Comments

Made at Fifth ASIPI Congress in Rio de Janeiro

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With respect to the subject of Transfer of Technology and Code of Conduct and Restrictive Clauses, I would like to make a few brief comments and pose a query or question.

But first let me lay the basis by some observations on an aspect on which there has been little focus and attention. Reference has been made only in passing to technology export on the part of developing nations to other developing and lesser developed countries. Dr. Bogsch in his Inaugural Address referred to Brazil as economic giant and exporter of products. Dr. Cikato in his paper states with reference to Argentina, Brazil and Mexico ever so briefly in the introduction: "e incluso son ya exportadores de technologia." And Dr. Leonardos yesterday decried Brazil's negative balance in the area of technology transfer. In this regard, incidentally, it should be born in mind that even Germany has a negative balance; in fact only two countries, the US and Switzerland, have positive balances.

In the heated debates about technology transfer, it has been overlooked it seems to me that a new stage has been reached where some developing nations have already become "developed" nations in the sense that they have become technology exporters. In some countries and notably Latinamerican

countries, such as, in particular, Argentina, Brazil and Mexico this has already reached very pronounced proportions. Mexico is best example one can find in this regard. I hope Bernardo Gomez Vega won't consider me presumptuous talking about Mexico for a minute but these matters are of public record.

Mexico is still being considered as a developing country. And insofar as the development of truly new products is concerned, e.g., synthesis of new chemicals, it certainly is not anywhere near the major European countries or the US or Japan. However, Mexico without a doubt has come a long way as regards technological progress.

Mexico has already sound technology of its own in such fields as agricultural infrastructure as well as such industries as petroleum, beer, cement, glass, steel and others including some in chemical areas. What is more, a full-fledged campaign is under way in Mexico to export homegrown know-how as an interesting article in Business Week, last August 1976, page 40, described.

For instance, the HYLSA process for direct reduction in steel making, which was developed by Hojalata y Lamina, the largest private steel company in Mexico, was first sold to Brazil in 1969 and has since also been bought by Venezuela. The technology DEMEX, invented by PEMEX the state oil monopoly, in order to extract metals from crude petroleum during the refining process, has been sold to ECOPETROL, the state Petroleum company of Columbia as well as to Jamaica. The method CORTINA to reinforce steel structures is used in Columbia and Venezuela. And Peru and

Argentina have bought the CUSI process, a method developed by the Bufete Industrial for the manufacture of paper pulp. Lately, Mexican technology has also been found outside of Latin America. Steel plants which incorporate the HYLSA process are being constructed in Iran, Irak, Indonesia and Zambia. The CORTINA technology has been bought by Saudia Arabia to be used in projects of the Department of Housing, and the DEMEX process is even being used in the United States in an expansion of a multi-million dollar refinery in Corpus Christi, Texas.

Mexico is developing a hydrometallurgical process of its own to make electrolytic copper. A pilot plant has started up this month in Baja California to produce 10 metric tons/day and later 9,000 m.t./year. In a year or two this process itself will be ready for export.

As far as Argentina is concerned I understand from Dr. Cikato of Montevideo that all the technology that Uruguay is importing comes from Argentina and it is more than likely that not only Uruguay is importing technology from Argentina but other neighbors, too.

It is also very interesting to note that there is a drive on in Brazil not only to export goods but also, and more recently, to export less sophisticated technology or to re-export technology adapted to the conditions of a developing country to countries which have not yet reached the industrial level of Brazil, such as, Arabic, African and some of the other Latinamerican countries. INTERBRAS, has been negotiating

the transfer of technology involved in about 30 projects from Brazil to such other countries including, for instance, two ceramics plants in Nigeria. All this I learned from Peter Dirk Siemsen's talk which he gave in Chicago last February.

This is just an illustration and possibly only the tip of an iceberg. But these are not isolated instances; it is becoming a pattern, a systematic practice and a logical development. This ought to be kept in mind for the sake of objectivity and perspective. I don't think there is a clearcut division or gulf or dichotomy between developed and developing countries. From the point of view of technology transfer it is a dynamic ever-changing picture. The point can be made and this should be born in mind that with respect to the Code of Conduct and Restrictions in Technology Transfer agreements, the chickens may come home to roost (as we say in the States) to the developing countries when they start to export technology or practice export of technology themselves.

Having said this, let me now pose this question or query. What kind of deals, contracts or license agreements are these developing countries as for example Mexico, Brazil and Argentina, or rather the state or private companies involved, concluding with their licenees in other countries?

I am sure they don't give their technology away free or for a very nominal royalty-fee and without any strings whatsoever attached.

On the other hand, I don't suppose they can charge what the traffic will bear in view of the criticism and

condemnation leveled against the transnational companies and the highly developed countries on account of past abuses such as excessive royalty charges and royalty repatriation.

It would indeed be interesting and intriguing to know what kind of deals are being made in cases of technology transfers between developing countries.

A strict Code of Conduct and elimination or outlawing of all or any restrictive clauses would come back to haunt them.

(After the session, Mr. Cavalier of Bogota told me that he has had experience with licenses from Mexico to Columbia and the same rules and restrictions are applied as are applied to licenses from, e.g., the U.S.).

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