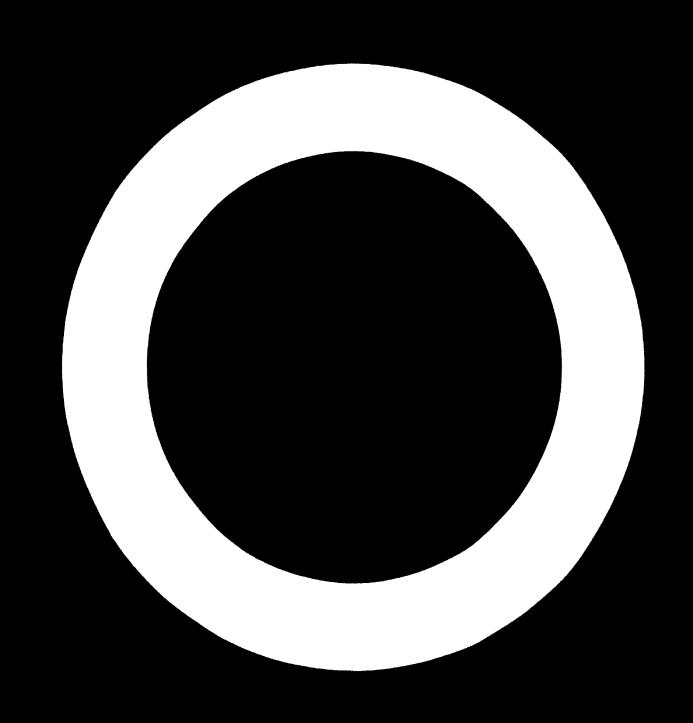
Ec 331/62/8

We thankfully acknowledge receipt of your letters of February 11 and April 7, 1965, with the enclosed paper on "The Use of Second-Hand Equipment in Developing Countries".

First of all, would like to point out, that the Ministry of Industry in Syria has confronted many problems concerning the importation and use of second-hand equipment in fyrian industry, and as yet, has not reached a satisfactory solution for these problems.

In general, it is not allowed to import second-hand equipment into Syria with the exception of diesel-power generators which are used by small industries and in farming. We have tried to restrict the import of these power generators to those units which have a certificate showing original and present technical specifications and number of hours used. But this was not successful, because of the lack of appreciation of these specifications on the part of the customers due to lack of technical knowledge.

In very few cases, the Ministry of Industry has allowed the import of some used equipment other than power-units but only after it was proved that the equipment was in good condition and the saving in cost justify its import. But in the case of precision equipment like machine toole (lather, milling machines, shapers, etc.), we believe that the import of second-hand equipment should be strictly prohibited.



SYRIAN ARAB REPUBLIC MINISTRY OF INDUSTRY

المنه وتشالع تأثيان وتعق

وزارة السنامة

الموضوع:

- 2 -

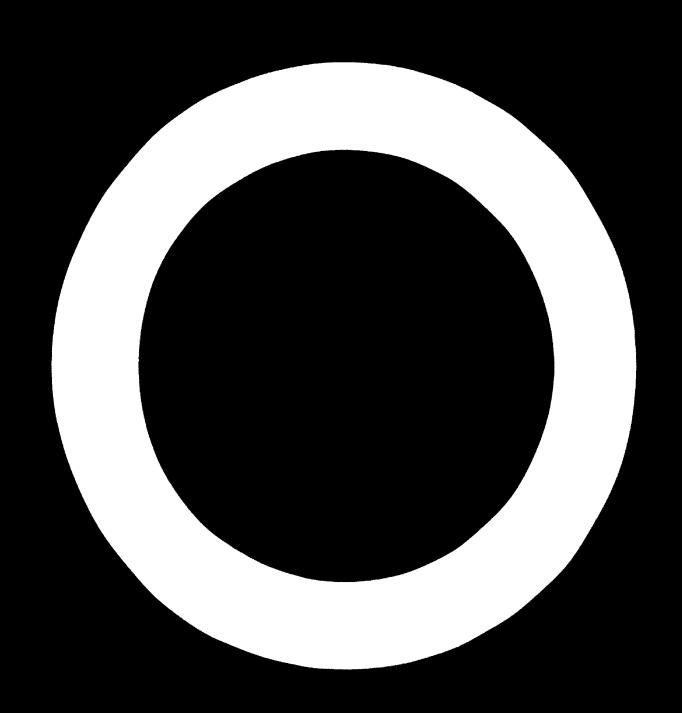
مديرية الرقم التاريخ عدد المستندات

The main reason discouraging the import of eccond-hand equipment is the lack of technical experience in their acquisition and evaluation. We are of the opinion that the evaluation of eccond-hand equipment requires more practical technical knowledge than that required for new equipment, especially, when the catalogues and technical specifications of used equipmentare not available.

The second reason is that newly established industrice in underdeveloped countries usually buy plants as turn-key jobs with guarantee figures for one year and technical supervision during the guarantee period. This is not possible in the case of plants with second-hand equipment and consequently, it is a great disadvantage.

The third reason is that concerned with difficulties in maintenance and availability of replacement or spare parts.

In spite of the above-mentioned reasons discouraging the import and use of second-hand equipment, we share your belief that second-hand equipment could be very useful in accelerating industrialisation in developing countries for the various reasons mentioned in your paper. However, this



SYRIAN ARAB REPUBLIC MINISTRY OF INDUSTRY

المنافق المتنابية

الموضوع:

- 2 -

وزارة السنامة

مديرية الرقم التاريخ مدد المستندات

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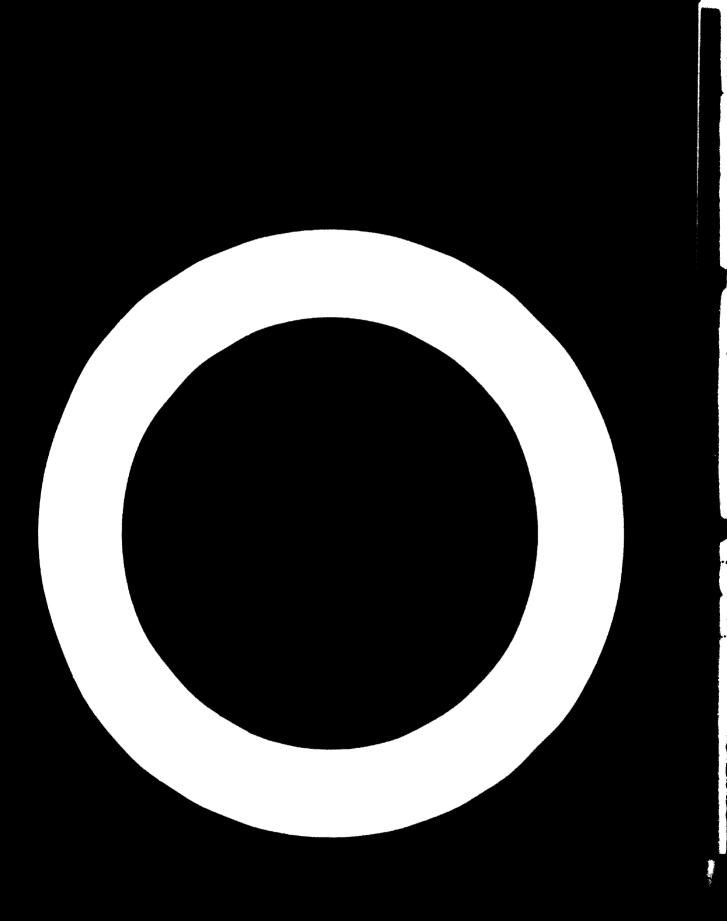
In spite of the above-mentioned rescone discouraging the import and use of second-hand equipment, we share your belief that second-hand equipment could be very useful in accelerating industrialisation in developing countries for the various reasons mentioned in your paper. However, this could be accomplished if your Centre could take the initiative in colving the problems involved. This may be done by studying the possibilities of execution of industrial projects in the developing countries based on usecond-hand equipment and recommending same with necessary technical specifications and guarantees. This will facilitate the promotion of use of second-hand equipment and help bring confidence in them.

indeed appreciate your efforte in the study and promotion of second-hand equipment in developing countries, and assure you of our willingness for cooperation.

Yours very truly,

M. ABDALIAH SALLOU'A

MINISTRY OF INDUSTRY



Telephone Exchange: No. 72236

MINISTRY OF COMMERCE, INDUSTRY & SUPPLY AND CO-OPERATION

UNDER SECRETARY'S

MINECOLDUS OFFICE

MCISC/81-3-GEN

JUN 30 100 2let June, 19

TO Melan

Dear Mr. Desai.

EC 331/62(8)

USE OF SECOND HAND EQUIPMENT
IN DEVELOPING COUNTRIES

The questionnair attached to your paper bearing the above title sent to me for comments were reproduced and cent to those undertaking using second hand equipment. As no reply is yet received I thought it better to acquaint you with our feeling towards the use of second hand equipment in this country.

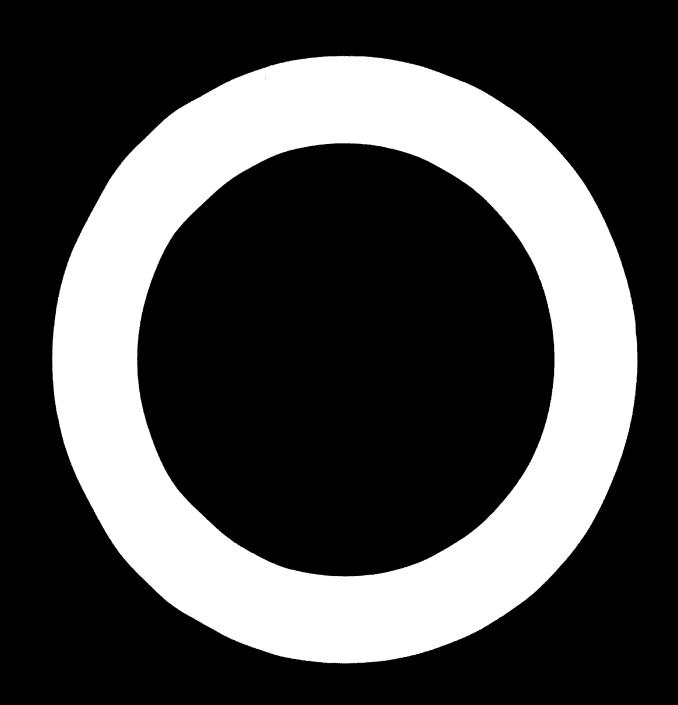
In the first place our country is very new in the field of industry and therefore a negligible number of firms are using second hand equipment.

As the Government exercises no control on industry that is to say we do not direct them to use specific types or to import from a said origin, this is left entirely to the firm to decide on the benefits they would get. Some of them preferred to import second hand equipment because:

- 1) It is believed that second hand machinery and equipment are cheaper to buy and install thus cutting down the total amount of investment.
- 2) Second hand equipment in some cases may be easier to run and perhaps less expensive and the skill to operate it could be found in the country without difficulty.

On the other hand when we receive an application for importation of second hand equipment we try to explain our opinion on the matter to the applicant as we consider that:

- 1) Then we give our approval for a firm tet up an industry, then we are obliged to make available the foreign exchange requirements for importation of machinery and spare parts etc.
- 2) As we are beginners in this field we think it is beneficial to us to get the most up to date technology in the country. We do not want to see our country working on obsolste technology and skill.
- 5) The importation of second hand equipment may cost less than the new but we believe that the actual cost is more as it will require:



Telegraphic Address "TIGARA"

Telephone Exchange: No. 72236

MINISTRY OF COMMERCE, INDUSTRY & SUPPLY AND
CO-OPERATION

UNDER SECRETARY'S

CORPORDE'S OFFICE

- 2 -

- 1) more spare parts
- ii) more frequent maintenance
- iii) special care in running and inspection
- iv) shorter working time

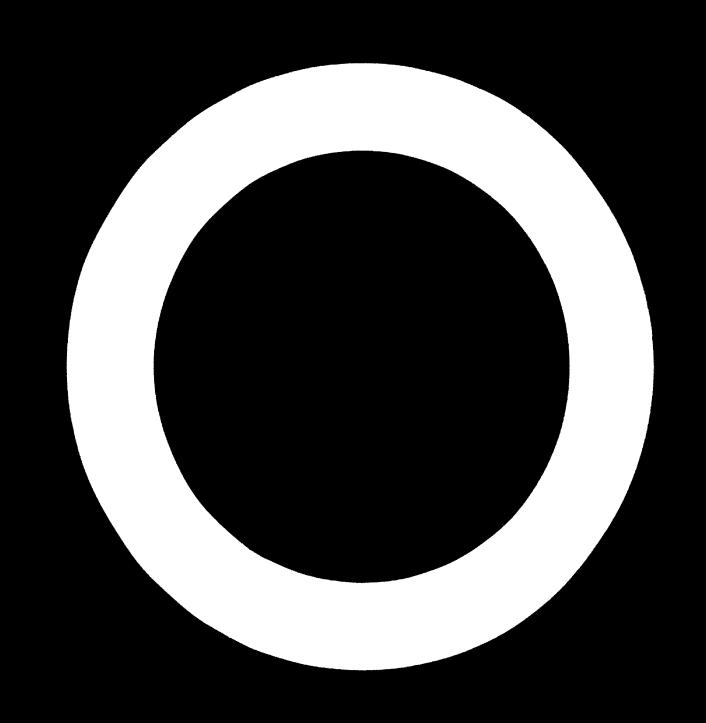
If however, the firm insisted on buying used machinery or equipment then we make it a condition that they should obtain a certificate from a surveyor that the said equipment are in good condition and that it would be possible to use them safely. Guarantee is not insisted upon but the firm is advised to obtain it. However, basing ourselves on the experience of those firms that used second hand equipment, we clarify the situation to the applicant and then it is up to him to decide on whether to use second hand equipment or not.

Yours faithfully,

Hola

(A.M. FADIALIA)
FOR/UNDER SECRETARY
AMEN/ I. MINISTRY OF COLLIEROE, INDUSTRY, SUPPLY AND
CO-OPERATION

Mr. R.C. Desai, Chief Industries Section, Centre for Industrial Development, United Nations, New York



62331 /62 4

16

TURKISH PERMANENT MISSION
TO THE UNITED NATIONS

No. //38/33/

Men Yerk, August 5, .1965

AUG 6 1965

Mr. R. C. Desai, Chief Industries Section Technological Division Center for Industrial Development United Nations New York.

Dear Sir.

ACTION

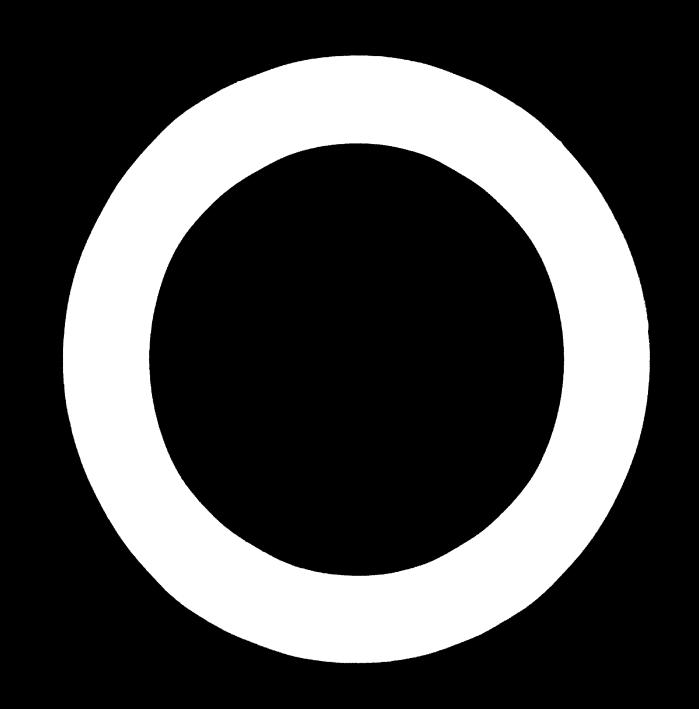
TO Action Completed

Links Compl

I have the honour to refer to your letter of June 4, 1965, addressed to the former Counsellor of the Mission, Mr. Murettin Karaköylü, regarding the use, by the developing countries, of secondhand machimery and equipment originating in advanced countries and to state the following in respect of my country's experience in this field:

The use of secondhand machinery and equipment will undoubtedly make it possible for the devel 'ag countries to save important sums in foreign exchange which they could otherwise spend to import new machinery and equipment. Therefore, it may seem profitable for the developing countries, most of whom often suffer from considerable deficit in their balance of payments, to obtain secondhand machinery and equipment from the advanced countries if these machinery and equipment are considered by technical experts as having some economic value and usefulness for their economics.

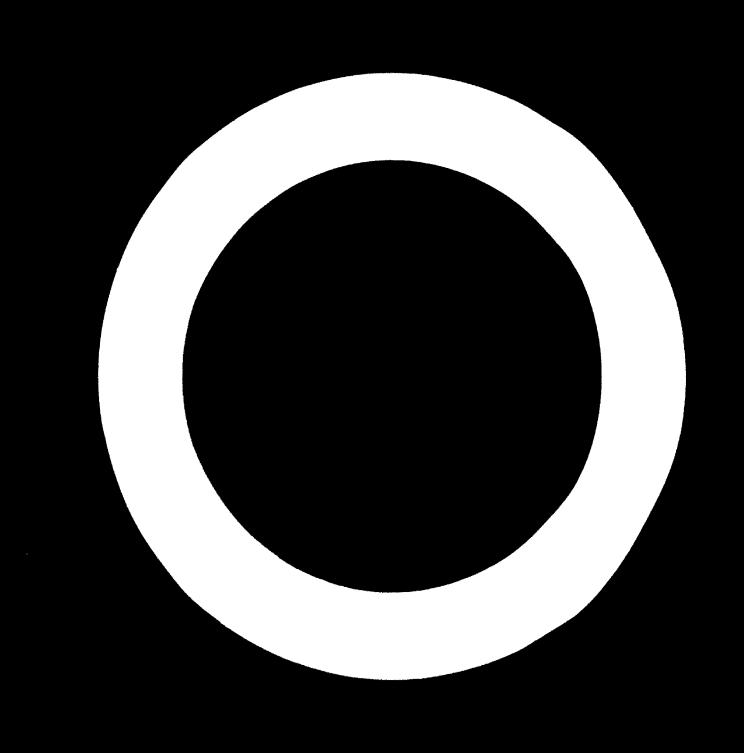
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Unfortunately however, the importation of secondhand machinery and equipment into Turkey is prohibited by law and this for the reasons mentioned below:

- a) It is almost impossible to determine beforehand the duration of use of secondhand machinery and . equipment,
- b) Similarly, it is also extremely difficult to determine to what extent this sort of machinery and equipment would retain their qualities as regards their economic usefulness.
- c) As a consequence of the observations in paragraphs (a) and (b), it is practically impossible to estimate what kind of repairs these machinery and equipment would require, the interval for such repairs and their extent,
- d) Secondhand machinery and equipment always has a much lower yield than new machinery and equipment,
- e) While it is easy to get information about the markets and the conditions of purchase for new machinery and equipment, this information is very difficult to obtain in the case of secondhand machinery and equipment.

Abust A. Akyamas Ocumedler



AUG 12 1965

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NOTIFIED OF

PERMANENT MISSION OF IMAG TO THE UNITED NATIONS 14 SAST TOWN STREET NEW YORK SI, N. Y.

11 August, 1965

Ec 331/62 (0)

Dear Mr. Desai,

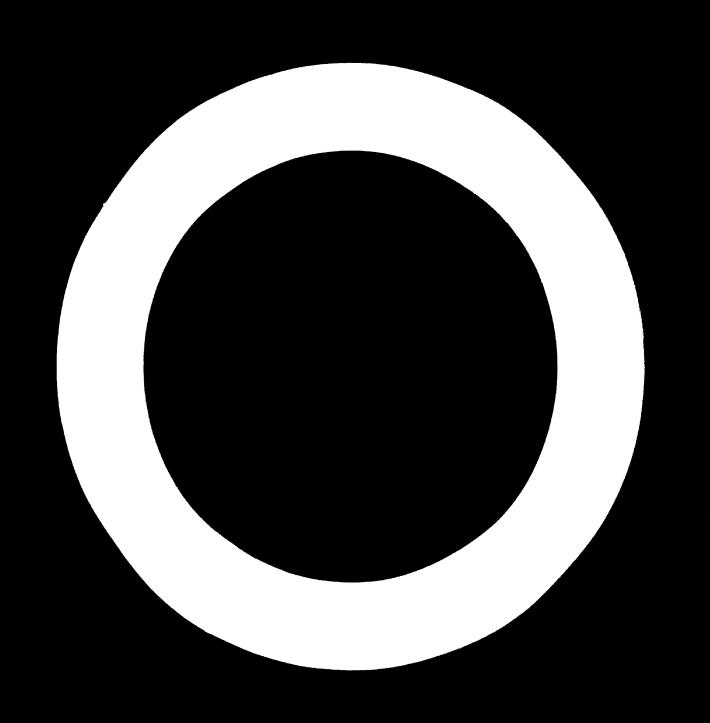
With reference to your lettere No. EC 331/62 (8) of 4 June, 1965, and 9 August, 1965, I have the honour to enclose information prepared by a group of experts concerning the use of secondhand machinery in Iraq.

Thank you for requesting this information.

Sincerely,

Burhan Nouri First Secretary

Mr. R.C. Desai Chief Industries Section Technological Division Centre for Industrial Development



Bestelene taken by the Comittee on Insertation of Best Bookinger in 1888,

Legions

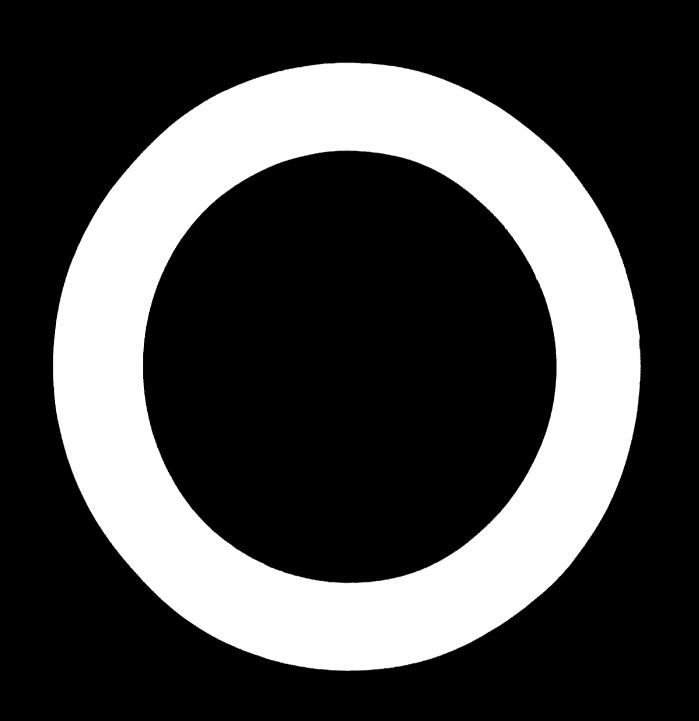
The Countities on Importation of Bod Hackinsoy has not three times and concluded the Sollaning with reducence to the subject in question.

Manufacea

- (a) The permission to import used machinery would name some foreign surrously:
- (b) It would increase the agricultural output;
- (a) The importation of used agricultural machinery
 is better for the farmer as the mover ence
 are more complicated and most technical chilities
 which may not be available;
- (4) The importation of now machinery would mean the sering in labour and also those who have workshops dealing with such machinery, its repair and provision of spare parts would have to be trained to do sensiting also.

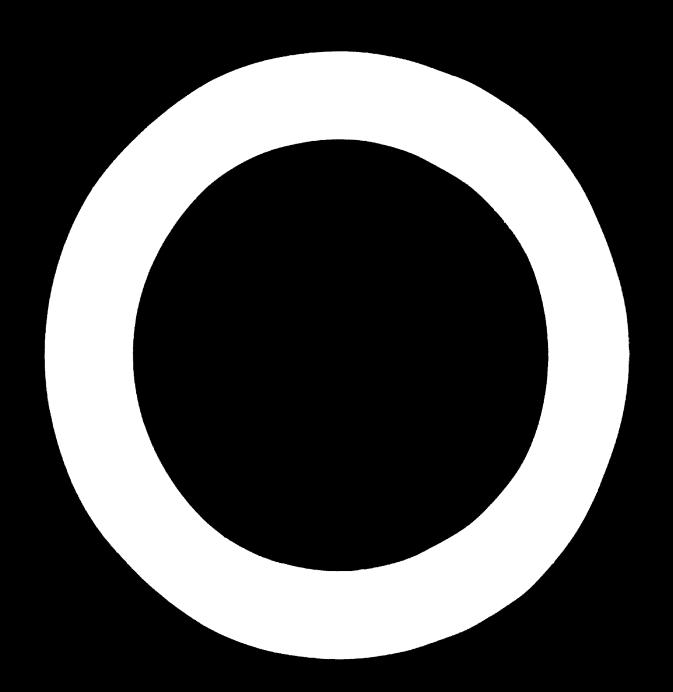
Machandage

- (a) Bifficulty of finding opers parts for eccent-hand machinery abread and inability to produce them locally would make the machine obsolute:
- (b) The decline in technical training for second-hand machinery in comparison to the rice of technical training for nor machinery;
- (a) Possibility of energiling out foreign ourstay due to the installity to determine the definite price of the west medianary.



The Saliering was agreed upon with reference to the importation of used machinery:

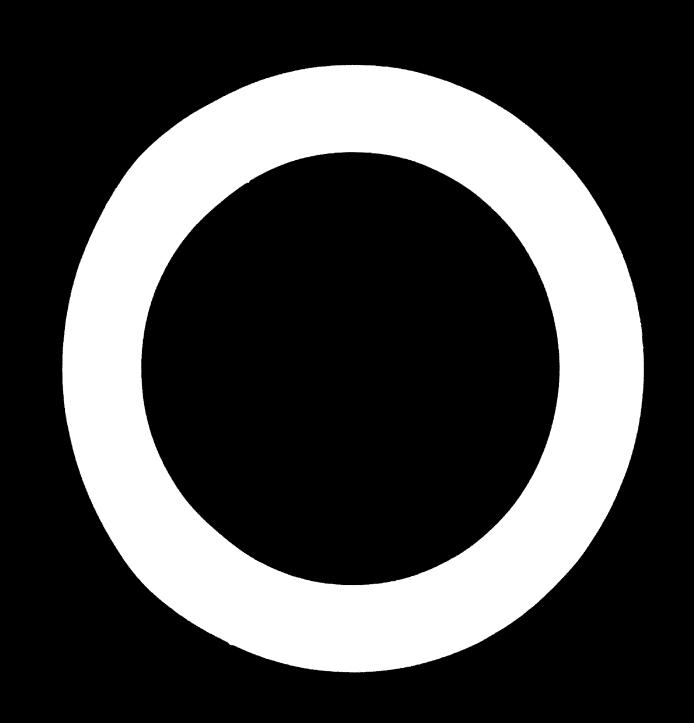
- (A) Requests for importation of used machinery are to be first referred to a Countition consisting of members of the Ministry of Agricultural Inform, Ministry of Secondary, Ministry of Industry for study from their technical and occurrie viewpoint.
- (b) The importor has to provide along with the request a cortificate from the producer of those machines, that they will continue the manufacture of the same product and its spare parts so as to insure its continuance.
- (a) The importer should present a certification on that firm producing the article, from the Chamber of Commerce of the country carelyed.
- (4) A comparison of the used mechines to be imported with the new mechines etc... evallable, to be made after subtracting a relative sun from its price due to its usage.
- (a) It is not allowed to import used mediancy which has internal controlion and the speed of which does not emocal 750-2000 etc.



UPPLETARIOS OF SECOND-HAND MULTINERY IN ARCHITECA -REMARKS FOR RESIDENCE PLACED OF THE EXPORTATION OF THE SAME

Propored by

Notional Department for the Premotion of Industry, Argentian



Perunent Mission of the Argentine Republic to the United Nations

Becamie Councellor

C.B.K.U. No. 17/65

New York, 21 October 1965

Sir,

I have the pleasure to address you as the Chief of the Industries Section of the Centre for Industrial Development with reference to your letters BC331/62(8) of 4 June 1965 and BC331/62(8) of 9 August 1965 in which you requested information from the Government of Argentina on our equatry's experience with the utilisation of second-hand equipment, and reasons for restrictions placed on that equipment.

Accordingly, I am transmitting to you the information requested, which was prepared by the National Department for the Promotion of Industry of my country:

Mr. R.C. Desai Chief, Industries Section Technological Division Centre for Industrial Development United Nations New York

GERVATIONS

The discussions and statements on the purchase of second-hand equipment by the developing ocuntries have referred to various advantages, disadvantages and difficulties.

A brief recapitulation and classification of those arguments is called for, with particular emphasis on those which apply, in whole or in part, to argentina.

The advantages out be summed up as follown:

Lower prices.

Hence, less capital investment - a factor of production which is usually scarce in such countries.

Also a consequent improvement in the balance of payments through savings in foreign exchange.

It should be added that the scarcity of capital in the developing countries is accompanied by a relative abundance of manpower. The utilization of second-hand machinery rather than newer models may absorb more manpower, which is at least a short-term advantage.

Second-hand machinery usually has a lower output capacity than new equipment and may thus be more suitable for production geared to the small consumer markets usually found in the developing countries.

The disadvantages or drawbacks usually mentioned in this context are

Difficulty of obtaining spare parts.

Difficulty of determining A Priori the real efficiency of the second-hand equipment to be purchased.

The cost of dismantling, overhealing, inspecting, crating, etc., may appreciably reduce the price margin between second-hand and new equipment. This fact, tegether with doubts about efficiency, epare parts, maintenance costs, etc., may make the purchase price less attractive.

Difficulty in obtaining financing for the purchase.

Higher maintenance costs. This may become a ponitive factor if a carefully worked out decision is taken to reduce the capital investment and make greater use, during the working life of the equipment, of the manpover employed in maintenance.

Unlike new equipment, for which the range of supply is wider, and which can be specially menufactured for the specific needs of the purchaser, the second-hand equipment offered is not always suitable for the needs of local purchasers.

If second-hand equipment is to be used for the manufacture of export goods, there may be differences in quality between such goods and these produced in competing countries using new and/or modern machinery.

The establishment or introduction in the developing countries of new industrial activities (these which did not proviously exist) based on second-hand equipment may entail the risk of introducing shoolete technology which it would be difficult to change or nederalse in a short time because of the could reconversion involved. Past examples upon the fixing of voltages and frequencies in electric power supply and the introduction of unsuitable gauges for railways. At present,

the same phenomenon may occur in the chemical industry, particularly in the manufacture of non-degradable detergents using plants imported from the developed countries where it has been susted by the manufacture of bio-degradable detergents.

From the mecro-economic point of view, it should be stated that facilitating the entry of second-hand equipment into the developing countries may seriously jeopardise the development and strengthening of the local equipment-producing industry, which is a dynamic sector of grout importance to the development of such countries. It should also be remembered that purchasing equipment abroad mullifles the multiplier effect of that investment within the purchasing country.

Finally, there is the problem of the price of second-hand equipment which is generally anortized at its original location so that its sale constitutes additional income. This problem goes further than the relationship between the sellor and the purchaser and is of concern to the governmental authorities involved. Bosnomic difficulties in general, and the balance-of-payments problem in particular, have, in the developing countries, made it necessary for them to control and supervise their foreign trade, especially the flow of foreign exchange, capital and imports. From this point of view, the problem facing governmental bodies with regard to second-hand equipment is price control which is likely to compe disputes and may even make expert appraisals assessment. This derives from the fact that such controls on foreign trade are, at times, accompanied by epoculative novements or trends to obtain additional profits. In the situation under standarstics such treats may take the form of ever-tavoleting the actual price paid. Many much enough secur and we shall quote two examples which we think are the most

in the frequent case where the fereign exchange rate is fixed by
the monetary authorities, is that of the local importer who, by overinvoicing the equipment, obtains a "surplus" of foreign currency
(granted by the monetary authorities) over and above the official
rate of exchange. This "surplue" is subsequently sold on the
so-called "parallel markets" at a higher rate. The other example
is that of foreign companies operating in the importing country which,
by "over-invoicing" second-hand equipment, fictitiously increase their
capital investment and thus enlarge their remittances of profite abroad,
etc. This partly explains the reluctance of official bodies to
facilitate the importation of second hand equipment.

THE PAPERLENCE OF ARGINATIVA

As regards Argentina's experience of imports of machinery in general, including second-hand equipment in the post-war period, for the eaks of brevity we shall refer to the ideas set forth in United Nations document E/CM/12/429/Add.1 and 2/Rev.1, chapter 8, page 198 (Spanish text).

Since that study, most second-hand capital goods have been imported by subsidiaries of international companies which sent machinery and equipment which was being replaced in its country of origin by more modern equipment.

The most important and notorious case concerns the establishments of the automotive industry which, by special governmental regulations, was authorised to invest up to a total of 25 per cent of ite capital in second-hand equipment.

The most repent provision on this subject in Argentine legislation is National Executive Decree No. 8626, of July 1960, which applies exclusively to industrial machinery and engines not manufactured in the country. Although it is at present in abeyance, an analysis of it follows since an understanding of it and of its implications may be of interest.

It should be added that Decres No. 8626 was promulgated at a time when other measures were being applied in the country which freed imports of new machinery and capital goods from import duties in order to sobieve the rapid re-equipment of industrial plants.

The presentle of that Decree explains and develops the spirit of the operative part. The following three aspects are borne in minds

It explains the criteriou followed in previous regulations authorising the importation of machinery for industrial plants. The purpose of that criterion, which stated that the machinery should be now, was to "ensure that the processing plants were provided with modern production equipment embedying the latest technical advances so as to achieve optimum conditions of low cost and maximum quality".

It agrees that these aims can be fulfilled by using second-hand machinery, but it lays down important provisionet

- that the machinery should be in good working order; and
- (2) that it should be among or be similar to the latest medels manufactured in the line consumed.

It states that the importation of machinery meeting the adsounced conditions should be facilitated, although it muone that this should be done "oubject to preconsions designed to course that it is used for the purposes intended.

Is addition to the above points, the operative part provides as follows:

It exempts from oustoms duties "machinery in good working order, provided it is one of the latest types and models manufactured by the original producing enterprise" (article 1). Hence, it is clearly designed not to exempt of duties imports of obsolete equipment or of copies of original models.

The aforesaid stringent restrictions on the specifications, to which second-mand equipment aust conform, are rendered less severe in the following article in evolute for another requirement—this time imposed on the industrial plant asserving the second-hand squipment. It may be said that this article 2 again shows the desire to provent the entry of obsolete equipment. The complete text may be useful: If equipment in good working order is not of the latest model manufactured, but if its technical specifications, in terms of the scondary and quality of the article produced, have not undergone any appreciable change, it is to be covered by the provisions of article 1, but "only when it is imported for the equipment of manufacturing plants whose products are seld competitively".

At the same time, it lays down that the benefits of article I will apply "enly if the equipment is imported by the direct user or on his behalf" (article I). This complice with the intention of preventing the entry of second-hand equipment for subsequent disposal within the national territory, and limits outtons exemption to firm transactions between those directly concerned.

It establishes a minimum productive life for anchinery imported in this out by providing that "the recipients are obliged to maintain the equipment referred to in this Decree in a perfect state of repair and making enter for three years from the date of its disputch". (asticle 6)

The remainder of this regulation lays down the procedures for its implementation, for expert appraisals and for penalties for effences, which are irrelevant here. It should be repeated that this regulation is in abeyance, since it was considered that the national industry had had an opportunity to re-equip during the sighteen months in which the regulation was in force, and also for reasons concerned with the national balance-of-payments situation.

At present, imports of second-hand equipment are liable to an import duty of 16 per cent on the cost and freight value as new. It should be explained that import duties on new equipment are appreciably lower-provided that similar types or models are not manufactured in Argentina.

To complete this report, it should be pointed out that there is legislation in force exempting imports of machinery for certain industrial activities. This legislation is part of the existing system to promote industry. The activities covered by this legislation are those which Argentina is specially interested in expanding or establishing, among which are the iron and steel industry, the pulp and paper industry, the petrochemical industry, etc. However, and this should be particularly noted, even the sectors benefitting in this may have not been authorized to import equipment indiscriminately. Each specific industrial project is analysed by the relevant State technical services to determine which part of its machinery and equipment may be exempted from customs duties. The samples is particularly concerned with the possibility of manufacturing such equipment in Argentina and, if it can be so manufactured, the decision is naturally to refuse exemption of duties.

Investments made with outside financing (loans from international erganisations, etc.) and also companies established with foreign expital are subject to the same treatment as regards the importation of equipment.

In view of this regulation on imports of equipment for State-promoted industries, it is clear that a general exemption for the entry of second-hand equipment would not be logical and that each case must be decided on its merits.

THE DIDUSTRIAL STRICTURE OF ARCHITICA AND CAPITAL GOODS

Within its industrial structure, Argentina has a large sector producing capital goods. In order to avoid repetition, we shall refer to United Nations publication "The Booncmic Development of Argentina", a study carried out by the Secretariat of the Booncwic Commission for Latin America. This document (E/CH.12/429/Add. 'and 2/Rev. 1) has a chapter entitled "The Machinery and Equipment Industry", whose conclusions, generally speaking, still hold good (except with regard to motor vehicles and tractors).

On the whole, it is concidered that for all practical purposes the import substitution process is now ended in Argentina so far as firished concurred are concerned. For that reason, the National Development Plan indicates that honosforth the manufacturing sector will concentrate on the development of basic industries and the strengthening of the capital goods easter.

This sector, namely the local manufacture of machinery and equipment has an output capacity expedie of setisfying a large part of description description of description duty those types or models of second-hand equipment which can be manufactured in Argentina must be excluded.

Mercover, recent governmental measures are intended to stimulate demontic demand for such machinery (credits from official banks, etc.) and thus etroughbon that industry.

In that connexion, the National Development Plan lays down that medium-term and long-term bank credit will be mainly aimed, as regards industrial activity, at financing the national manufacture of capital goods, promoting non-traditional exports and pre-financing the production of exportable industrial goods. Extending the lines of credit will have the effect of putting the national industry producing capital goods on an equal footing with foreign industries as regards the purchases to be made both by official bodies and by the private sector. Thus, it is heped to forge sheat boldly with the policy of import substitution and the utilization of the installed capacity of the national capital goods industry.

The National Development Plan states that the utilisation of existing capacity to produce capital goods will make it possible to increase demostic production of these goods. It is estimated that its share of the grees product in respect of manufactures will increase from 17.8 per cent in 1964 to 20.6 per cent by 1969. Of the 774.5 million peace at 1960 prices to be invested during the period 1965 - 1969 in industrial machinery and equipment, 548.7 million will come from national sources and the rest will be imported.

lioreover, this sector of capital goods production is tending to become an export sector, which is the logical reason for governmental support through the measures which have been presulgated and others which are under study.

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To sum up, it can be said that, in principle, industry should be equipped with new machinesy.

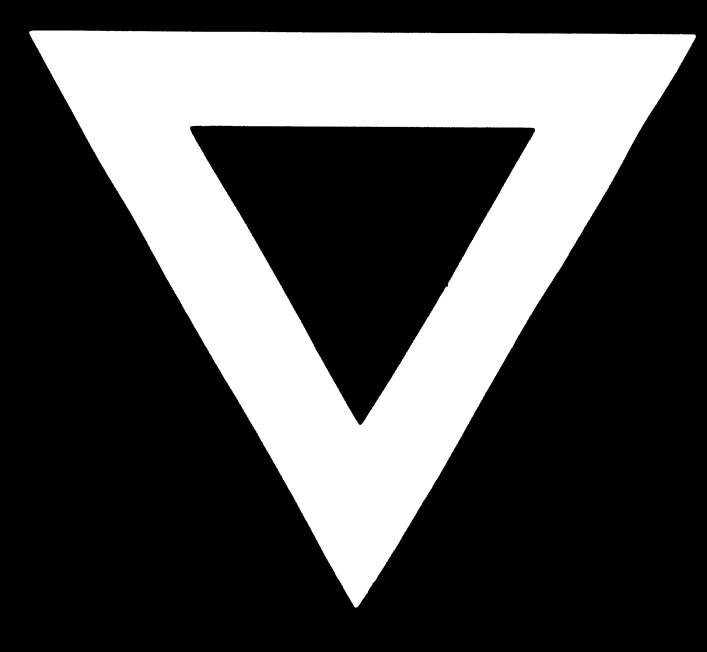
With regard to second-hand equipment, no generalization should be attempted. Buch specific case should be studied and analysed, bearing in mind the type, the state of repair, the price and the general economic situation.

Accept, Sir, the assurance of my highest consideration.

(signed)

Eduardo Bradley
Escacuic Counsellor





75.08.20