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THE BRAIN DRAIN PROBLEM:
CAUSES, MAGNITUDE AND POSSIBLE COUNTERMEASURES

The emigration of scientists, engineers and technologists from one country to another is part of the natural sociological phenomenon of human migration which has taken place from time immemorial and which has generally been regarded as having beneficial effects. Until the early 1950's, the international movement of this class of individuals attracted no special attention for two reasons. It generally took place from the more highly developed to the less developed countries and the numbers involved were comparatively small. This is no longer the case. There has been a sharp reversal in the natural direction of movement and the numbers of permanent emigrants has now reached such proportions as to constitute a serious drain on the scientific and technical manpower of a large number of countries, including even such highly developed countries as Britain, Germany and Switzerland. What has been described as an international market for trained scientists and engineers has developed and each country is expected to compete for brains by outbidding its competitors in salary or in the opportunities for future advancement. The U.S.A. being the richest country in the world and having set itself the objective of being foremost in science and technology, is able to attract scientific manpower from every country in the world, which is willing to permit its emigration. In turn, countries such as Britain and Canada which lose heavily to the United States, endeavour to make up their deficit by drawing scientists and engineers from countries which they can outbid. A pyramid has been created with the United States at the top while at the base we find many of the Asian, African and South American countries. In fairness to the more advanced countries, it must be pointed out that they have provided substantial financial aid to the less developed countries and have sent many scientists and engineers there to foster scientific and technological development. This small input by no means counterbalances the emigration. Moreover, this is an artificial stimulant which is sensitive to political influences and to the economic climate in the donor countries. It should be regarded as a short term measure. No country wishes to be permanently dependent on the charity of richer countries. It has been estimated that the financial aid given in this way may well have been repaid by the economic value of the scientists and engineers recruited from the developing countries. Even if such a doubtful "balance of payments" could be substantiated, the concept of trading men for money is abhorrent to all civilized people.

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