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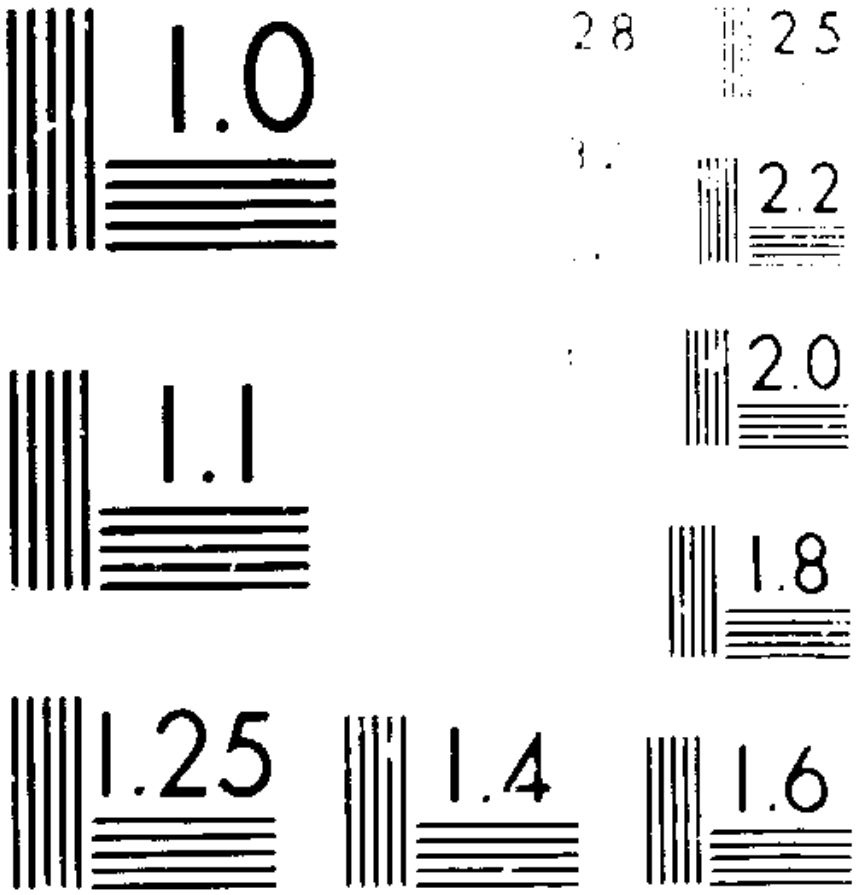
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TIES NEWSLETTER

TECHNOLOGICAL INFORMATION EXCHANGE SYSTEM

Issue Number 8 — March 1981

12037

Dear Reader,

Technology acquisition requires not only a knowledge of what exists but also an awareness of what is round the corner. We are in the midst of significant advances in technology in fields such as micro-electronics, telecommunications, bio-technology and genetic engineering. Developing countries should be aware of the potentials and implications of such advances so as to reorient their industrial and technological policies and develop the necessary technological capabilities as well as to use such knowledge in making decisions on individual projects. We have already initiated indepth studies in this respect in the fields of micro-electronics, bio-technology and genetic engineering, and sea bed mining. Long-term trends in machine tools and petro-chemical industries are also being studied.

Early in February UNIDO brought together a number of leading scientists and technologists in the field of genetic engineering as well as a few development specialists to review the implications of advances in genetic engineering for developing countries. It was found that bio-technology has a definite industrial orientation and could create wholly novel industries with low-fossil energy demands. It is expected to affect, over a period, the food and animal feed industries, the whole range of chemical industries including drugs and pharmaceuticals, fertilizers and insecticides, the energy industry, mineral processing and recycling and waste treatment. As of now, the initial commercialization has been in the bio-medical field and there are ongoing clinical trials for human insulin, human growth hormone and human interferon. However, given the rate of advance in this field, it is a matter of time before technologies for other purposes are commercialized. The meeting recommended among other things the initiation of a programme by UNIDO in this field, including the establishment of core technical groups in developing countries and the preparation of a detailed project report for an International Centre for Genetic Engineering and Bio-technology.

We feel that no time should be lost by developing countries in getting to know the potentials and implications of technological advances. Recently I wrote a paper on this subject, a copy of which I am sending to all TIES readers who attended the Buenos Aires Meeting. I am also hoping that we will have an opportunity to organize national consultative meetings in selected developing countries in order to stimulate discussions and action at the national level.

G.S. Gouri

Registry news

Portugal

Dr. Alexandre Vaz Pinto former President of the Foreign Investment Institute of Portugal has been appointed Minister of Commerce of Portugal. Dr. Vaz Pinto assumed his new duties in January of this year. We wish Dr. Vaz Pinto, an active supporter and contributor to the TIES system, every success in his new position. His valuable participation in the TIES meetings will be sorely missed.

UNIDO activities

Production of Ethanol from Celluiosic Materials

UNIDO, in conjunction with the Government of the Philippines, has recently concluded arrangements for a project on the production of ethanol from cellulosic materials. Phase I of the project will be devoted to a techno-economic study and a detailed design study whose conclusions will be used in a subsequent Phase II for the construction of a pilot plant conducting research for commercial production of ethanol from cellulosic materials.

At present about 95% of national energy consumption (excluding firewood) is met in the Philippines by imported crude oil. In 1979 the country had a trade deficit of $US 1.64 billion of which 97 per cent, or $US 1.596 billion, was directly attributable to oil imports. With the growth in national energy consumption and the rising oil prices the deficits in the coming years are likely to increase. The Government is therefore undertaking major programmes to develop its own sources of energy, both from conventional and non-conventional resources. Under its present policy it expects to reduce its dependency on imported oil to 25% of the current level by 1989.

One of the major efforts in this direction is the Alcogas Programme whose immediate objective is the production of anhydrous alcohol (99.5% ethanol) for use as motor fuel in blends with gasoline, containing up to 20% of alcohol. The programme hopes to attain the 20% blend target by 1986 when the alcohol requirement would be 595 million litres, corresponding to the projected gasoline requirement of 2,973 million litres. On this basis, it is estimated that 634 million litres of alcohol would be required in 1988. A

Compiled by the Technology Group of UNIDO — P.O. Box 300, A-1400 Vienna, Austria

longer-term objective of the Alcogas programme is to produce enough alcohol for 100% alcohol engines and perhaps also to use alcohol as a chemical feedstock for the production of ethylene and its derivatives.

A key factor for the success of any fuel ethanol programme is feedstock diversification. Ethanol can be produced from three types of raw materials in that order of difficulty: 1) sugar crops (e.g. sugar cane, sugar beet); 2) starch crops (e.g. cassava, sweet potato, sorghum, corn); 3) cellulosic materials (e.g. agro-forestry wastes such as bagasse, wood wastes, straw, corn stalks, corn cob, grasses, etc.). The technology for ethanol production from sugars is well established and practised on a large scale, whilst that from starches is known but not yet proven to be economic on a large scale. Ethanol production from cellulosic materials, although at an advanced stage of development, is not a yet commercially proven technology for the purposes of fuel ethanol production. However, cellulosic materials hold the greatest promise as ethanol feedstock in the long term because, being largely agro-forestry wastes, they do not compete with food production which the sugar and starch crops do. Therefore, the ultimate goal of a national fuel ethanol programme must be the development of a commercial process for conversion of cellulose to ethanol. That is why many countries are interested in intensive research and development efforts in this direction.

Many advances have been made in cellulose conversion, particularly in the enzymatic process because the latter has certain advantages over the acid hydrolysis process. As yet, no commercial enzymatic process has emerged; however, notable progress has been achieved in two enzymatic processes, one developed by the U.S. Army Natick Research and Development Command, Massachusetts, and one by the Gulf Oil Chemicals Company, U.S.A. The Natick process has been tested in a plant of 50 kg./day feedstock capacity whilst the Gulf process has been tried in a small pilot plant of around 1 ton/day feedstock capacity. Any developing country wishing to exploit its cellulosic resources should study these processes and apply them in a pilot plant having an adequate capacity for scaling-up purposes. Co-operative R+D efforts among developing countries in this field would be highly beneficial.

The Alcogas Programme, currently based on cane juice and molasses as raw materials, has plans for feedstock diversification which is of fundamental importance to its long-term success. Studies so far initiated cover the starchy materials, such as cassava, sweet potato, sorghum and corn. It is the natural ambition of the Programme to extend these efforts to include cellulosic materials which the country has in abundance. It is believed that an amount of energy equivalent to 60 million barrels of oil can be derived annually in the Philippines from agro-forestry wastes (e.g., rice hull, rice straw, corn cob, corn stalks, bagasse, wood wastes, logging wastes, coconut shell, coconut petiole, peanut shell, coffee hull, grasses, reeds).

Besides aiming at a technological breakthrough in cellulose-to-ethanol conversion, many developing countries that have either launched or are interested in starting fuel ethanol programmes (e.g., Brazil, India, Thailand, Philippines) are intensifying their R+D efforts to reduce production costs and to establish fermentation ethanol firmly as an alternative energy source on a national scale. In making such efforts, ranging from feedstock diversification and development of more efficient micro-organisms to better techniques for each process step in fermentation ethanol production, these countries have become aware of the dire need to strengthen their own technical capabilities in all the scientific disciplines and technologies related to fermentation ethanol production.

In the Philippines, a step in this direction was taken by the establishment in November 1979 of BIOTECH (National Institutes of Biotechnology and Applied Microbiology in the University of the Philippines at Los Baños) whose major R+D programme concerns the production of biofuels from agricultural crops and residues and is intended to give direct support to the Alcogas Programme.

Two related organizations are the Philippine National Alcohol Commission (PNAC) which is responsible for the Alcogas Programme and the Centre for Non-conventional Energy Development (CNED).

This project which aims to ensure the success of the Alcogas Programme, is a timely one, since considerable lead time is necessary for the commercialization of new technologies and the development of technical manpower in the complex field of fermentation ethanol production for use as fuel and chemical feedstock.

Phase I of the project which is expected to be completed in 18 months is being jointly financed by the United Nations Development Programme, the Government of the Philippines, and UNIDO through special contributions from the Governments of Finland and Sweden. Phase II of the project for which preparations will begin in October 1982 will be carried out over a five year period.

Co-operation with the Licensing Executives Society (LES).

From 27 - 29 January, a delegation from the Licensing Executives Society International headed by Mr. S. Heijin, President of LES International visited UNIDO to review the scope of co-operation between the two organizations and identify possible joint programmes for 1981 and beyond.

In addition to Mr. Heijin, Messrs. Payne and Gay were present from LES and were met by Mr. G.S. Gouri, Senior Technical Adviser in Charge of UNIDO's Technology Programme, as well as by other members of the secretariat.

It was agreed that while present forms of co-operation were being carried out and were found to be useful, further expansion of the co-operative programme was needed in order to provide a forum for international understanding between suppliers and recipients of technology. In this connection, certain decisions were made which should lead, in the long run, to better understanding between members of LES, as representatives of technology suppliers and technology recipients in developing countries.

It was felt that although growing, there is still a lack of official information on the positions and circumstances of sellers of technology available to developing country recipients and vice versa. To attempt to alleviate this problem LES has suggested that representatives of developing countries, particularly members of the TIES system, should write articles on their problems and situation vis a vis technology transfer. Such articles would be published by LES in their journal "LES Nouvelles". Contributions therefore are welcomed and encouraged from readers of the TIES Newsletter. Upon receipt by UNIDO the articles will be forwarded to LES for publication. At the same time the TIES Newsletter will publish selected articles prepared by LES members in future issues. This issue includes an article describing the aims and activities of LES.

In another area, it was agreed that access to information on currently available technologies as provided by UNIDO's Industrial and Technological Information Bank (INTIB) should be strengthened. As such LES agreed to provide inputs on available technologies to INTIB.

LES and UNIDO also agreed to continue meetings between LES members and heads of technology transfer registries. Both organizations will work towards organizing such a meeting in the spring of 1982. Details as to this meeting will be made available at a later date.

THE LICENSING EXECUTIVES SOCIETY INTERNATIONAL

WHAT IS LES?

LES International is an association of individual Societies each composed of individuals with substantial responsibility for licensing-in and licensing-out technology as well as other aspects of the transfer of industrial property rights. It is a business-oriented professional society whose individual members include management representatives from companies both large and small, lawyers, patent attorneys, scientists, engineers, academics, government officials and others engaged in some form of licensing or industrialisation activity.

The first licensing executives society was established in 1965 in the U.S.A. Similar societies have since been formed in Argentina, Australia, Austria, Benelux, Brazil, France, Federal Republic of Germany, Hong Kong, India, Italy, Japan, Republic of Korea, Mexico, Scandinavia, South Africa, Spain, Switzerland and the United Kingdom. These Societies co-operate under the umbrella of LES International and all have similar purposes which include the following:

- To function as a non profit professional society encouraging high professional standards among individuals engaged in the transfer and licensing of technology and industrial or intellectual property rights.
- To assist its members in improving their skills and techniques in licensing through self education, the conduct of special studies and research, the sponsorship of educational meetings, the publication of statistics, reports, articles and other material, and the exchange of ideas relating to domestic and foreign licensing.
- To inform the public, international bodies, governmental bodies, and the business community concerning the economic significance of licensing and the high professional standards of those engaged in the licensing profession.
- To make available to its members the latest, most accurate, information on licensing.

In keeping with its character as an association of individuals (membership of corporations being excluded), the constitution of LES International specifically provides that it shall be non political and that it shall be free to grow by the creation of Member Societies in the widest possible variety of countries irrespective of politics, religion, or state of technology development in each country.

LES International endeavours to present practical and technical advice to international organisations having an immediate concern with licensing and serves to feed information to Member Societies to keep them informed and to enable them to submit their views to their own governments if they so desire.

HOW DOES LES FUNCTION?

LES International has a constitution, bylaws and officers who are elected by a Board of Delegates. Member Societies enter into an agreement with LES International containing certain obligations with which Member Societies must comply. These obligations include rules of conduct.

Each Member Society, as a separate non profit organisation and having its own constitution, bylaws, treasury, officers, meetings etc., sends an agreed number of delegates two or three times a year to a meeting of the Board of Delegates responsible for the conduct of the affairs of LES International. Such meetings deal with questions of co-ordination of the interface of LES with international bodies, supervision of the journal "LES Nouvelles", provision of funds, sponsorship of international conferences, support and help to Member Societies and organisation of new Member Societies.

WHAT ARE THE ACTIVITIES OF LES?

MEETINGS

In addition to meetings organised by Member Societies for the benefit of their own membership and conducted in the language of the Member Society, there are one or more meetings per year each organized by a Member Society and sponsored by LES International. These International Licensing Conferences are usually two or three day meetings. They are held in different parts of the world to provide a forum for disseminating information and for the

informal gathering of actual and potential members. These meetings feature speeches, workshops, round-table discussions, instruction courses and panels dealing with matters of particular interest to licensing executives.

Venues of International Conferences have included Helsinki (1980), Geneva (1980), Madrid (1979, 75), Sydney (1979), New Orleans (1978), Utrecht (1978), London (1977, 73), Tokyo (1977), Rome (1976), Paris (1976), Basel (1975), Oslo (1974, 72), Brussels (1974) and Copenhagen (1971).

In addition to the meetings organized by Member Societies and sponsored by LES International there have been meetings organized jointly with UNIDO to consider specific aspects of licensing and venues included New York (1972), Sydney (1979), Lisbon (1979) and Helsinki (1980).

JOURNAL

"Les Nouvelles", unique in its focus and a scholarly journal of the first rank, reports four times a year upon activities of LES International and of the Member Societies, current legislation and other developments affecting licensing and transfer of technology. It carries articles, statistics and studies of worldwide general licensing interest. This journal is the authoritative publication on licensing matters.

RESEARCH

Projects and reports, for example by University professors, on licensing practices and procedures with an emphasis on licensing areas not covered by other organizations or media.

CO-OPERATIVE MEETINGS AND PROJECTS

With other organizations such as United Nations, EEC, governments, universities, law groups, patent groups, management groups etc.

OTHER PUBLICATIONS

Books and pamphlets on licensing, some of these being the result of teams of LES members visiting selected countries specifically to collect information on licensing practices and legal requirements in such countries.

LES International has adopted the following Rules of Conduct which all members are expected to observe in the conduct of their licensing activities.

RULES OF CONDUCT

In order to promote and establish the professional standing of individual members of this Society and of its Member Societies (such individual members hereinafter called "Members"), and in order to enhance the trust of the public in Members, the following Rules of Conduct are adopted. The spirit of these rules should be a proper guide for the conduct of all Members to establish confidence of the public in the profession of licensing.

1. COMPLIANCE WITH LAWS AND REGULATIONS

It is the duty of each Member to comply with all applicable national, international, and local laws and regulations and all rules of conduct imposed by membership in the Society and in other professional organizations, governing the conduct of persons engaged in the transfer of technology or any other aspect of licensing of intellectual or industrial property rights (hereinafter called "Licensing").

2. OBLIGATION UNDER OTHER RULES OF ETHICS

The duties imposed by these Rules of Conduct shall be in addition to the rules of conduct imposed by membership or status in other professions or professional organizations.

3. MISREPRESENTATION

It is the duty of every Member to make a fair representation as to the nature, quality, and extent of the subject matter being negotiated for Licensing. Representations as to performance, reliability, or value should be supported by fact and any statement which is not supported by fact should be identified as opinion.

4. CONFLICTS OF INTEREST

It is unprofessional to represent both parties involved in the subject matter being negotiated for Licensing or to represent conflicting interest in the same transaction without the knowledge and express consent of both parties involved. Prior to accepting employment with a client, it is the duty of a Member to disclose any interests which might be adverse to a client.

5. INTEREST IN THE SUBJECT MATTER BEING NEGOTIATED

If the Member has an ownership interest in the subject matter being negotiated for Licensing, it is his duty to disclose this fact.

6. CONFIDENCE

It is the duty of a Member to respect and hold inviolate the confidences of a client. In the absence of other agreement with the client, termination of the employment with the client will not terminate this obligation, but the duty is relieved by the fact that the

information given in confidence is generally known. In the event that confidences of a previous client prevent him from fully discharging his duties to the subsequent client the Member shall immediately notify the subsequent client of his disability.

7. ADVERTISING AND SOLICITATION

A Member in his contacts with the public and his clients should not behave in a manner which brings discredit on the Society or himself. In particular, a Member should not use any business card, letterhead, directory listing, advertising material or any other form of communication which is undignified or which is false, deceptive or misleading or likely to create false or exaggerated expectations as to the skill, experience or ability of such Member or the value or cost of the services or facilities offered or as to the results to be accomplished through such services or facilities.

8. MEMBERSHIP LISTS

The international membership and attendance lists are the property of the Licensing Executives Society International and the membership and attendance lists of each Member Society are the property of that Member Society. The lists are entrusted to Members for their personal use only. Unauthorized use of the lists by members for general mailings or similar purposes is unethical.

9. ENFORCEMENT

The Licensing Executives Society International has promulgated these Rules to indicate to Member Societies and Members the standards of conduct expected from Members. Each Member Society must use its best endeavours to ensure the maintenance of high levels of professional conduct among its Members by

(a) appointing an Ethics Committee to which any complaint may be referred for investigation report and recommendation for action;

(b) using whatever informal means seem appropriate to persuade an offending Member to improve his professional conduct and practice, or in serious cases to resign from the Member Society; and

(c) in the event informal methods fail, establishing a formal procedure for expelling or otherwise disciplining the offending Member, which formal procedure shall include the step of notifying the offending Member in writing of the nature of the charges and the step of permitting the offending Member to submit a written answer to the charges.

(In addition to the foregoing Rules of Conduct, a Member Society at its option may adopt the following Section 10).

10. SUPPLEMENTAL ENFORCEMENT

A final determination by a competent authority that a Member has violated any law, regulation or rule as set forth in Section I of these Rules of Conduct may be a basis for discipline or expulsion from the Society by the governing body without compliance with the enforcement procedures set forth in Section 9 of these Rules.

Technology acquisition and TAS

Technology Regulation in Egypt

Recent trends in several developing countries indicate certain fundamental aspects in the pattern of foreign investment and technology. For "high" technology, such as sophisticated electronic or chemical processes, foreign techniques and know-how may not be available without substantial foreign investment, often in the form of wholly-owned subsidiaries while, in other sectors, foreign techniques and know-how may be forthcoming if accompanied by majority foreign capital ownership. It is to be expected, however, that the exercise of greater selectivity by developing countries with respect to private foreign investment, combined with efforts to improve the negotiating and bargaining position of recipient enterprises through regulatory control, will increasingly channel private foreign investment and technology to selected growth sectors and improve the terms of trade of technology transactions. Varying degrees of regulation are necessary to ensure that foreign technology inflow takes place primarily in sectors where this is necessary for effective absorption.

Therefore, various institutional and other mechanisms are needed to ensure that foreign technology flow (i) takes place in identified sectors of growth; (ii) is appropriate to factor-conditions and situations, (iii) is consistent with and complementary to domestic technological development and (iv) is acquired on acceptable terms and conditions.

In the absence of an explicit regulatory policy in this field in Egypt, it may be appropriate here to consider some basic principles that should be observed in promoting the transfer of technology into the country.

First, there is a need to establish a technology policy in the country. This policy would require a solid national base and would have to be consistent with economic and social objectives. This policy should also be consistent with other policies for development and should be designed in such a manner that they support each other. More specifically, there is a need to incorporate the "dynamics of technology" within the existing industrial policy. This requires the analysis of the existing technological alternatives through the improvement of information facilities, the establishment of programs for the selective importation and adaptation of foreign technology and the definition of adequate

training programs in the areas of selection, negotiation and adaptation of foreign technologies.

Second, there is a great need to establish a co-ordinated system for the regulation and promotion of foreign technological and licensing transactions. This requires the proper co-ordination of legislative and administrative procedures in the fields of industry, technology transfer, foreign investment, industrial property legislation and fiscal policy. There should also be a clear definition of government criteria and guidelines for the selection, evaluation and approval of foreign technological proposals. Another critical issue is the need for closer association with the productive units in the country; specialized technical centres, universities and government agencies having responsibilities in these matters.

It may be added that the changing technological environment has to be regularly monitored to permit periodic assessment of foreign technology in use and domestic technological progress. The results of such monitoring will serve as the basis of new policies on technology regulation.

Dr. W.G. Wahba
Director General
Research, Promotion and Marketing
Foreign Investment Authority
Cairo

Regulating technology transfer in the Philippines

The following information is based on a study prepared by Lilia R. Bautista, Acting Executive Director of the Technology Transfer Board and Governor of the Board of Investments as well as additional information received from the Technology Transfer Board.

The imports of technology by Filipino industry played an important and growing role in the past years as can be seen from the following table.

Royalty remittances from the Philippines

Year	Amount $ 000
1965 - 1969	4800 (annual average)
1974	13556
1975	14587
1976	19651
1977	26552
1978	26875

Source: Records of Central Bank of the Philippines.

In view of the growing importance and impact of technology transfer on the development of industry, guidelines were issued and published in 1973 in Central Bank Circular 393, spelling out the basic conditions for approval of technology transfer agreements between Philippine industry and foreign suppliers.

In the implementation of the guidelines contained in Circular 393, an ad hoc Central Bank Board of Investment Committee on evaluation of licensing agreements was created in 1974 to enforce provisions of compulsory evaluation and registration of technology contracts.

In view of experience gained in technology transfer regulation Presidential Decree 1520 was promulgated on 11 June 1978 providing the legal framework for the country's comprehensive approach to technology transfer and creating the Technology Transfer Board (TTB) at the Ministry of Industry, as the central body entrusted with evaluation and approval of all technology agreements.

The Technology Transfer Board consists of senior representatives of several institutions (Ministry of Industry Board of Investment, National Economic Development Authority, Central Bank, Philippines Patent Office, National Science and Development Board and the Technology Resource Center) involved in technology transfer and is backed by the administrative staff of the Registry and Licensing Division and Policy Formulation and Assistance Division.

The general criteria and guidelines for evaluation and approval of technology agreements as applied by the TTB can be characterized as follows:

(a) appropriations and need for the technology/industrial property right;

(b) reasonableness of the technology payment in relation to the value of the technology to the technology recipient and the national economy as well. For this purpose, the rate of payment for contracts involving manufacturing or processing technology shall not go beyond the rate that will be established by the Board for the specific technology or industrial right to be transferred;

(c) restrictive business clauses shall not be allowed in any agreement; specifically, the following clauses shall be prohibited:

1. those which restrict the use of technology supplied after the expiry of the agreement (without prejudice to the application of the Philippine Patent Law),
2. those which require payments for patents and other industrial property rights after their expiration, termination or invalidation,
3. those which restrict the technology recipient from access to continued improvements in techniques and processes related to the technology involved during the period of the agreement even if the technology recipient is willing to make additional payments thereon,
4. those which stipulate that patentable improvements made by the technology recipient shall be patented in the name of the technology supplier; required to be exclusively assigned to the technology supplier; or required to be communicated to the technology supplier for its use, free of charge,
5. those which require the technology recipient not to contest the validity of any of the patents of the technology supplier,
6. those which restrict a non-exclusive technology recipient from obtaining patented or unpatented technology from other technology suppliers with regard to the sale or manufacture of competing products,
7. those which require the technology recipient to purchase its raw materials, components and equipment from the technology supplier or a person designated by him (except where it could be proven that the selling price is based on international market prices or the same price that the supplier charges third

parties and there are no cheaper sources of supply),

8. those which restrict directly or indirectly the export of the products manufactured by the technology recipient under the agreement,

9. those which limit the scope, volume of production or the sale or resale prices of the products manufactured by the technology recipient,

10. those which limit the research activities of the technology recipient to improve the technology.

(d) the agreement shall provide for a fixed term not exceeding five (5) years and shall not contain an automatic renewal clause in order to ensure adequate adaptation and absorption of technology.

The listing of restrictive provisions enumerated above suggests further similarities with other developing nations in regulating the inflow of technology such as country members of the Andean Pact or Mexico.

It should be added here that in so-called exceptional cases, that is, where substantial benefits may accrue to the economy such as export-oriented ventures, labor intensive industries, and similar1/ exemption from any of the above provisions may be accepted.

The results of the TTB's 2 years of activities have been very positive particularly in relation to elimination of restrictive business practices, reduction of payments for technology without reduction of the amount of technology brought into the country, improvement of the local R+D base and the creation of an overall positive climate towards foreign suppliers and investors.

In terms of payments it is interesting to note, for example, that out of 185 contracts surveyed in the study by L. Bautista, 141 had a royalty level of 3% or less on net sales value and in only 44 did royalty levels range between 3.01 and 5%. Such data clearly illustrate the effectiveness of the work of the TTB. It could be expected that other developing countries may draw on the experience of the Philippines.

The following offers an interesting insight into the type of technology transferred; out of 151 agreements analysed 39 contained know-how, 57 trademark and know-how and only 44 were related to patented products/technologies.

Finally it should be mentioned that the TTB is one of the few similar institutions in developing countries which monitors on a continuing basis, implementation of agreements in order to ascertain the level of absorption of the imported technology and to prevent unnecessary extensions of contracts beyond 5 years.

Licensing Contracts 1979

The following represents information on license agreements extracted from the "Bulletin of Foreign Commercial Information USSR", No. 5120 - 1979.

1) Great Britain and Romania concluded an agreement under which the latter has the license to manufacture in Romania the jet planes "BAC 111" of the English firm "BRITISH AEROSPACE CORPORATION" and engines "SPRAY" of the firm "ROLLS ROYCE LTD.". In addition Great Britain will supply Romania with passenger planes and aviation engines. During the 15 year term of the agreement Romania will build about 80 planes. The total payments amount to $550 million dollars. The English company believes that this is the largest license agreement in the history of commercial aviation.

2) The Japanese company "KUNIGAWA RUBBER" has concluded an agreement with an American firm "DETROIT PLASTICS MOLDING COMPANY" for an exclusive license to use the production technology of rigid foam plastic from polyurethane and some other plastics. The licensee plans to use these materials for manufacturing parts of bumpers and inner door handles of cars.

According to the conditions of the agreement the Japanese company has the right to sell sub-licenses for the said technology.

3) The French firm "PEUGEOT" concluded with the Yugoslavian organization "FABRICA AMORTIZERA" a license agreement for the production of the cars Peugeot 305, Peugeot 504 as well as spare parts for them. According to the agreement the Yugoslavian organization has the right to export the manufactured cars.

The licensor will lend technical assistance for the construction of an automobile plant with an annual capacity of 50,000 cars which should be ready in 1981. The estimated cost of construction is 289 million dollars.

4) The Japanese firm IOKAGAMA RUBBER CO. (one of the biggest manufacturers of automobile tires in Japan) bought from "GOODYEAR AEROSPACE CORPORATION" (U.S.A.) the production technology for fuel tanks for the military aircraft "F-15".

According to the agreement concluded for 10 years the licensee will pay to "GOODYEAR AEROSPACE CORPORATION" 6.5% of profit from sales.

5) The American company BRISTOL-MEYERS concluded a license agreement with the Swiss pharmaceutical firm SANDOZ LTD. for the production of anti-cancer medicaments. According to the agreement BRISTOL-MEYERS has the right to manufacture and sell the medicaments VM-26 and VP-16-213 in all the countries of the world except France.

6) The firms STANDARD MICROSYSTEMS CORPORATION and WESTERN ELECTRIC (both USA) signed a license agreement in the field of semiconductor manufacture. The agreement envisages the exchange of patents.

7) The company OWENS-ILLINOIS INC., (USA) concluded a license agreement with the Czechoslovakian foreign trade ogranization on know-how for the manufacture of glass for kinescopes. OWENS ILLINOIS INC. will provide technical assistance in the construction of the plant for production of glass parts for kinescopes of colour television sets.

8) The firm MONSANTO (USA) provided the company CITIES SERVICES CO. (USA) the exclusive right to use the new polimerization process for the production of high density polyethylene resin. The licensor will also supply the partner with the necessary equipment.

1/ Sec.2 of Rules and Regulations to implement provisions of Sec.5 of Presidential Decree No. 1520.

9) The company FAIRCHILD CAMERA AND INSTRUMENT CORPORATION (USA) concluded a license agreement with the firm ROBERT BOSCH (FRG) to supply the latter with the production technology of electronic ignition for automobile engines. The term of the agreement is 5 years.

10) The company BORDEN INC (USA) and the firm TOEBO CO., LTD. (Japan) concluded a license agreement for the production technology of polypropylene film with two dimensional orientation used for packing. According to the agreement the licensee has the exclusive right to use the said technology in the USA.

11) KERR MCGEE CORPORATION (USA) concluded a license agreement with the firm KEPALA MINERALS AND METALS LIMITED (India) to supply the latter with the production technology of titanium dioxide.

12) REFAC TECHNOLOGY DEVELOPMENT CORPORATION (USA) concluded a license agreement with the Romanian foreign trade organisation TECHNOIMPORTEXPORT on the transfer of "Know How" for the manufacture of digital electronic watches. The licensee plans to build a plant in Bucharest for watch production. Some of their components will be bought from the licensor.

Calendar of Meetings

1. Seminar on the National Centre for Technology Transfer, Khartoum, Sudan; March/April 1981 (tentative).
2. UNIDO/UNDP/ICD Workshop on Selection of Technology for Assembly of Electronic and Electrical Products, Utrecht, Netherlands; 4-8 May 1981.
3. Technology Transfer and Negotiations for Small and Medium Industries, Vimeiro, Portugal; 14-17 May 1981.
4. Dissemination Meeting of Technology Service Delivery System (TSDS), Manila, Philippines, June/July 1981 (tentative).
5. Technology Transfer Workshop, Beijing, People's Republic of China; 8-22 June 1981 (tentative).
6. National Workshop on Negotiation of Technology Transfer Agreements, St. John, Antigua; September 1981 (tentative).
7. Expert Group Meeting on Technology Advances: Application and Use of Micro Processors (in co-operation with ECLA), Mexico City, Mexico; September/October 1981 (tentative).
8. Workshop for Heads of Regional Centres for Technology Transfer, Vienna, Austria; September/October 1981 (tentative).
9. High-Level Meeting on Regulation of Technology Transfer, ASEAN Country; October 1981 (tentative).
10. International Advisory Panel meeting for IRSI Operation, Sao Paulo, Brazil; 2-6 November 1981 (tentative).
11. Sixth Meeting of Heads of Technology Transfer Registries, Manila, Philippines; 23-27 November 1981.

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