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GLOBAL INDUSTRIAL TECHNOLOGICAL PROBLEMS

OF INTEREST TO THE DEVELOPING COUNTRIES

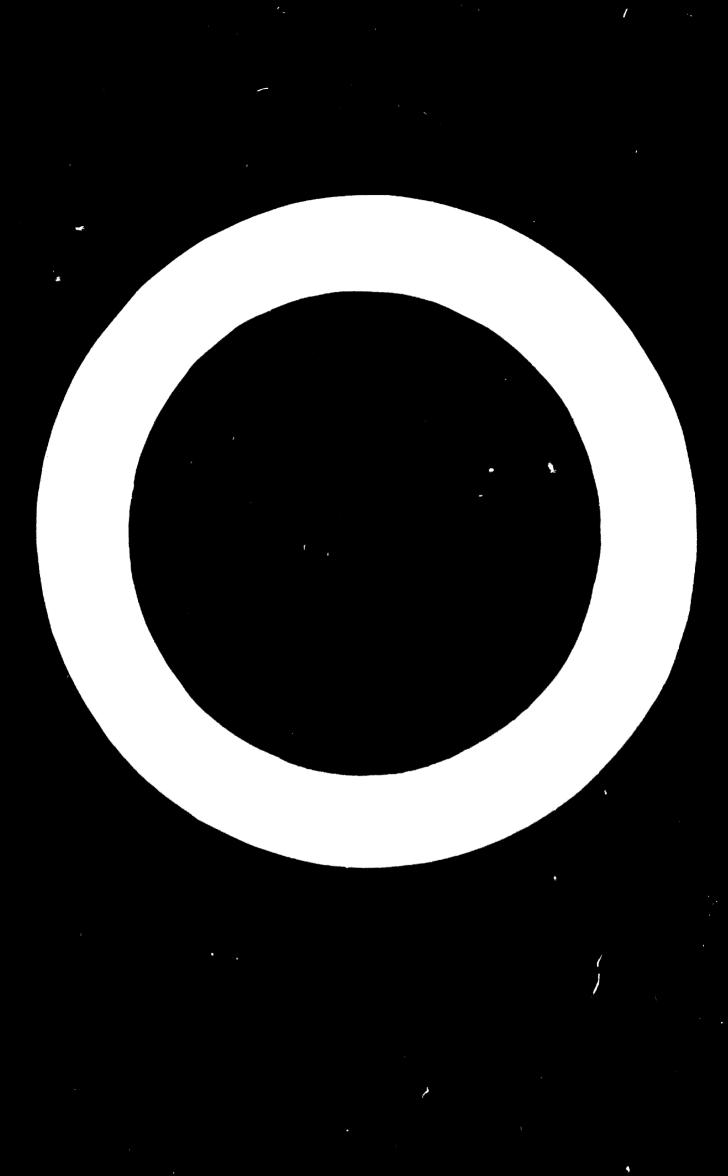
Note submitted by the Executive Director of UNIDO to the

Ad Hoc Working Group on Industry and the Transfer of Technology of the Advisory Committee on the Application of Science and Technology to Industrial Development

Vienna, 24 - 30 November 1970

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We regret that some of the pages in the microfiche copy of this report may not be up to the proper legibility standards, even though the best possible copy was used for preparing the master fiche.



There are a number of important technological problems of 1. particular interest to the developing countries which need limited development and experimentation so as to be readily applicable to As an example one may mention the production of newsindustry. print from bagasse which is a problem of great interest to all sugarcane growing countries and for which technologies have already been developed in certain advanced countries but need pilot plant and further experimentation before full industrial application. Another problem is the extraction of titanium and rare earth elements from black sand deposits, a question which needs technological investigation and would benefit many developing countries. A third example is the production of steel under conditions of scarce coke and abundant cil and natural gas; this is a question of perticular importance to the developing countries now and even more so in the The cotton-growing and exporting countries need coming years. technical research to improve the qualities of cotton fibres and to introduce new technologies of production which will improve the competitive situation of cotton and cotton textiles. Research and experimentation related to hard woods, jute, cocoa and other developing countries' products could also be noted.

2. In the above-mentioned cases (and many others) what is wanted is not long-range fundamental research which may take years of work, but rather short-term techno-economic experimentation with limited investigations which would be expected in the immediate future to lead to improved investment and economic returns. Financing in the order of several million dollars in each case could produce tangible results.

3. Within the United Nations system the main sources of financing of such activities is the UNDP. Unfortunately the UNDP is restricting the share of such global projects to a total of 1^{σ}_{ℓ} of its resources. The developing countries individually will find it difficult, in spite of the great importance to them of each one of those problems, to include it in their national programmes so as not to create a serious imbalance in such programmes.

4. Current investments by the developing countries as well as by the international financing sources are proceeding in such matters as development of agriculture production, mining and forestry while the few cases of technological research mentioned above (and certainly many others) would increase rentability of these major investments. Yet it is quite difficult according to the present practices of pre-investment and investment financing to secure the minimum resources for such major operations.

5. The World Bank is currently assuming the initiative in calling for continuation of financing of research and studies related to high yield varieties of wheat and rice and other crops. International initiative is equally required to raise the necessary funds and direct attention to other technological problems of immediate return. 6. UNIDO suggests that the Advisory Committee on Science and Technology may wish to examine this question and recommend to the Governing Council of the UNDP to re-examine the situation which, if left unchanged, will harm seriously the interests of the developing countries themselves.

7. The Committee may also find it possible to recommend to financing institutions, bilateral donor countries and Foundations to give the necessary attention and support to such important problems of technological application in industry.

