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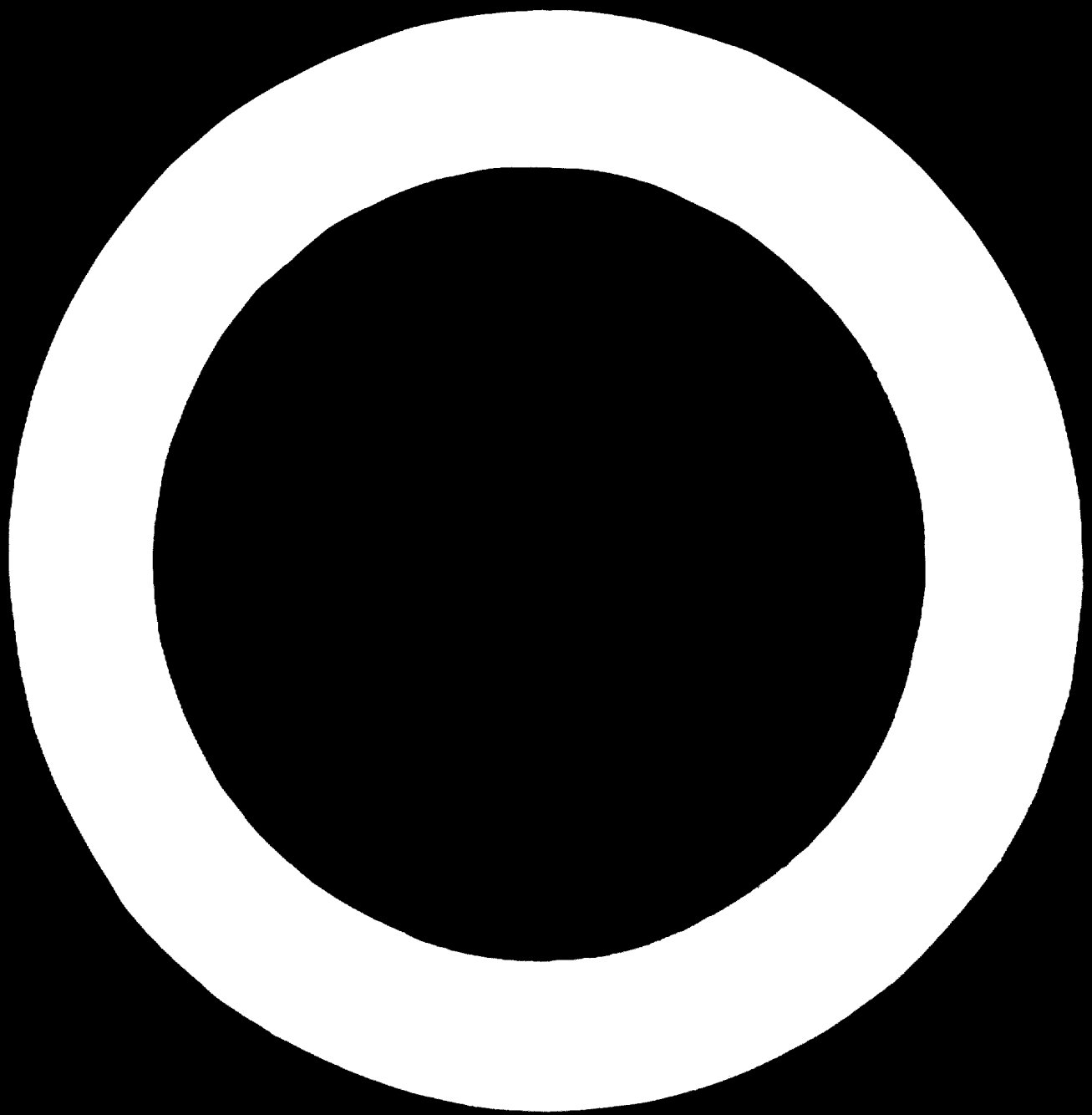
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SUMMARY

Both India and Republic of Korea have a clear policy and specific institutional arrangements for acquisition of technology through licensing agreements, supported by measures for adaptation of imported technology and the growth of indigenous technology. India has explicitly published guidelines and lists of technological gaps. The Indian approach is selective and combined with a selectivity in regard to foreign investment which is not shared by the other countries. The approach of Republic of Korea is promotional and marked by a keen desire to acquire and absorb technology. In Philippines, scrutiny takes place in the Central Bank and to some extent in the Board of Investments, an arrangement which has elements of duplication and raises questions of orientation. In Indonesia, scrutiny takes place in limited respects in the Board of Investment, Ministry of Industry and Ministry of Finance. The major component of scrutiny seems to be the tax angle. There are other elements in the situation which render regulation rather ineffective. In Thailand, the matter is essentially regarded as a private business transaction between two parties. This raises questions about the basic rationale of regulatory arrangements. Such arrangements are useful and necessary in more than one respect and not necessarily inconsistent with a promotional approach to industrialisation.

There is relative paucity of data. The subject needs greater attention and has to be studied as part of the perspective of industrialisation and alongside foreign investment, patents and trade marks, and transfer of technology. A set of recommendations have been made from this point of view, including the need for assistance to officials and entrepreneurs in regard to sources of technology and the contents of technology contracts.

I. POLICY AND INSTITUTIONAL FRAMEWORK

In developing countries national approaches and institutional arrangements (1)* relating to technology licensing get determined often by the following circumstances. In them, licensing is often for the establishment of production and is thus part of the industrialisation process in general. In actual practice as well as in mental approach, licensing is closely related to foreign investment. Licensing generally involves remittance of foreign exchange. As a result, forums of scrutiny of technology licensing agreements (2) are most often to be found in agencies concerned with the admission of foreign investments or industrial approvals in general or the remittance of foreign exchange (3).

General Scheme of Industrial Approvals

2. In all the countries under study, industrial approvals, whether of a regulatory or promotional nature, cover major and important fields of industrial activity. In India, the process of approval of a foreign collaboration agreement is part of the total process of industrial approvals. For industries covered by the Industries (Development and Regulation) Act, the entrepreneur is first given a letter of intent which stipulates whether or not foreign collaboration will be considered for the project. Thereafter he goes ahead with other negotiations including foreign collaboration, if permitted. An industrial licence is issued only after such negotiations receive the approval of the Government. In the other countries under study, industrial approvals relate largely to providing or denying certain privileges and exemptions for selected categories of industries. Indonesia has its Foreign and Domestic Investment Laws, Korea the Foreign Capital Inducement Law, Philippines the Investment Incentives Act and Thailand the Promotion of Industrial Investment Act. This scheme of

* Numbers in parentheses correspond to references listed at the end of the paper.

industrial approvals provides an opportunity for screening technology licensing agreements, an opportunity which is used by these countries in different manners and varying degrees.

Policy approach to licensing agreements

3. In India, though there is no specific provision under the Foreign Exchange Regulation Act on technology licensing agreements, it is the power under that Act to refuse remittances of foreign exchange that provides the sanction behind the approval processes for technology licensing. The policy approach is that technology will be allowed to be imported only in fields of relatively high priority and where sophisticated foreign technology would become available to the country; and it will be denied in those fields where indigenous technology has sufficiently developed.
4. In the Republic of Korea, the import of technology is governed by the Foreign Capital Inducement Law as passed in 1966 and amended in 1973. The purpose of the law is to attract foreign capital including technology by a scheme of exemptions, which in the case of income from technology contracts, means a tax holiday for five years and 50% taxation for three years thereafter. The law now covers all contracts irrespective of duration whereas earlier it covered only contracts, the payment period for which exceeded a year (reminiscent of the Class A and Class B technology contracts in Japan). The law provides (Article 19) that (i) the authorisation of the Minister of the Economic Planning Board shall be obtained for entering into a technology contract or for its renewal or change; (ii) conditions may be attached to the authorisation; and (iii) the contract should be enforced within six months of authorisation or such extended period as may be allowed.

5. In Philippines there are two tiers of control. In regard to projects covered by the Investment Incentives Act, the Board of Investments scrutinises technology licensing agreements as well and has powers of persuasion to have terms of contract changed before the final registration of the projects takes place. The Act, however, does not spell out any policy for technology licensing. In regard to all projects, whether under the Act or otherwise, it is the Central Bank which has more comprehensive powers. Circular No. 281 of the Central Bank of Philippines dated 26.11.1969, issued under the Central Bank Act, in the wake of foreign exchange constraints, provides, inter alia, for prior authorisation by the Central Bank, of all contracts involving remittance of foreign exchange. Licensing agreements involving trade marks are also registered with the Patent office but such registration is neither backed by any sanction nor subject to any scrutiny.

6. In Indonesia there is no special regulation governing the import of technology. Currently, there is freedom of foreign exchange transactions, including royalty and similar payments. The sanction for scrutiny comes essentially from the foreign and domestic investment laws. As part of the process of scrutiny under these laws, it is possible for the Board of Investments to impose conditions on the import of technology. In practice, this is not done for cases under the domestic investment law. Under the foreign investment law, a measure of scrutiny is done. There is also a measure of sanction from the tax angle in as much as, in the context of royalties being taxed at lesser rates than income, the Ministry of Finance decides how far the quantum of royalties could be considered as legitimate items of expenses to be deducted from income.

7. In Thailand, there is no specific provision in regard to the screening of technology licensing contracts. Such contracts are considered as private transactions between two parties. However, local parties are expected to file a copy of the contract and register themselves with the Bank of Thailand to qualify for remittance facility. Once this is done, Commercial Banks can make the actual remittances and report to the Central Bank. Check, if any, is confined to ensuring that the payments made conform to the terms of the contracts.

Explicit Guidelines

8. In India, explicit guidelines have been formally published in 1968. The guidelines provide, inter alia, illustrative lists of industries in which (i) no foreign collaboration will be permitted; (ii) only technical collaboration may be permitted (i.e. licensing); and (iii) where financial as well as technical collaboration may be permitted. (4) Royalty ceilings of 3% and 5% are also indicated for specific products. For products not covered by the lists a decision is taken on the merits of each case. The guidelines also indicate the conditions Government will usually impose and the features not ordinarily acceptable to Government. Exemptions are available for proposals envisaging substantial exports. Lists of technological gaps have also been published subsequent to 1968.

9. In addition, the letter of intent itself invariably contains the following general guidelines: (i) avoidance of export restrictions; (ii) employment of Indian organisations as prime consultants; (iii) programme for further development and improvement of technology in the field; (iv) desirability of associating approved Indian engineering design and consultancy organisations in the evaluation, selection and negotiation conducted for

purchase of technology (iv) desirability of obtaining quotations for distinct services and not for a package(5).

10. In the Republic of Korea, no explicit guidelines of a similar nature have been published.(6) The Foreign Capital Inducement Law however provides (Article 4) the "standards" with reference to which authorisations may be granted: (i) projects which greatly contribute to the improvement of balance of payments; (ii) projects which contribute to the development of key industries or public enterprises; and (iii) projects which contribute to the development of the national economy or the public welfare. It is provided in addition that priority shall be given to those which will greatly contribute to the improvement of the balance of payments or, in the case of foreign investment, to joint ventures. Certain other guidelines which are more in the nature of criteria for approvals are referred to in a later paragraph.

11. In Philippines, there are no explicit guidelines. Section 14 of the Investment Incentives Act provides as one of the basic rights and guarantees, the right to remit at the existing rates, foreign obligations arising from technological assistance contracts, subject to the provisions of the Central Bank Act. Investors in registered enterprises are also given the protection of patents and other proprietary rights.

12. In Indonesia and Thailand, no explicit guidelines exist.

Venue and process of scrutiny

13. In India, the Foreign Investment Board, as part of a system of industrial approvals, is headed by the Secretary of the Department of Economic Affairs and includes the top officials of Ministries of Industrial

Development, Company Affairs and production Ministries, the Director General of Technical Development, the Department of Science and Technology and the Council of Scientific and Industrial Research. Powers of delegation exist to a sub-committee, ^{and} where payments are less than Rs. 0.5 million, to the production Ministries themselves. Cases are sponsored before the Board or the sub-committee by the production Ministries concerned after consultation with the authorities mentioned above and the Development Commissioner for Small Scale Industries. A quick procedure exists for import of designs and drawings, worth less than Rs. 0.5 million, for fabricating machinery indigenously.

14. In the Republic of Korea, the Foreign Capital Inducement Deliberation Committee established under the Foreign Capital Inducement Law, is a body at the ministerial level with the Minister of Economic Planning Board as Chairman and as members, the Ministers of Finance, Agriculture, Commerce and Industry, Construction and Science and Technology, the Governors of the Bank of Korea, the Development Bank, and the Korean Exchange Bank and other persons nominated by the President from among those who are widely educated and experienced in the field of economics and law. The Chairman has powers to decide cases where the rate of royalty does ^{not} exceed 3% and the period of the agreement does not exceed 3 years. Cases are sponsored by the Bureau of Economic Cooperation of the Economic Planning Board in consultation with other authorities concerned. Contracts of a duration of less than one year are considered directly by the foreign exchange division of the Ministry of Finance and remittances authorised by them more or less on an automatic basis.
15. In Philippines, the applications are disposed of by the Central Bank in its Foreign Exchange Division with the Governor taking the final decision. There are no formal

systems or procedures for examination or deliberation though the Bank may refer cases on a purely ad hoc basis to the Board of Investments for comments. In the Board of Investments also agreements are examined within its own divisions.

16. The Board of Investments in Indonesia has been reorganised in June, 1973 so as to centralise the examination of applications for investment as distinct from the earlier procedure when it was more or less a "post office" and the entire scrutiny took place at the respective Departments. In the Board, however, scrutiny relates essentially to some of the legal aspects. The technical aspects are still looked into by the respective Departments to which the applications are sent for comments. The scrutiny of the terms of royalty is done from the taxation angle by the Ministry of Finance. While the Ministry of Finance takes into account the views of other departments, it appears that it is its view that generally prevails. All this scrutiny is not on a separate application but as part of the examination of the application in Form B which is submitted under the Foreign Investment Law after an approval in principle is accorded on the application in Form A. Prescribed forms of application for import of technology exist only in India and Republic of Korea and have to be submitted in 11 copies and 5 copies respectively.

Criteria for approval

17. In India, the criteria for approval are well defined. Basically, no collaboration will be permitted if the industry is not eligible for foreign collaboration. In many cases, the letter of intent itself makes this position clear, thus sending an application for foreign collaboration unnecessary. In regard to areas which are prima-facie eligible, regard is had to the views of the technical

authorities and the Council of Scientific and Industrial Research on the availability of the know-how within the country. Payment of royalty is not allowed for a period of more than 5 years. In so much as projects take time to go into production after the signing of the contract, the period of the agreement could be up to 8 years from the date of the signing of the agreement provided the period of the payment of royalty does not exceed five years. For royalty, the ceilings, if any, prescribed in the guidelines are taken into account. Regard is also had to past cases of importation of similar technology. Where foreign investment is involved, the royalty is attempted to be fixed at a slightly lower level in as much as dividend remittances will also be entailed. Lumpsum payments are allowed where there are specific identifiable services to be performed at the beginning of the contract. Where both lumpsum payments and royalty are involved, it is attempted to be ensured that put together the figure is not out of line with the royalty ceilings prescribed. Clauses for minimum royalty are not encouraged.

13. In the Republic of Korea the criteria for examination are: "(i) need to induce the technology; (ii) details of the technology to be induced; (iii) costs involved; (iv) contract period; (v) economic and technological spread effects; and (vi) relevancy and effect to the same lines of business enterprises." Apart from these criteria, internal guidelines have also been formulated. The principal guidelines adopted since October, 1969 are: (i) Inducement of the technology concerned must be contributive to expanding export markets. Technology for the manufacture of machinery parts and the development of installation process will be given priority; (ii) Cost of induced technology must in principle be under 3% of the net sales

of the resultant manufactures; (iii) The period for the payment of fees for the introduction of technology is in principle to be three years; (iv) The inducement of technology exclusively for the use of trade marks or to promote sales will not be permitted; and (v) Only such technology that is difficult to develop or the domestic development of which is not economical will be authorized. (7).

19. In Philippines, the Board of Investments and the Central Bank adopt parallel and largely similar criteria. However, the Bank has the final say in the matter and is known to have modified agreements already modified by the Board. In the Board, the scrutiny is largely in regard to the restrictive clauses and the duration of the agreements; discussions are held with the proponents and they are asked to revise the agreements. The preference in the Board is for royalties. Comparable royalties in similar cases are looked into. In some cases, royalties have been permitted to be capitalised so that the foreign collaborator has a continuing interest in the project. The Board generally considers a duration of 10 years as reasonable to enable the absorption of technology. In general, the Board tries to take a realistic approach in regard to the project as a whole and does not particularly interfere in the clauses of the agreement, when the project as a whole is financed by a foreign partner and the other elements of the project have already been tied up. Some clauses are not interfered with as being essentially business decisions as between two parties.

20. In the Bank, contracts are evaluated with reference to possible economic benefits. The criteria seem to be that the contracts should contribute to the technical knowledge of the country and to one or other factors such as employment, import substitution or exports, revenue for

Government, etc. The applications are generally rejected if the collaboration is for an industry which is in the list of overcrowded industries. The practice of charging management fees is not generally allowed. Lumpsums are not encouraged and are often required to be set off against future royalties. The contracts entered into prior to 1969 are not interfered with unless they come up for extension.

21. In Indonesia, up to June, 1973, each Directorate General of Industry used to decide the matter in the light of its own experience and the extent to which the royalty payment would constitute an element of cost in the project. There were no uniform criteria. From June, 1973, however, the Ministry of Finance has begun to adopt certain criteria. These are basically in regard to the rates and to the need for a separate payment itself. Also, where the foreign equity participation is more than 51%, a view has begun to be taken that payment of royalty will not be necessary since the foreign partner has sufficient incentive to import technology. Subject to these considerations, and the views of the Directorate General of Industry concerned, the scrutiny, in so far as it is done, is essentially from the tax angle, that is to see that elements of profit are not disguised in the form of royalty. This arises because the marginal rate of taxation for income is 45% whereas the tax on royalties is 20%. The attempt therefore is to limit the extent to which the royalty payment will be treated as an item deductible for tax purposes. From June, 1973, the Finance Department has adopted as a norm a rate of royalty of 2% for five years. This rate is said to have been arrived at on the basis of the broad experience of the earlier years. Admittedly, restrictions on royalties are not effective for other than tax purposes in view of the freedom of foreign exchange transactions. As

regards the fields in which technology may or may not be permitted, there is no specific demarcation. Decisions are taken on an ad hoc and case by case basis. Clauses of agreement are scrutinized by the Board of Investment but to a limited extent, such as ensuring arbitration and force majeure clauses.

Conditions of Approval

22. In India, certain standard clauses are attached to the letter of approval (3). These include: (i) the applicant should establish research and development facilities within the period of the agreement so that the technology is absorbed and he does not come up for extension; and (ii) the applicant must be free to sublicense the technology to other Indian parties on terms to be mutually agreed upon with the foreign collaborator and the Government. These conditions are in the nature of attempts to ensure the absorption of the technology and for avoiding repetitive import of technology. However, they have not been formulated in too strict a manner nor are they capable of being enforced rigidly at present. Restrictions on the export franchise are discouraged. Foreign brand names are not allowed for internal sale, though they are allowed for use in exports. Export obligations may be imposed if the import of technology is in a field of low priority or is permitted only on the grounds that the project is export-oriented. They may also be imposed in cases of foreign equity participation, if there are reasonable chances of export of the product. Royalties for exports are allowed at higher rates, if necessary. In other countries, conditions of approval generally pertain to clauses of agreements only.

Follow-up of Approvals

23. In India, an entrepreneur importing technology has to submit an annual return indicating the amount of

royalty remitted, the steps taken for R & D and other relevant particulars. The follow-up is not, however, strictly monitored or scrutinised.

24. In the Republic of Korea, the applicant must submit a report not later than one month from the date on which the technology is induced. Follow-up is specifically the charge of the Foreign Capital Management Section which also administers such other changes, including extensions, as may be sought by the applicant after the general approval is given.

25. In Philippines, no specific follow-up exists but in regard to the projects registered with the Board of Investments, returns are submitted periodically in which details as to the steps taken to absorb the technology are also indicated. Indonesia has prescribed a similar overall reporting but this is yet to become effective in practice. Remittances, inter alia, of royalties are required to be reported to the Central Bank but this is generally not done.

Remittances

26. In India and the Republic of Korea, once the agreement is approved, the remittance facilities are automatic. In Indonesia, there are no restrictions on remittances. In Philippines, even though the Investment Incentives Act guarantees remittance facilities for registered enterprises, this guarantee is modified under the Central Bank Act in view of the foreign exchange restrictions from November, 1969. The current policy is that remittance of royalties or rentals on patents, trade marks and copyrights may be allowed upto 50% of the amount accrued during the year, provided no royalty remittance should exceed 5% of the wholesale price.

Assistance to entrepreneurs

27. In India, the basic assistance to entrepreneurs is rendered by the publication of the guidelines for foreign collaboration, including illustrative lists where it may or may not be permitted. This has been followed by a subsequent publication of the list of technological gaps where foreign collaboration will be welcomed. In addition, the Indian Investment Centre, an autonomous institution financed by the Government, also provides information and assistance to entrepreneurs in securing technology from abroad. In other countries, the Boards of Investments or their equivalent have facilities for assisting entrepreneurs in setting up industries in general but not specifically on the acquisition of technology. There is no systematic attempt in any of the countries to educate entrepreneurs in the negotiation of technology contracts.

II. A COMPARATIVE ASSESSMENT

A. Survey of factual data

28. A few detailed studies on foreign collaboration in India are available and it is not necessary to traverse the ground covered by them.(9) Attention should however be drawn to the industry-wise composition of the approvals, which is presented in Table 1 in the Annexure. Machinery and machine tools, electricals and transportation constituted as much as 48% of the approvals even during the period prior to 1967 and 58% of the approvals after 1968. These together with chemicals constitute 70% of the approvals in recent years. This shows particularly the extent to which licensing is used to diversify the manufacturing capabilities in the machinery and engineering sector. As regards royalties and duration, approvals after 1968 have conformed almost always to the announced norms. A study (10) for the period prior to 1967 showed, among other things, that (i) more than 58%

of the approvals related to firms which had more than one collaboration agreement; (ii) in 85% of the cases there was no accompanying foreign investment; (iii) in 23% of the cases the duration was unspecified and in 40% for over 5 years; (iv) in 36% of the cases no royalty was specified and only in 4% of the cases was it over 5%; (v) in more than 50% of the cases royalties were combined with lumpsum payments; and (vi) U.K., U.S.A. and Federal Republic of Germany were the leading suppliers of technology accounting for 31%, 20% and 12% respectively of the approvals. These features continue to hold good for the recent years except for the duration and royalty, which have now been streamlined.

29. In Republic of Korea, no data are maintained for agreements of less than one year. Table 2 in the Annexure shows the number of agreements over one year concluded in different industry categories, the number cancelled or expired, and the total payments made up to June, 1973. It is noteworthy that three categories, namely, chemical products, electronic and electrical equipment, and machinery, account for nearly 66% of the total contracts and nearly 75% of the contracts in the manufacturing sector. In regard to the year-wise approvals, it is seen that nearly 264 out of the 337 contracts were approved between 1968 and 1972. The foreign investment approvals in these years have however been growing at a faster pace, being over 400 for the same period. Only 42 out of the 337 collaboration approvals relate to joint ventures. The others are simple licensing cases. This shows the importance of technology licensing in the country in its own right, but functioning side by side with influx of foreign investment as well. (11) 69.7% of the cases approved up to 1972 pertained to import of technology from Japan and 22.3% from the United States. (12)

30. In Philippines a study of the agreements up to 1970 (13) showed that out of 527 companies inquired, over 80% had no technical collaboration agreements. A major portion of foreign subsidiaries did not have separate technical collaboration agreements. The study went into 254 agreements and found that 129 pertained to foreign subsidiaries or branches, 53 to minority foreign capital participation companies and only 72 were purely technical collaborations. The pure technology licensing cases were thus relatively limited. Among the countries with whom collaborations were concluded, 170 collaborations were with the United States and 20 with Japan. 58 agreements related to pharmaceuticals and 50 to foods and beverages, accounting between them more than 40% of the agreements concluded. Cosmetics and cigarettes between them accounted for 33 agreements, i.e. for another 13%. Agreements relating to machinery and engineering industry were only 45 i.e. about 18%. Out of the 254 agreements, 87 related solely to trade marks. Making the agreements as a whole, 196 out of the 254 provided for trade marks and trade names, 113 for patents and 162 for know-how. 174 were for an indefinite period, 21 were for one to four years and 55 for 5 to 10 years and 4 for over 10 years. 55% of the indefinite period agreements were with foreign subsidiaries and branches. The indefinite duration has a danger that royalty payments will be continuing endlessly. As regards royalty payments, the study revealed a somewhat peculiar pattern. Out of the 254 agreements, details were not available for 90 and of the rest, 49 had only nominal or no royalty. 26 had royalties up to 5% and 66 between 5 to 10%. The study concluded that the cases of nominal or no royalty would be cases where there might be some hidden pricing.

31. During the period October, 1971 to September, 1973 the Central Bank of Philippines approved 74 agreements

of which 35 related to trade marks, trade names, etc. and 39 to services and know-how. 34% of the cases involved import of technology from the United States and 12% from Japan. The products covered are given in Table 3 in the Annexure, comparing the position prior to 1970 to the extent possible. The proportion of engineering cases has somewhat increased but even so a number of relatively non-essential items would appear to continue.

32. No data are available in regard to the number of licensing agreements approved in Indonesia. It may, however, be stated that the majority of cases relating to foreign investment in Indonesia would appear to have provisions for royalty payments as well. Besides, the extent of purely domestic investments going in for collaboration is relatively limited due to the comparatively small size of the local units. Table 4 in the Annexure furnishes the industry-wise details of foreign investment approved, as a broad approximation to the fields of industry in which licensing agreements may exist.

33. Table 5 in the Annexure provides for the year 1972 the payments made by Thailand under various industry groupings for royalty, technical assistance fees and trade marks. These figures were obtained from the Bank of Thailand. Out of the 155 cases for which payments were made, at least 60% would appear to pertain to joint ventures and 100% subsidiaries and branches of foreign companies. Substantial variations in royalties would appear to be prevalent.

B. Common elements of licensing agreements

(1) Royalties and down payments

34. In India the guidelines do not provide any norms in regard to lumpsum payments. The general approach is that it is not practicable to do so; royalty payments are

preferred but suitable lumpsum payments may be considered in deserving cases for the import of drawings, documentation, etc. In deciding their reasonableness, regard will be had to the value of production, so that by themselves or together with royalty, if any, they form an acceptable proportion of the value of production. Lumpsum payments are ^{almost} invariably expressed in Indian rupees.

35. In practice, lumpsum payments do figure in most collaboration agreements in India. Upto 1967, there were 1164 agreements without lumpsum payments as against 1608 agreements with such payments. In 887 of the 1608 agreements there were no royalties. In the rest royalty at various rates up to 5% was payable in addition to the lumpsum.

36. In India as well as the other countries, royalty is generally calculated on the basis of ex-factory selling price of the product and occasionally in terms of physical units of production. In India the landed cost of imported components is invariably deducted. The object of doing this is to see that the supplier of technology does not get the benefit of royalty in respect of those items which he has not helped to manufacture indigenously. There is no policy in the other countries under study to specifically deduct the landed cost of imported components, though in individual agreements, depending on the company practice and the skill of the negotiator, such deductions are provided for. Clauses for minimum guaranteed royalty are not generally allowed in India.

37. In the Republic of Korea there are no specific or explicit guidelines on the admissibility of lumpsum payments in addition to royalty. An analysis of the 327 agreements up to 1972, however, shows that in 47 lumpsum payments were alone involved and in 78, lumpsum and royalty together.

The rest, that is to say the majority, did not have lumpsum payments at all.

38. In Philippines, royalty is generally preferred to lumpsum payments in the Board of Investments. The Central Bank on its part does not generally permit lumpsum payments. Where such payments are permitted they are to be set off against future royalties.

39. In Indonesia as well there is a preference for royalties as against lumpsums but in the context of the general freedom of foreign exchange remittances, it is difficult to say whether this preference works in actual practice.

40. In Thailand, among the cases in which remittances were made in 1972, lumpsum payments were relatively much fewer in number than royalties.

(ii) Exclusivity

41. In all the countries under study, except/India, there are no guidelines on the subject and it is generally felt that this is a matter of negotiation between the two parties. A survey of agreements upto 1964 showed that in about 75% of the cases/exclusive rights were obtained. (14)

(iii) Guarantees

42. None of the countries under study has any specific or explicit guidelines in regard to the nature of guarantee clauses in collaboration agreements. This is left to be secured by the importer of technology in the light of his own requirements.

(iv) Exports

43. Restrictive clauses relating to exports in licensing agreements are becoming a matter of international concern. The guidelines in India provide that export

restrictions will not be allowed save for valid reasons. Valid reasons could exist if the licensor himself or another of his licensees happens to have an exclusive right to the markets of certain other countries. In the other countries under study, there are no specific policy announcements regarding the undesirability of export restrictions.

44. Detailed information in this regard is available in regard to India and Philippines. This is summarised in Table 6 in the Annexure which presents information relating to restrictive clauses on exports and otherwise. It will be noticed that while export restrictions as such formed a greater percentage of agreements in India, an absolute ban on exports was found in a much larger percentage of cases in Philippines. Similarly tied purchases were also much larger in the case of Philippines.

(v) Continuous assistance and grant back rights

45. There are no specific guidelines in any of the countries as to the manner in which the agreements should be worded in this respect. This is largely left to the care of the individual negotiator. It would be correct to say, however, that in the absence of a special watch on the part of the negotiators, this aspect will be lost sight of. The study of restrictive practices by UNCTAD revealed that contractual restrictions included restrictions on the disclosure of acquired technical knowledge to third parties and unilateral grant back of technical improvements. (15)

(vi) Hold Confidential Provisions

46. This would cover ensuring secrecy during the pendency of the agreement and, sometimes, after its termination. Generally the secrecy clauses during the

pendency of the agreement are insisted upon by the sellers of technology and this is allowed. Buyers on their part may also require exclusivity. In India, the secrecy clause would have to be read with the insistence on the provision for sub-licensing of technology but such sub-licensing can take place only on terms mutually agreed upon by all the parties concerned. The hold-confidential provisions become more important after the termination of the agreement. A survey in India of agreements prior to 1964 revealed many instances of licensing agreements that required licensees, after the termination of the contract, to return the technical information acquired and to discontinue the use of the transmitted, patented and / or unpatented know-how as well as the trade marks involved. Even in recent years there have been occasional cases of new technology where the secrecy clause has had to be allowed for a period longer than the duration of the agreement. It would not be incorrect to believe that such post termination restrictions find wide prevalence in other countries also.

III. EXPERIENCE IN INDIVIDUAL INDUSTRY SECTORS

47. Industry-wise policies as to whether import of technology will be permitted and if so, the acceptable terms therefor, have been published only in India. No such explicit guidelines are available in the other countries, though in Philippines import of technology in overcrowded industries is not encouraged by the Central Bank. As regards experience in individual industry sectors, a short paper like this can make only general observations based on available data and general impressions.

Drugs and Pharmaceutical Industries

48. Taking the countries under study as a whole, the following are some of the common features:-

- (i) a dual structure of a large number of indigenous firms, mainly small, co-existing with a number of well-known multi-national firms or subsidiaries covering a significant proportion of the market; and
- (ii) the predominance of formulation activity as distinct from basic drug manufacture.

49. In India, of 148 collaborations approved in the industry up to 1967, 122 had no foreign investment in them and only 6 were foreign majority companies. Of the 148 agreements the duration was not specified in 45 cases and 25 were for short-term services. Of the rest over 50% were for a duration of 10 years or more. In 55 cases no royalty was charged. Of the rest over 50% of the cases had royalty of 4% or more. (16) The guidelines issued in 1968 allow royalty upto 5% for selected drugs and pharmaceuticals.

50. In the Republic of Korea 23 cases of technology imports have been approved. In addition, 8 cases of foreign investment have also been approved. Of these 2 cases involved foreign investment as well as technology licensing agreements. 16 of the 23 licensing cases were for a duration of less than 5 years and 7 for a duration of 5 to 10 years. In a majority of cases the royalty was 3% or less.

51. In Philippines foreign owned companies were found to have approximately 70% of the market. (17) The royalties were on an average 7.5% for compounding know-how; the more complex technology of producing the raw materials was hardly passed on to the licensees. The duration normally ranged from 5 to 10 years.

52. In Indonesia, an informed assessment is that in the case of joint ventures the royalty charged is 5 to 7½% and in the case of licensing obtained by indigenous

firms, 7½% to 10%. The duration is generally 10 years.

53. In Thailand, no data about the number of technical collaboration cases are available. About 70% of the production is controlled by joint venture companies. For the year 1972, remittances were made in 12 cases by drugs and pharmaceutical firms, of which roughly 50% carried a royalty of 5% and above.

54. It should be borne in mind that comparison of the royalty ranges mentioned above for the different countries will not be complete without knowledge of the levels of equity and raw material pricing.

Electrical Engineering Industries

55. In India^a/fairly large base has been created in electrical engineering industries like transformers, switch gears, electrical motors, cables, etc.; after 1969 import of technology has not been permitted for lower ratings of transformers, motors and cables. In the field of electricals as a whole including light electrical products, over 500 collaborations have been approved in India in the past. In the electricals field as a whole, barring those for short-term services and those for which duration has not been specified, the majority of agreements have^{in the past} been for a period of 10 years. In the majority of agreements the royalties have ranged between 2 and 4%.

56. In the Republic of Korea, 39 agreements for electrical products were approved upto the end of 1972, constituting about 12% of the agreements. Those included industries such as cables, air-conditioners and refrigerators, electric hand tools, etc. In Philippines, electrical engineering industry has not developed to the same extent. About 20 agreements were entered into prior to 1970 in this field.

57. In Indonesia, no information is available about the extent of the agreements in the electrical engineering industries. As of June, 1973, 20 foreign investment cases in the electrical industry including in refrigerators and air-conditioners have been noticed. In Thailand details about licensing agreements in this field are not available.

Common Industrial Sectors

58. In common industrial sectors such as textiles, sugar and cement, technology is well established and the scope for licensing agreements much less. (Foreign investments in some cases are however noticed in Republic of Korea, Indonesia and Thailand) In regard to paper, however, considering the technology and the scale of investment involved, the need is greater.

59. The cotton textile industry as such has been in existence in the countries under study for a relatively long time. Even so licensing agreements become necessary in regard to trade marks, synthetic fibres, finishing and garment making. In India, the number of agreements has sharply reduced in recent years (vide Table 1). In the Republic of Korea and Philippines also the number of agreements for textiles is only about half a dozen and largely related to garment making and synthetic fibres. In Thailand there were remittances for 29 agreements relating to textiles in 1972, as against nearly 25 spinning mills and 100 weaving mills in operation. In Indonesia even recent licensing agreements appear to provide for royalty payments (upto 3½%) for integrated spinning and weaving mills.

IV. SOME CONCLUSIONS AND RECOMMENDATIONS

60. We may now sum up briefly the comparative picture of the national arrangements for the acquisition of technology. India and Republic of Korea have clear-cut and explicitly stated institutional arrangements, Philippines and Indonesia rather tentative and evolving ones and Thailand none at all. Both India and Republic of Korea

have also a clear policy for acquisition of technology, supported by measures for adaptation of imported technology and the growth of indigenous technology. India has explicitly published guidelines and lists of technological gaps which Republic of Korea, not to speak of other countries, lacks. The Indian approach is selective, denying imports where local capability exists, and welcoming imports where it does'nt; it is also combined with a selectivity in regard to foreign investment which is not shared by other countries under study. Republic of Korea's approach, in the context of its own requirements, is promotional and does not at present have a selective component; there is also lesser stress on the scrutiny of agreements. The Indian approach however contains the danger that in fields where import of technology is not permitted the country may lose its contacts with the mainstream of technological advance. Both countries are however marked by a strong desire to create a sound technology base for industry. (18)

61. The other countries need a clear policy for acquisition of technology and explicit internal and external guidelines. The Philippines arrangement has elements of duplication and an orientation more effectively of the Central Bank than of industry. Since Philippines follows a more selective approach to foreign investment than similar countries in the region, greater attention may be necessary to technology licensing as an instrument of industrialisation. The Indonesian arrangement is again somewhat undefined, evolving and not generally well-known; its orientation is that of taxation and not that of industry, indigenous technological development or the need to remove restrictive clauses. It seems to have no application to domestic investment cases, is not backed by effective control at the time of remittances and its purpose of ensuring that taxable income does not escape in the guise of the lower-taxed royalties, counter-productive in the

context of liberal tax-holidays for income and none at all for royalty.

62. The case of Thailand which has practically no arrangements or policies in this regard raises the question whether such arrangements are necessary at all. The 'practical logic' may be that it is more important to get industries established than worry about the extra cost to the economy that the absence of such arrangements may entail. But, as the instance of Republic of Korea shows, a screening arrangement for acquisition of technology is not necessarily inconsistent with a promotional approach to industrialisation. Once a screening arrangement is there, it can be operated with different degrees of liberality or severity as national requirements may dictate. Apart from withholding the avoidable flow of foreign exchange, however limited it may be, it will give a fillip to improving technological capabilities and reducing costs, particularly necessary for competitive export economies, stimulate adaptation and utilisation of local raw materials and machinery, eschew the national and private costs of restrictive clauses, and help the entrepreneur in getting the best value for his money. Even the selection and use of imported technology requires a measure of discrimination and technical competence which comes but slowly in the total absence of regulation. (19)

63. It would be appropriate to end this report with a few broad conclusions and recommendations. These have not been discussed with the Governments concerned and are made in a purely personal capacity.

64. Greater study of the subject is needed than what is available now. The field is characterised by paucity of data particularly in Indonesia, Thailand and Philippines.

65. Suitable institutional arrangements would appear desirable in Indonesia, Philippines and Thailand. This has to be combined with an industry-orientation. Suitable explicit guidelines would need to be published for the information of entrepreneurs both as to the industries in which foreign collaboration will be welcomed and conditions under which it will be so welcome.
66. It is also necessary to evolve internal guidelines and criteria. Such guidelines and criteria are available in India. A greater measure of scrutiny of restrictive clauses would appear to be necessary in Indonesia, Thailand and Republic of Korea. The officials involved in the scrutiny could be assisted by suitable training programmes. The "Guidelines for the Acquisition of Technology" and "Industrial Joint Venture Agreements" (20) are not generally well-known among the officials dealing with the subject and would need to be made available to them.
67. Entrepreneurial guidance would be necessary both in regard to the sources of technology as well as the contents of contracts. It would be useful to incorporate in the UNIDO-ILO programmes relating to industrial management institutes and the like, a component on the negotiation of joint venture and licensing agreements. "Joint venture forums" could be organised, as once done in Indonesia, for discussions among entrepreneurs on matters relating to negotiation of agreements. Joint venture discussion meetings as in Kuala Lumpur could be organised, with a separate session for technology licensing. It is also possible to think of adding this component of joint venture discussion meetings as a sequel to investment promotion meetings, so that the persons who come to negotiate projects could also stay on and acquire a greater insight into the substance of contracts.

68. In as much as technology is often transferred through import of capital goods, it may be useful to initiate studies on the practices adopted in such contracts so as to ensure that appropriate know-how benefits are obtained by the recipient country.
69. It will be useful to review the policy in regard to trade marks and names. In India, brand names are not permitted to be used for internal production in new foreign collaboration agreements and allowed for export purposes only. In certain other countries, the use of trade marks appears to be extensive and the implications thereof would need to be studied.
70. It may be useful to consider in countries which have not had any mechanism of scrutiny so far, whether the country will go on paying royalties for the indefinite contracts concluded in the past. This would apply to Thailand, Philippines and Indonesia. Otherwise royalty payments may have to be made indefinitely and the restrictive clauses will likewise remain indefinite. An opportunity for review of such contracts either on the basis of mutual negotiation or through considered legislation will be useful.
71. The mechanisms for actual adaptation of imported technology are the weakest links in almost all the countries. Well-considered policy measures would need to be adopted.
72. The subject needs to be studied as part of the perspective of industrialisation and alongside foreign investment, patents and trade marks and transfer of technology.

REFERENCES

1. For limitations of space, the text has to be rather condensed. The matter has been dealt with more elaborately, and including the role of research and consultancy organisations, in a report submitted by the author on the same subject to UNIDO after travel to Thailand, Republic of Korea, Philippines and Indonesia.
2. A fact-finding report should not be constricted by definitional problems. We will simply follow the definitions in pp. 1-2 of Guidelines for the Acquisition of Foreign Technology in Developing Countries, with special reference to technology licence agreements, United Nations, New York, 1973. "Technology or knowhow" denotes the sum of knowledge, experience and skills necessary for manufacturing a product or products and for establishing an enterprise for this purpose. The term "technology licence agreement" relates to the communication of technology or knowhow on agreed commercial terms.
3. For such a pattern in different regions, see Table 5 in p.28 of Restrictive Business Practices. Interim report by the UNCTAD Secretariat, United Nations, New York, 1971.
4. See pp.44-51, Guidelines for Industries, 1973-74. Ministry of Industrial Development, New Delhi, 1973.
5. p.40, ibid. For a more detailed account of the policy and procedure for import of technology, see Chapter III of this publication.
6. "Positive" and "restrictive" fields for foreign investment have however been recently published. See p.47 et seq. in Investment Opportunities in Korea, Economic Planning Board, Seoul, Dec., 1972.

7. p.78, A guide to Foreign Capital Inducement in Korea. Korea Exchange Bank, Seoul, 1971. A more recent announcement also says that only up-to-date technology and new technology will be approved for inducement. p.7, Korean Business Review No.36, Federation of Korean Industries, Seoul, Sep.1973. The former publication may be referred to for a more detailed account of the procedure for import of technology.
8. For a specimen letter of approval of foreign collaboration, see pp. 52-53, Guidelines for Industries, 1973-74, ibid. This is being revised.
9. For example, Foreign Collaboration in Indian Industry, Survey Report, Reserve Bank of India, Bombay, 1968, and Foreign Technology and Investment, National Council of Applied Economic Research, New Delhi, 1971.
10. Foreign Technology and Investment, Op. cit. at (9)
11. Taiwan seems to have had a similar experience. Under the Statute for Technical Co-operation, 622 cases of import of technology were approved between 1962 and 1972. See Vol.12 No.3 (March,1973) Taiwan Industrial Panorama, Industrial Development and Investment Centre, Taipeh.
12. Japan and the United States are the leading investors and suppliers of technology in most South East Asian Countries as well. A study has shown that 16% of primary and manufacturing projects overseas of Japanese investors were undertaken with the receipt of royalties and technical and management fees as one of the aims of the project. Japanese royalties ranged from 2% to 5% as against U.S. royalties of 5% to 10%. See p.15, Direct Investment of Japanese enterprises in South East Asia, a study of motivations, characteristics and attitudes, Thoman W.Allen, Study No.01, Economic Cooperation Centre for the Asian and Pacific Region, Bangkok, 1973. Study No.s 2 and 3 relate to United States and European enterprises.

13. Restrictions on exports in foreign collaboration agreements in the Republic of the Philippines, United Nations, New York, 1972.
14. Foreign collaboration in Indian Industry. SURVEY Report, op.cit. at (9)
15. Op. cit. at (1)
16. Op. cit. at (10)
17. Op. cit. at (13)
18. In a note (Sep. 1973) on "Main Korean Science and Technology Development Policies in 1970's", kindly made available to the author, the Ministry of Science and Technology suggests introduction of an automatic permission procedure and 'a substitute machinery for foreign technology import system' so that research institutes could absorb foreign technologies and distribute them to private industries. These suggestions have not been elaborated.
19. For similar arguments, see pp. 34-36, Guidelines for the Acquisition of Foreign Technology in Developing countries. Op.cit. See also Know-how for Sale, Industrial Research and Development News, Vol.VI, No.4, United Nations, 1973, pp 10-11. On the regulatory mechanisms in Andean countries, see ibid., Constantine V. Vaitzos, Technology Licensing.
20. Manual on the establishment of Industrial Joint - Venture Agreements in developing countries, United Nations, New York, 1971.

ANNEXURE

Table 1.

Industry-wise classification of foreign
collaboration approvals in India

	<u>1946-67</u>	<u>1968-1973(June)</u>
Food, Drinks and Tobacco	24	14
Textiles	116	10
Pulp and Paper	52	14
Rubber Products	34	13
Chemicals	267	110
Pharmaceuticals	148	7
Metallurgical Industries and metal goods	339	49
Machinery and machine tools	804	295
Electricals	374	164
Transportation	168	83
Consultancy	18	16
Others	448	264
Grand Total	2792	939

Source: Upto 1967, Foreign Technology and Investment, National Council of Applied Economic Research, New Delhi, 1971. For the later period, Ministry of Industrial Development, New Delhi. Subject to minor variations in industry classification.

Table 2

Technology Licensing Agreements in
Republic of Korea up to June, 1973

Industry	(\$ '000s)			Pay- ments so far	Foreign Invest- ments *approved
	Agree- ments Appro- ved	Agree- ments Cance- lled	Agree- ments Expi- red		
<u>Primary Industry</u>	7	-	3	434	26
Agricultural Livestock	7	-	3	434	11
Fisheries	-	-	-	-	10
Mining	-	-	-	-	5
<u>Secondary Industry</u>	305	17	73	26757	390
Foods	6	-	3	423	12
Pulp and Paper	3	-	2	-	-
Textiles	9	1	2	326	45
Chemical Fibres	10	1	2	2225	-
Ceramics & Cement	5	-	3	866	20
Petroleum	9	1	-	4913	4
Chemical Products	65	2	15	2841	55
Drugs	23	-	4	544	8
Iron & Non-ferrous Metal Electronic and Electrical Equipment	69	3	16	2776	79
Machinery	87	7	20	2297	54
Glass	1	-	-	-	-
Others	3	-	1	47	89
<u>Tertiary Industry</u>	25	-	11	2453	25
Electricity	2	-	2	7274	2
Communication	20	-	6	1083	9
Construction	3	-	3	101	5
Others	-	-	-	-	9
TOTAL	337	17	87	19649	441**

Source: Economic Planning Board

* Upto June, 1972

** The figure stood at 615 as of March, 1973. In the first half of 1973, licensing agreements increased by 10 whereas even in the first quarter of 1973, foreign investment approvals increased by 77.

Table 3
Licensing Agreements in Philippines

Industry	Upto 1970	October '71 to September, '73
Plantation, mining and petroleum	1	5
Foods	31	3
Beverages	19	-
Textiles & Wearing Apparel	5	-
Electrical Supplies, appliances and accessories	20	-
Chemicals and Paints	24	11
Pharmaceuticals	58	2
Metals, metal products and construction equipment and materials	27	-
Petroleum Products	9	-
Cosmetics, toiletries, soaps and detergents	19	2
Motors, engines, machinery etc.	7	15*
Cigarettes and tobacco products	14	2
Office supplies and equipment	13	-
Cars, car parts and rubber products	7	-
Electronics	-	3
Shoes	-	1
Films and motion pictures	-	13
Phonorecords	-	5
Ceramics	-	1
Paper and Pulp	-	2
TOTAL:	254	67

Source: Figures upto 1970 from "Restrictions on exports in foreign collaboration agreements in the Republic of the Philippines," U.N., 1972. Later figures from the Central Bank, Philippines. Where the figures cannot be fitted into the earlier classification specifically, they have been indicated separately.

* Classified as "engineering"

Table 4
Foreign Investment Approvals in Indonesia

(Jan. 1967 to June, 1973,
million dollars)

<u>Activity</u>	<u>No.</u>	<u>Capitalisation</u>
1. <u>Manufacturing</u>		
a. Animal feedstuff	8	5.4
b. Chemicals	17	91.9
c. Containers	14	24.3
d. Electrical goods/household appliances	20	25.4
e. Food processing/beverages/ seasoning	29	58.7
f. Metal working	35	54.6
g. Pharmaceuticals/cosmetics	34	38.4
h. Remilling/crub rubber processing	7	4.0
i. Textiles	44	314.5
j. Tobacco processing	10	12.7
k. Miscellaneous	106	138.2
Total (mfg.)	324	768.2
2. Agriculture/Land development	44	65.3
3. Air transport	9	3.2
4. Fisheries	9	19.7
5. Forestry	77	489.4
6. Hotels/tourism/real estate/ housing	29	175.0
7. Mining (excluding oil)	15	460.1
8. Recreation/Amusement/Racing	9	16.0
9. Construction/General contracting	23	24.4
10. Miscellaneous	47	72.0
Aggregate total:	586	2093.3

Source: Board of Investment.

Table 5
Payments for licensing agreements
in 1972 in Thailand

(Dollars)

Agreements involving

Industry	Royal- ties	Technical Assistance Fees.	Trade Mark Pay- ments	Total Agree- ments.	Amount (approx.) (\$ '000)
Textiles	16	12	1	29	1375
Toiletries	18	2	-	20	1268
Drugs and Chemicals	13	-	-	13	295
Paints	5	1	1	7	129
Milk	4	1	-	5	557
Batteries and electrical products	7	4	-	11	387
Tyres	1	1	-	2	419
Automobile Assembly	5	1	-	6	358
Glass	1	2	-	3	265
Copying Machines	3	-	-	3	270
Others	44	10	2	56	1853
TOTAL:	117	34	4	155	71056

Source: Bank of Thailand

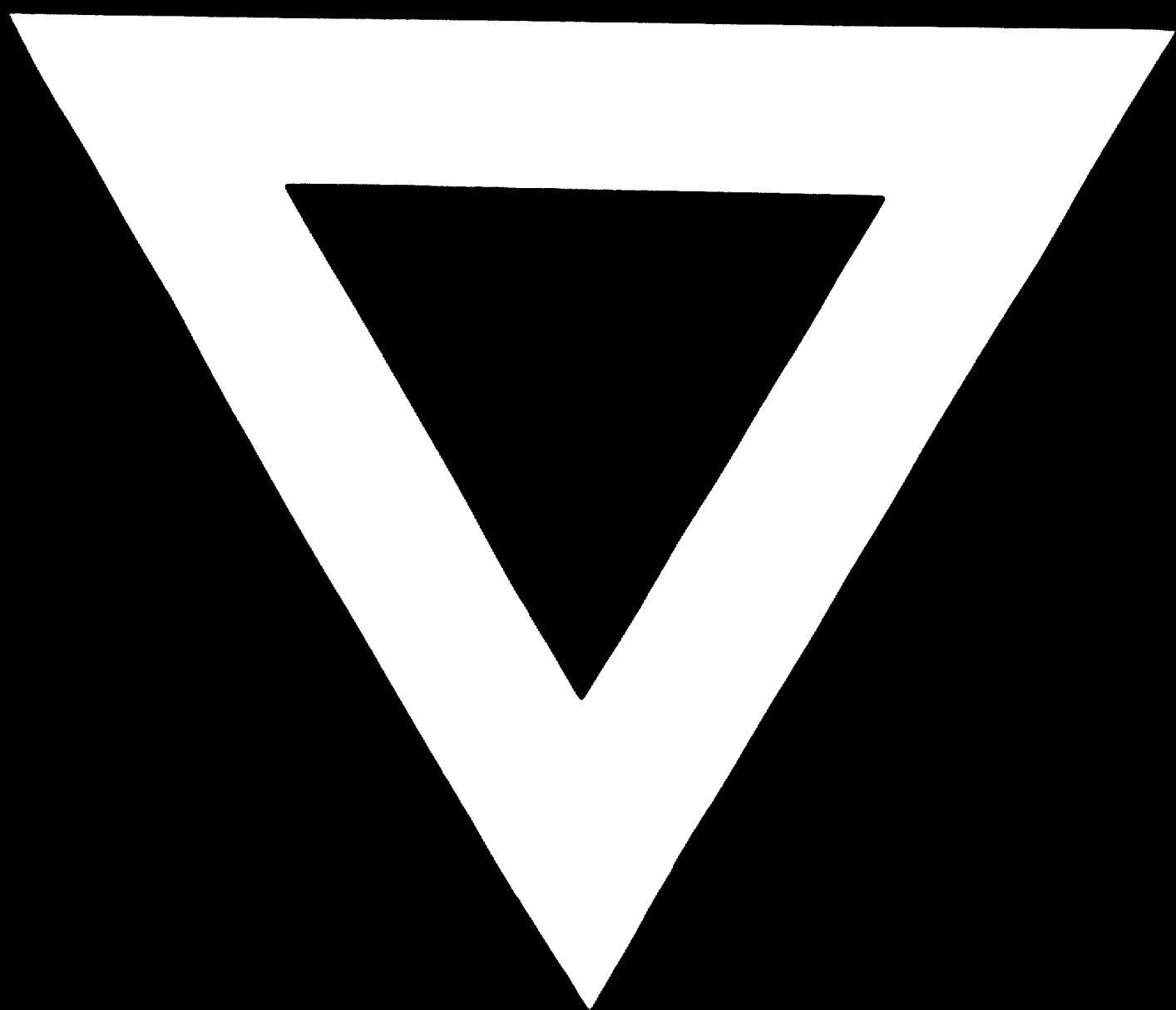
Table 6

6

Restrictive Clauses in Foreign Collaboration
Agreements - India and Philippines

	India upto March '69	Philippines upto 1970
<u>Export Restrictions</u>	616	82
Global ban on exports	39	49
Exports prohibited to specified countries	102	4
Exports permitted to specified countries only	257	1
Prior approval for exports	164	17
Exports permitted to or through specified firms only	36	6
Restrictions on use of trade marks in exports	10	5
Other export restrictions	8	-
<u>Other Restrictions</u>		
Tied Purchases	160	67
Restrictions on production patterns	65	5
Payments of minimum royalty	59	13
Improvements to licensor	-	14
Restriction on sales procedures	19	-
Non-local laws to settle disputes	-	21
Restriction on termination	-	3
Other restrictions	4	1
Total No. of restrictive agreements:	698	126
Total No. of agreements	1393	254

Source: Table 2 & 3 of "Restrictive Business Practices",
Interim Report by the UNCTAD Secretariat, United
Nations, New York, 1971.



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