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Foreign Associates

When educated and talented people leave poor countries to go to rich ones there is ambivalence at both ends of the migration route. The receiving countries welcome gifted newcomers, but feel guilty about taking talent that can be ill-spared in a less fortunate country. The losing countries complain of the brain drain, but often continue conditions that encourage able men to emigrate.

The reasons for migration are many, and there is no single remedy for the complex of problems called the brain drain. It is, however, possible to identify the persons whose loss would be most damaging and to make it more attractive for them to remain.

If a developing country is to take reasonably full advantage of modern science and technology, it must have at least one research and teaching university of good quality in order to develop and hold the indigenous competence necessary to analyze the country's own problems, evaluate work done elsewhere, translate new findings into locally useful applications, counsel government leaders, and inspire and educate future scholars. The staff members best qualified to lead such an undertaking are, understandably, the ones best known and most likely to be offered positions elsewhere. They are also the ones most likely to be driven away from their own countries by intellectual loneliness unless they have an adequate number of stimulating colleagues and the facilities necessary to do the work of which they are capable.

Abdus Salam wrote in 1966 in *Minerva*: "Looking back on my own period of work in Lahore . . . I felt terribly isolated. If at that time someone had said to me, we shall give you the opportunity every year to travel to an active centre in Europe or the United States for three months of your vacation to work with your peers; would you then be happy to stay the remaining nine months at Lahore, I would have said yes. No one made the offer."

But now the offer can be made to a few scientists. The International Center for Theoretical Physics in Trieste, of which Dr. Salam is the director, has granted to 27 carefully selected physicists from developing countries the privilege of working at the Center for from 1 to 4 months a year with little more formality than a letter announcing the time of arrival. These Associates, of which the Center hopes eventually to have 50, are reimbursed for travel and maintenance costs from Center funds, but it is expected that their salaries will be continued by their own institutions. The Royal Society is establishing a similar scheme that will extend into fields other than theoretical physics. A recent seminar of the United Nations Advisory Committee on the Application of Science and Technology to Development proposed to the National Academy of Sciences and the Canadian National Research Council that the United States and Canada create from 200 to 300 similar associationships tenable in Canadian and American universities and research centers.

If the associates and the institutions are well matched, the arrangement will be advantageous to the host institutions, for, almost by definition, the associates will be those scientists from developing countries that institutions in other countries would most like to lure away.

The host institutions should benefit, but the primary purpose is to help the developing countries build up their own scientific resources to the point of not needing such special help. The richer countries will surely continue to assist the developing ones. Among possible forms of assistance this one appears to be a particularly attractive way—and an inexpensive one to boot—to help them retain one of their own greatest assets: able scientific leaders.—DAEL WOLFFLE