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Agricultural technology: leaving home

American land grant universities have historically maintained a policy that the knowledge and technology they develop is public information and is available to anyone in this country or abroad to utilize to best advantage. Except for issues involving national security or particular patent arrangements, this policy has been actively pursued by most publicly supported universities and their faculties.

It has not been a matter of passive interest: our missionary zeal has caused us to make every effort to spread the word of American intellectual and scientific development to every point of our globe. State and federal governments, university organizations, private foundations, and private businesses have all made extensive efforts to use American knowledge to improve the lot of developing nations. We have brought students from all over the world to our universities to provide them with a scientific education and to improve their ability to understand the technology developed here.

Who could quarrel with these efforts to improve the standard of living of the world? Who could quarrel with the belief that the knowledge developed here should be shared with those less fortunate in their academic opportunities than ourselves? Who could question that the knowledge and technology brought to our country from other universities and businesses is clear justification for an open exchange policy?

Until recent years, these goals were generally viewed as humanitarian, and in our best interests. That appears to be changing.

Until the mid-1950s, the United States was a net importer of agricultural products, and it seemed that anything that improved productivity in the rest of the world could not help but benefit us. Besides, we have all heard many times that a developed nation is a better market for our products than a struggling underdeveloped nation.

Today, however, American agriculture is an exporting enterprise. The United States depends heavily on agricultural exports for its balance of trade. Our agricultural business enterprise finds itself facing stiff competition from nations that use our technologies. The new improved varieties we've developed now compete with us in the international market. The combination of American technology and foreign subsidized products hits our agricultural businessmen where it hurts the most — in the wallet.

From the California point of view, I believe that the advantages of open exchange of knowledge and technology still surpass the benefits of a closed policy. Drip irrigation from Israel, beneficial insects from almost every temperate and arid country of the world, germplasm for new varieties, and disease-resistant rootstocks are all examples of the positive side of an open information exchange philosophy. In addition, foreign scientists working in our universities bring invaluable knowledge, experience, and understanding to American science for agriculture.

That may be little consolation to an agricultural business whose products cannot compete with those produced elsewhere and sold here more cheaply with a combination of American know-how and aid, plus foreign subsidies.

There is no simple answer to the dilemma. I believe we have to consider the interests of American business, but I also believe it is essential to maintain an open exchange of American technology with the worldwide scientific community.

The lack of a clear and consistent United States policy on international trade of food and fiber is a major contributor to the situation. We cannot begin to resolve the issue of technology exchange until we get at the underlying cause of current concerns.