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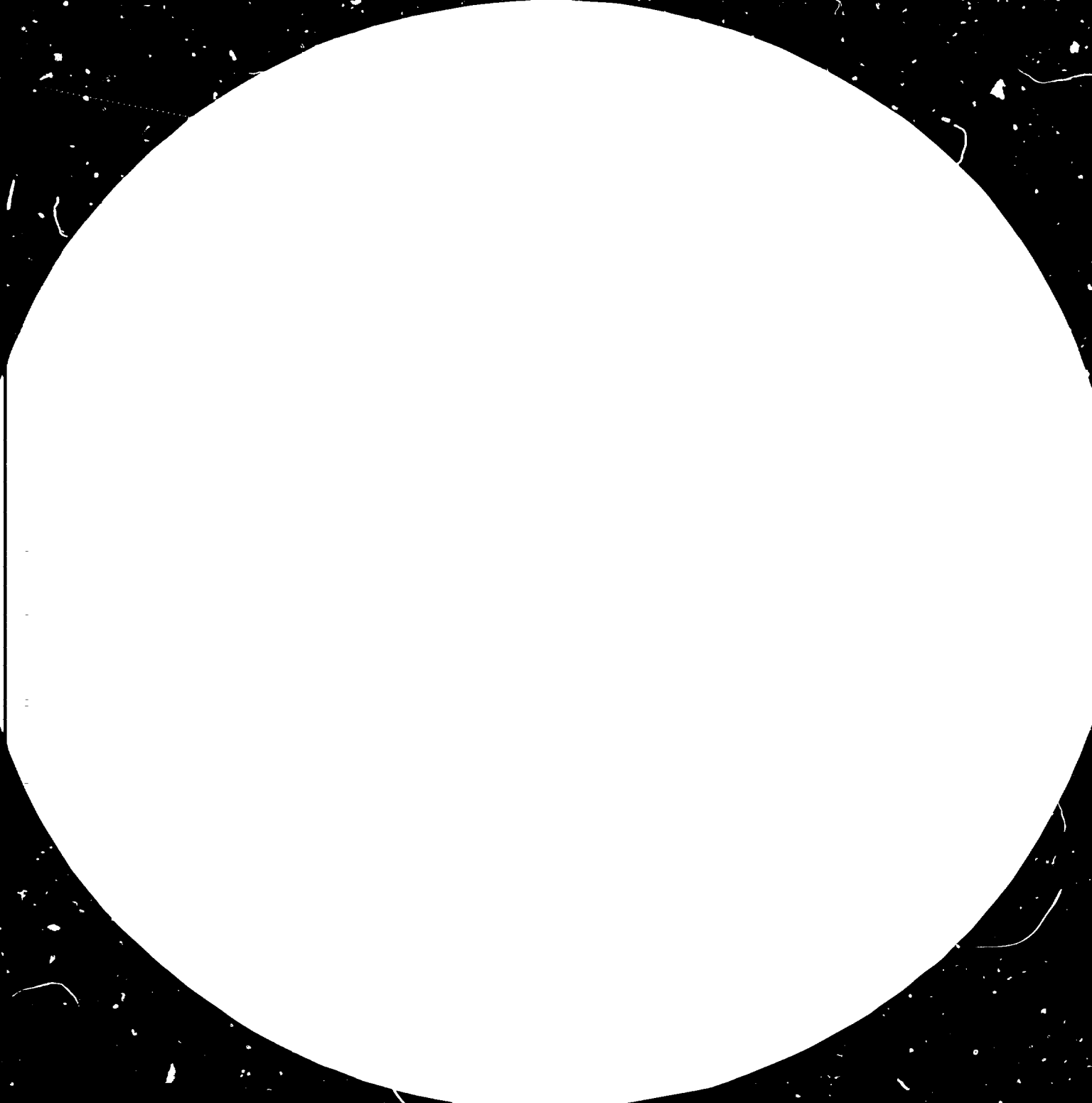

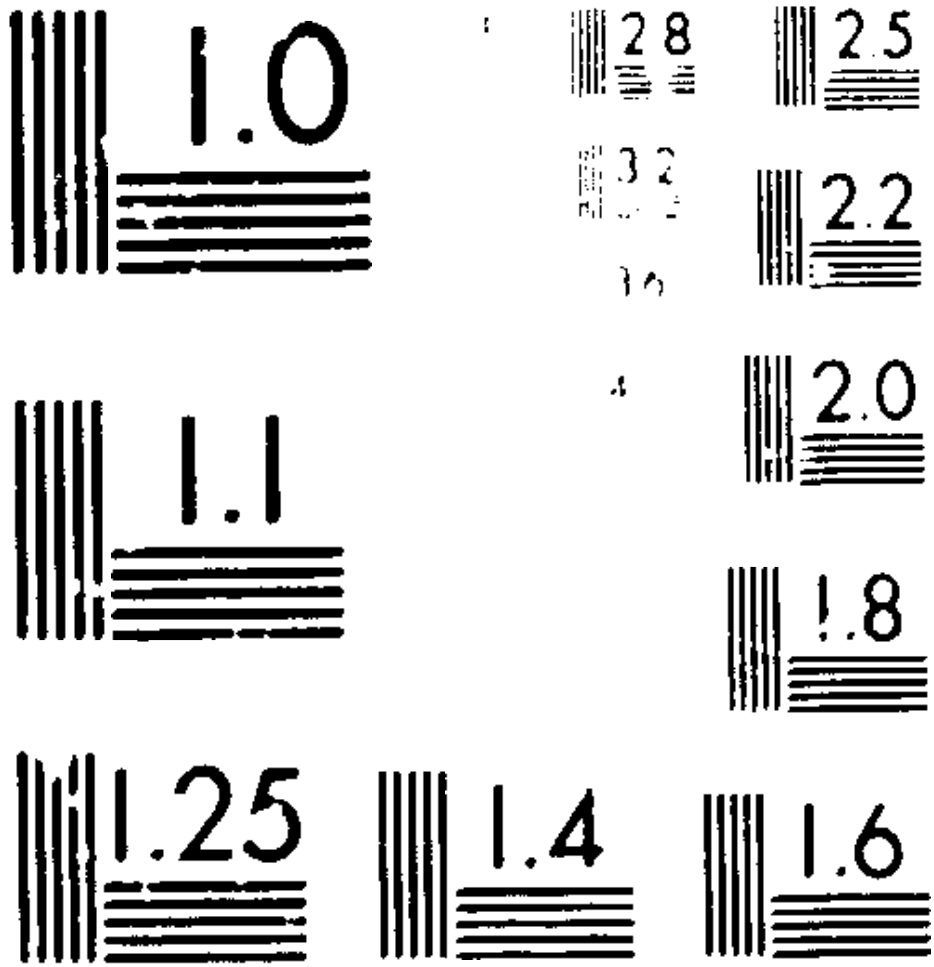

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UNITED NATIONS INDUSTRIAL
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THE DEVELOPMENT OF THE ASEAN INDUSTRIAL PROJECTS (AIPs)*/

Studies on regional co-operation in the
field of industry

Prepared by

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in co-operation with
Regional and Country Studies Branch
Division for Industrial Studies

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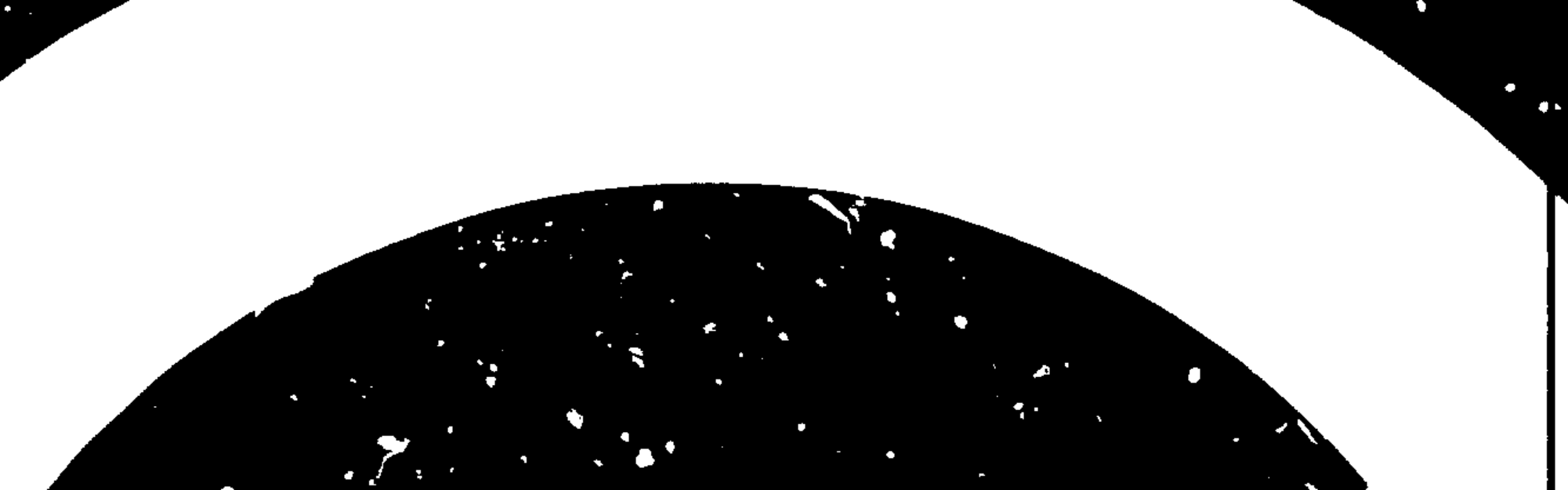

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PREFACE

The Regional and Country Studies Branch of the Division for Industrial Studies, UNIDO, within its studies and research programme, is giving particular attention to the potential of co-operation between developing countries in the context of sub-regional schemes; emphasis being placed on the pursuance of the most effective modes of co-operation in the field of industry.

Thus, as part of the programme for 1981, a series of issue-oriented studies or analyses were carried out on various aspects of industrial co-operation within the regional co-operation schemes of ASEAN and the Andean Group. The main objective of the studies was to provide guidance for future regional and sub-regional co-operation in industry between developing countries through analysis of the ASEAN and Andean Group experience in the various forms of industrial co-operation which have been pursued.

The ASEAN studies aimed to bring out and analyse critical issues in the industrial co-operation; the various forms of co-operation employed; the methods and modalities used in identifying, preparing and analysing various factors at the branch or products level as well as at the project level. The studies were not intended to present a chronological expose of the industrial co-operation in the region, the past experience was looked at merely as reference in the analysis of the key issues involved, how further progress may be achieved and of the various measures which may be taken to that effect.

The specific areas in respect of which issue-oriented analytical studies concerning ASEAN have been carried out are:

(i) ASEAN industrial co-operation - a long-term perspective;

(ii) ASEAN industrial product or branch co-operation through industrial complementation programmes and technical co-operation arrangements;

(iii) regional industrial projects - the present large-scale ASEAN Industrial Projects (AIPs) as well as prospective ASEAN joint-venture projects sponsored by the private sector;

(iv) ASEAN co-operation in industrial financing and promotion.

The present study concerning the development of the ASEAN Industrial Projects (AIPs) has been prepared for UNIDO by Professor Mohamed Ariff, Faculty of Economics and Administration, University of Malaya, Kuala Lumpur.

Regional and Country Studies Branch
Division for Industrial Studies
UNIDO

CHAPTER I

INTRODUCTION

The Association of South East Asian Nations (ASEAN) came into existence on 8 August 1967 with the signing of the Bangkok Declaration. Although ASEAN remained somewhat languid in the first decade of its existence, it is remarkable that ASEAN countries were able to stick together inspite of their heterogeneous characteristics relating to their political, social and economic structures, and differences in their cultural and colonial heritages. Though ASEAN has been in existence since 1967, the real beginnings in regional economic cooperation were initiated only nine years later at the Bali Summit in 1976.

The UN team of experts which was invited to study the scope of economic cooperation in the ASEAN region had recommended the following mechanisms viz. (a) trade liberalization through preferential trading arrangements (PTA) to encourage intra-ASEAN trade, (b) complementation programmes to rationalize existing industries by introducing complementarity in industrial production for the sake of greater economic efficiency, and (c) "package deal" agreements to launch large-scale industries which require a regional market to be economically viable. 1/ ASEAN has adopted the UN study as the basis for its major co-operation measures, i.e., trade liberalization through preferential tariff units on a steadily increasing number of products, industrial complementation among existing industries and initiation of large-scale industrial projects on a regional basis.

Although economic cooperation was stressed as one of the main

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1/ "Economic Co-operation among Member Countries of ASEAN" report of a UN Study Team with Mr. G.Kansu as Team Leader and Professor E.A.C.Robinson as Senior Adviser. The report is published in the Journal of Development Planning, Number 7, United Nations, New York, 1974.

objectives of ASEAN right from the very beginning, such a cooperation has been beset with practical problems. Intra-regional conflicts in the form of national versus regional interests appear to dampen the enthusiasm for regional economic cooperation within ASEAN. The reluctance on the part of some of the member countries to grant mutual tariff concessions and the unwillingness to provide free market access to the products of ASEAN industrial projects illustrate the extent of conflicts between economic regionalism and nationalism in Southeast Asia.

The present study is concerned with ASEAN industrial cooperation. To be more precise, it focuses on the ASEAN industrial projects under the so-called "package deal" technique recommended by the UN team.

Two basic approaches were initially adopted to promote ASEAN cooperation in the field of industrial development. The first approach seeks to establish large-scale government-sponsored ASEAN Industrial Projects (AIPs). The second approach attempts to promote greater complementarity among existing industries through private initiatives under the ASEAN Industrial Complementation (AIC) schemes. While ASEAN governments will assume the responsibility for setting up the AIPs, the promotion of AIC projects will be primarily the responsibility of the private sector. It is believed that the private sector is in a better position to initiate and promote AIC projects in view of their extensive and pervasive network of commercial linkages, while the Governments are better equipped to handle large-scale projects involving heavy capital investments.

At the same time it may be stated that the various industrial projects considered for ASEAN industrial cooperation, may be classified into three sub-groups: (i) ASEAN private sector projects (ii) ASEAN joint venture projects and (iii) ASEAN.

industrial projects.

The ASEAN private sector identified six AIC projects for consideration by the Committee on Industry, Minerals and Energy (COIME). They were magnesium clinker plant, security paper mill, mini tractor, motor vehicle headlight, carburetor and real axle projects. These projects were discussed at eight meetings of the Technical Committee, two meetings of Experts' Group, four meetings of the ASEAN Automotive Federation Council, three meetings of the COIME Experts' Group on the Automobile Industry and four COIME meetings. Finally the allocation of the following package on automotive complementation was approved by the ASEAN Economic Ministers at their Tenth Meeting:

Indonesia:	diesel engines (80-135 HP);
Malaysia:	spokes, nipples, drive chains for motorcycles and timing chains for motor vehicles;
Philippines:	Ford body panels for passenger cars;
Singapore:	universal joints ;
Thailand:	body panels for motor vehicles of one ton and above.

The ASEAN Economic Ministers also approved the allocation of the second package on automotive complemention, as given below:

Indonesia:	steering system;
Malaysia:	headlights for motor vehicles;
Philippines:	heavy-duty rear axles for commercial vehicles;

Singapore: fuel injection pumps;

Thailand: carburators.

It is also of interest to note that additional automotive components are being considered for ASEAN industrial cooperation under the AIC scheme.

The concept of ASEAN Joint Venture Projects (AJVPs) is designed to cover projects other than those covered under the Basic Guidelines on ASEAN Industrial Complementation approved by the ASEAN Economic Ministers in October 1980. ASEAN Chambers of Commerce and Industry (ASEAN-CCI) has drawn up the "Guidelines on ASEAN Joint Venture Projects" which was recently submitted to COIME for consideration. According to these "Guidelines", similar benefits and privileges as those provided for AIC projects would be extended to AJVPs. The Guidelines on AJVPs, if accepted by ASEAN Governments, will introduce a new dimension in ASEAN cooperation in the field of industrial development. It has been suggested that AJVPs may be started one at a time without having to encompass participation of all the five countries. This means that AJVPs need not be presented as a "complementation package". It is believed that this flexibility will accelerate the pace of ASEAN industrial cooperation.

Large-scale government-sponsored ASEAN Industrial Projects (AIPs) refer to those projects involving heavy capital investments, which are to be established in the ASEAN region, at the rate of one in each member country. The decision to launch the first five AIPs was reached in 1976 by the ASEAN Economic Ministers. The allocations of the initial AIPs were as follows:

Indonesia: urea

Malaysia: urea

Philippines: superphosphates

Singapore: diesel engines

Thailand: rock salt/soda ash

Of these, the Indonesian and Malaysian urea projects have taken off the ground and are expected to come into commercial production by 1984, the Thai rock salt/soda ash project is in the process of serious evaluation, while the remaining two projects allocated to Philippines and Singapore have been withdrawn. Philippines has presented another project instead. Meanwhile ASEAN Governments are seriously considering other possible AIPs some of which are presently undergoing detailed feasibility studies.

The focus of the present study is on AIPs. Two important observations are pertinent at this juncture. First, the progress made under the AIP programme has been only modest. Second, this modest progress took about five years of intensive negotiations and assessments and evaluations. It will be interesting and revealing to ask the question: Why? The present study attempts to provide at least a partial answer to it.

The concept of AIPs, the potential for AIPs in ASEAN given the present economic and industrial structures in the member countries, the ASEAN mechanism used for the initiation and promotion of AIPs and lessons of ASEAN experience are all covered in the subsequent chapters. The final chapter provides a summary of the discussion and the main conclusions of the present study.

CHAPTER II

THE CONCEPT OF ASEAN INDUSTRIAL PROJECTS (AIPs)

The ASEAN Concord, which was signed during the Bali Summit in February 1976, spelled out in no ambiguous terms the areas of ASEAN economic cooperation. The Declaration of ASEAN Concord provides, inter alia, that member countries "shall co-operate to establish large-scale ASEAN industrial plants particularly to meet regional requirements of essential commodities, and that the expansion of trade among member states shall be facilitated through co-operation in ASEAN industrial projects". It was clearly stated that priority shall be given to industrial projects which utilize the raw materials of member countries, create employment, contribute to the growth of food production and lead to increased foreign exchange earnings or savings.

At the post-summit meeting of ASEAN Economic Ministers, held in Kuala Lumpur in March 1976, the first package of ASEAN industrial projects was identified and allocated among member countries for undertaking feasibility studies. Thus, the urea projects were allocated to both Indonesia and Malaysia, the diesel engine project was assigned to to Singapore, the soda ash project was earmarked for Thailand and the super-phosphate project was allocated to the

Philippines. At the next meeting of ASEAN Economic Ministers, held in Manila in January 1977, the progress of work on these five ASEAN industrial projects was reviewed and an agreement was reached to set up an expert group to evaluate the feasibility studies of these projects.

Each of these five industrial projects was expected to require an investment of about US250-300 million. It was resolved that the host country would own 60 per cent of the total equity while the remaining 40 per cent would be allocated equally among the other four member countries. It was indicated that equity participation by private sector interests might account for as much as 40 per cent of the host country's 60 per cent, depending upon the attitude of the host country. It was also suggested that 70 per cent of the infrastructural costs of these projects would be financed by foreign aid while 60 per cent of the balance would be met by the host country and the other four member countries would be contributing 10 per cent each. It is also of relevance to mention the offer of the Government of Japan of a US$1 billion loan towards the financing of the ASEAN industrial projects. It now appears that Japanese finance for the infrastructure component of these projects would be on concessional terms under its Overseas Development Assistance (ODA), while Japanese financial assistance for equipment would partake of the character of commercial loans. It is of interest to note that Japan's financial commitment, be it commercial or concessional, would be subject to the viability of the projects being established by the feasibility studies. It is also of importance to note that the ASEAN leaders have indicated time and again that these regional industrial projects would be implemented only if they are found to be economically viable.

As mentioned earlier, there are already unmistakable signs that some of these projects are facing serious difficulties. It will indeed be revealing to study systematically the problems of the first package of five projects. Before such a study is attempted, it will be useful to consider the concept of ASEAN industrial cooperation in some depth.

The concept of ASEAN industrial cooperation has been brought out quite clearly in a number of comprehensive studies.[1/] Of these, Kansu-Robinson and Bos-Feraldis reports merit special mention, owing to the impact these studies have apparently had on ASEAN' approach and choice of projects in the field of industrial cooperation.

Three principal techniques of economic cooperations were outlined in these UN reports, viz., (a) selective trade liberalization through preferential trading arrangements (PTA) to stimulate intra-ASEAN

1/ "Economic Co-operation among Member Countries of ASEAN" report of a UN Study Team with Mr. G. Kansu as Team Leader and Professor E.A.C. Robinson as Senior Adviser. The report is published in the Journal of Development Planning, Number 7, United Nations, New York, 1974.

"Asian Industrial Survey for Regional Co-operation", report prepared under the auspices of ECAFE (now ESCAP) in co-operation with the Asian Development Bank, UNDP and UNIDO. Professor H.C. Bos was co-ordinator for the study project, Mr. A. Feraldis was leader of the permanent team. The report is published as Document AIDC (9)/1, United Nations, New York, 1973.

Further research on basis of the two above studies, on regional co-operation in the establishment of large-scale industrial projects has been done, inter alia, by:

Arie Kuyvenhoven and L.B.M. Mennes of the Centre for Development Planning, Erasmus University, Rotterdam, "Projects for regional co-operation: identification, selection and location" Industry and Development, No. 1, 1978, UNIDO (ID/SER.M.1); and

Martin J. Staab, IBRD, "The production location problem and the development of industries on a regional basis in the ASEAN countries", The Journal of Institute of Developing Economies, March 1980.

trade, (b) industrial complementation programmes to rationalize existing industries through complementarity agreements to promote greater economic efficiency, and (c) the so-called "package deal" agreements to launch new large-scale industries which require at least a regional market to be economically viable. Although all these techniques of cooperation complement each other in the field of trade and industry, the main focus of this paper, as spelled out clearly at the very outset, falls on the package-deal technique. The package deal takes the form of an agreement to allocate among the various member countries certain large-scale industrial projects and to create the conditions, including preferential trading arrangements, which would enable them to cater for the whole or a large part of the ASEAN market. The package-deal technique is designed to take advantage of the ASEAN market so that industries which could not be viably established in any one member country could be viably and efficiently set up on a regional basis.

The most striking feature of the package deal approach is the prominance attached to the role of the governments in the identification, selection, location and implementation of the industrial projects. Another interesting aspect of the package deal technique is that it partakes of the character of a partial customs union-cum-investment plan in the sense that it entails the elimination of "internal" trade barriers with protection against "external" competition. The UN studies presumably recognised that the appeal of a fortified regional market is particularly strong for ASEAN countries and apparently considered that the direct role of the governments in the establishment of ASEAN industrial project would be the best way of dealing with the infrastructure

disadvantages which exist in most ASEAN countries.

A critique of the package deal approach as developed in the UN studies will be attempted in the light of the ASEAN experience in Chapter V, but suffice it to note here that the package deal technique has proved to be politically attractive enough to be adopted by ASEAN for promoting industrial co-operation in the region. An examination of the economic rationale for the establishments of ASEAN industrial projects would shed some light on the concept which underpins the package deal approach to regional co-operation in the field of industry.

It is readily clear that any regional arrangement is inferior to free trade. But this comparison is irrelevant and misplaced. For, the practical alternative to regional co-operation is not free trade but autarky for most developing countries. The main rationale for industrial cooperation lies in the enormous advantage presented by the enlarged regional market. Accordingly, the choice of industrial projects for regional co-operation will be heavily influenced by the economies of scales considerations. The application of the principle of comparative advantage will then ensure efficiency in resource allocation within the region, although equity considerations may call for a different distribution of industrial projects among member countries. Whilst some sacrifice of efficiency for the sake of greator equity may be socially and politically desirable, the viability of the regional set-up, in the final analysis, hinges upon economic gains and losses.

It is not difficult to show that there is a lot of economic sense for ASEAN countries to cooperate regionally in the field of industry. The prospects for regional co-operation in a wide range of industries

have been analysed in an UN study.[2/] For purposes of illustration, industries were chosen on the basis of such considerations as the availability of raw materials within the ASEAN region, the existence of ready regional markets for the products and the extent of scale economies. The products considered include mechanical items, chemical goods, heavy industries and capital goods.

It would indeed be naive to think that a group of regional industries could be established in a manner that was optimal from the viewpoint of efficient resource allocation. Economic factors may be allowed to dictate the choice of industries for ASEAN industrial co-operation but not the geographical distribution of industries within the region. In these matters, the political considerations are bound to remain supreme. Some trade-off between efficiency and equity may be necessary to ensure that the projects are politically feasible. In spite of all these, the resulting package can make a substantially positive contribution to economic growth and development in the region.

The UN study has successfully shown that regional projects require less investment and less labour per unit of [illegible] than do the national projects. It has also been shown that industrial co-operation would yield larger positive trade balances than situations of national autarky or complete reliance on imports from the third countries.

The relative superiority of regional co-operation over non-co-operation may be assessed in terms of cost differences. It has been

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[2/] UN (ECAFE) Asian Industrial Survey for Regional Co-operation, New York, 1973.

shown that the cost of meeting a supply deficiency is significantly less in the case of industrial co-operation than in the case of non-cooperation. It is not surprising that the autarkic system represents the most uneconomical way of eliminating a supply deficiency. Besides, savings in costs have been estimated to be greater in the case of industrial co-operation than in the case of importing from third countries. This suggests unambiguously that regional co-operation in industrial projects is superior even to the alternative of importing from outside the region at least for some industries. Savings in costs have been estimated to be substantial for several industries. Examples of such products include newsprint for Indonesia and Malaysia, um phosphate for the Philippines, steel billets for Singapore and flat glass for Thailand. It is also interesting to observe that some regional projects are at least as competitive as, if not more competitive than, the rest of the world. This, however, should not conceal the fact that there are many industries in the ASEAN region which cannot be competitive at world market prices even when all national markets in the region are integrated.

Nevertheless, it is clear that industrial projects, on a regional basis, would yield substantial gains in the form of scale economies. For example, it has been estimated that it would cost Malaysia 15 per cent more than the world market price to produce newsprint for the national market and 5 per cent less than the world market price to produce it for the ASEAN market. Likewise, it would cost 18 per cent more for Malaysia to produce printing paper for the Malaysian market and 7 per cent less to produce it for the ASEAN market as compared with the world market prices. Similarly, electrical transformers would cost Malaysia 9 per cent

more than imports if they are produced for the domestic market and 25 per cent less than imports if Malaysia produced them for the ASEAN region as a whole. By the same token, it will cost Malaysia 4.5 per cent less to have ammonium phosphate imported from the Philippines than to have it produced locally for the Malaysian market. Likewise, it would cost 15.4 per cent less for Malaysia to import transmission cables from Thailand than to produce them domestically.[3/] In all such cases, intra-regional trade will bring about a shift from high-cost foreign or domestic sources to low-cost partner sources. To be sure, there are many industries which cannot be competitive at world market prices even on a regional basis, and regional co-operation in such cases would cause the sources of imports to be shifted from low-cost foreign sources to high-cost partner sources, with strong trade diversion effects. It is therefore important that such industries are carefully avoided by ASEAN.

Needless to say, the effects of regional co-operation in industrial projects, in the short term, would be less favourable or more adverse to the member countries than they have been pointed out above, since regional industrial projects must emerge from their infancy before cost advantages can be fully realized. This raises the question of protection. The survival of the project during its infancy will depend crucially upon the preferential treatment it receives in the member

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[3/] These calculations are based on the data given in the UN (ECAFE) study ibid. See: Mohamed Ariff, "Malaysia's Trade and Industrialization Strategy with Special Reference to ASEAN Industrial Co-operation", in Ross Garnaut (ed.), ASEAN in a Changing Pacific and World Economy, Australian National University Press, Canberra, 1980, pp. 292-293.

countries. Its products must have duty-free access to the markets of the member countries and in addition it must be given tariff protection from the external competition, the tariff rate being at least equal to the percentage cost differential. It is however important to specify the time period during which protection will be accorded to the projects and to gradually withdraw as the project begins to operate at its full capacity.

The location of the regional projects, as discussed earlier, will be influenced considerably by equity considerations so as to ensure an equitable distribution of the benefits among the member countries. This does not mean that such economic factors as the availability of local raw materials and other local inputs will be completely ignored. However, industries can be so selected as to avoid any sacrifice of efficiency for the sake of equity.

The large-scale regional industry by its very nature is highly capital-intensive and as such employment creation will be insignificant. It would take less investment to generate more employment in small-scale industries. As the regional project requires massive injection of capital, there is a need for a workable formula for equity participation by the member countries, by the public and private sectors, and by the foreign and the local investors. References have already been made earlier to the ASEAN formula for investment in ASEAN industrial projects. To be sure, there will be more to say about this in the subsequent chapters.

CHAPTER III

THE POTENTIAL FOR AIPs

To assess the potential in ASEAN for regional cooperation in the field of industry, one has to examine the key factors in the economies of the five member countries, such as the economic and industrial structure of the individual countries. A survey of the trade and industrialization strategies of the ASEAN countries which reflect the factor endowment patterns of individual countries will be useful.

(i) Trade and Industrialization Policies of ASEAN Countries

(a) Indonesia

The Indonesian economy is an open one in the sense that its economic growth has been largely export-led. Indonesia's exports, as mentioned earlier, consist of primary products. Extractives, i.e., petroleum, minerals and lumber, account for 80 per cent of the total exports. Petroleum of course tops the list, as it formed 67 per cent of Indonesia's exports in 1977.[1/] In spite of this openness in terms of primary exports, the Indonesian economy has been somewhat introspective in its trade policy.

[1/] Douglas S. Paauw, "The Indonesian economy in the 1980s", United Nations, ESCAP (unpublished), Table 5, p. 19.

Indonesia is well endowed with a diversity of natural resources and a large population. The existence of a vast domestic market has led Indonesia to adopt restrictive trade policies aimed at national self-sufficiency. Accordingly, Indonesia has pursued an autarkic trade policy insofar as consumer goods are concerned. Ironically, however, industrialization in Indonesia has led to severe balance of payments problems, since its manufacturing sector is heavily dependent on the imports of intermediate and capital goods.

Import substituting manufacturing production in Indonesia has been sustained by heavy tariff protection and non-tariff barriers. Although no tariff studies on Indonesia are readily available, the Indonesian tariff regime appears to be very restrictive as in the case of the Philippines. But, Indonesia's non-tariff barriers seem to be even more formidable.

Indonesia's tariffs escalate steeply, with tariff rates rising from earlier to later stages of fabrication in the production process. Thus, the Indonesian tariff rates are much higher for final consumer goods than those for intermediate or capital goods. But, the Indonesian tariffs are scarcely prohibitive. It is the non-tariff barriers which effectively put off the imports of consumer goods into Indonesia. Non-tariff barriers in Indonesia range from quantitative restrictions to cumbersome customs regulations.

Intuitively, effective rates of protection for Indonesia must be rather high, although no such estimates are presently available. Since imported inputs are admitted at low or zero tariff, the effective

rates would be much higher than the nominal rates. Besides, the real cost of imported inputs would be much higher than what the manufacturers actually pay, since the Indonesian currency had remained overvalued for a long time. Market distortions caused by the Indonesian trade policies are thus likely to be substantial so much so that value added at world prices might well be negative for many industries.

The restrictive trade policies have thus provided industries in Indonesia with a captive market, insulated from foreign competition. As a result, industries in Indonesia have remained inefficient and uncompetitive. The trade policies of Indonesia have thus encouraged manufacturing production for the domestic market with an unmistakable bias against exporting. The oil bonanza of the 1970s has rendered Indonesia's balance of payments so favourable that there has been no pressure to reorientate its industries to be outward-looking. Such a pressure would come eventually from within, for the import substitution phase seems to have reached saturation points for many final consumer goods. Moreover, import substitution based on imported inputs and borrowed technology has failed to create domestic linkages, as a result of which labour-intensive activities have not developed as much as they should have. Indonesia may therefore be compelled by domestic forces in the long run to adopt trade policies which would be consistent with its factor endowment pattern. The 33.6 per cent devaluation of the Indonesian rupiah in November 1978 is indicative of such a policy re-orientation.

(b) Malaysia

Malaysia is a very open economy, with exports accounting for about 46 per cent of GNP and imports for about 39 per cent of domestic aggregate expenditure. The Malaysian economy is characterised by its specialisation in primary production, export orientation and vulnerability to external fluctuations. But, changes during the last decade, including those associated with the rapidly growing industrial sector, have changed its profile somewhat.

The primary industries continue to dominate exports and to be very important in total production, although contribution to total GDP has tended to decline gradually. They now account for roughly one-third of GDP. They also contribute about 50 per cent of total employment. The primary sector is dominated by a few export products such as rubber, tin, palm oil, timber and more recently petroleum. Most primary output is exported in raw or semi-processed forms mainly to industrialised countries. The manufacturing sector is becoming increasingly prominent. Its share of GDP has risen from 12 per cent in 1970 to 21 per cent in 1980 and it presently accounts for about 16 per cent of total employment.

Import substitution was the basis of industrialisation in the initial stages. The prospect of quick results was apparently a compelling reason for the adoption of import substitution as the initial industrialisation strategy. At first, attention was focused primarily upon consumer goods, mainly because the existing domestic market was by and large oriented toward consumer goods and presumably also because domestic production has less disadvantage for consumer goods. Subsequently,

industrialisation based on import substitution could be extended to cover intermediate and investment goods and also to production for export.

There are several compelling reason why import substitution must give way eventually to an outward-looking strategy. Although import substitution did serve to initiate industrial growth, this growth could not be sustained for long because of the size of the market. Besides, industrialisation is costly when it depends heavily upon a domestic market that is small and not expanding rapidly. With depleting tin reserves and uncertain long-term price prospects for natural rubber, the need to assign a more important role for exports of manufactures was recognised clearly.

Serious efforts to gear the manufacturing industries towards exports were consciously undertaken only after 1968 with the launching of the Investment Incentives Act 1968. Light manufactures such as textiles and wearing apparel and products based on domestic raw materials such as timber and rubber have made some inroads into export markets. The export performance of the manufacturing sector has been fairly impressive. The share of manufactures in gross merchandise exports has increased from less than 5 per cent in 1960 to 27 per cent in 1979. Food, rubber products, industrial and electrical machinery and wood products together formed 87 per cent of total manufactured exports of Peninsular Malaysia during 1970s.

This state of affair began to change with the classification of the tariff schedule in 1959 which also terminated the Commonwealth

Preference for several items.[2] The Tariff Advisory Committee was established in the same year. The Committee's recommendations dealt only with "pioneer" industries and by the end of 1962, about 25 tariffs were in existence for pioneer industry products. The Tariff Advisory Board replaced the Committee in 1962. The Board[3] was instrumental in imposing modest protective duties on more than 200 imported items by 1963 when tariffs averaged 15 per cent and rarely exceeded 25 per cent, while many products had no tariffs at all. Although tariffs were raised in many cases and extended to several items especially after 1965, the Malaysian tariffs on the whole appears to be rather mild in comparison with most developing countries. Import quotas have been imposed in addition to tariffs, but such quantitative restrictions are applied neither stringently nor widely. Import quotas have been confined to few items, mainly as an anti-dumping measure.

There is no doubt that industrialization in Malaysia was facilitated to a considerable extent by the protective system, although the protective measures were rather mild in nominal terms by modern standards. Two independent studies of effective protection in peninsular Malaysia based on the Survey of Manufacturing Industries for the years 1965 and 1970 are available.[4] A more recent study[5] gives the structure of protection

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[2] The Commonwealth Preference disappeared altogether in 1967.

[3] Tariff Advisory Board has now become defunct, its role being taken over by the Tariff Unit in the Malaysian Industrial Development Authority (MIDA).

[4] J.H. Power, "The Structure of Protection in West Malaysia", in B. Balassa (ed.), The Structure of Protection in Developing Countries, John Hopkins, Baltimore, 1971; and Mohamed Ariff, "Protection for Manufactures in Peninsular Malaysia", Hitosubashi Journal of Economics, Vol. 15, No. 2, Feburary, 1975.

[5] Malaysia, Economic Planning Unit (EPU), an unpublished study.

in Peninsular Malaysia in 1973 for 54 industries, defined at 3-digit level of industrial classification, based on 1970 input-output table.

It can be seen in these studies that although the nominal protective rates have been rather low, the average effective rates have been significantly high. It is clear that Malaysia's protection system has undergone substantial changes in both nominal and effective terms. The average nominal rate for manufacturing increased from 13 per cent in 1965 to 18 per cent in 1970; the average effective rate for manufacturing increased from 4 per cent in 1965 to 44 per cent in 1970, and subsequently to 55 per cent in 1973. Wide variations in both the nominal and effective rates between major industries can also be easily observed. Rubber products, textiles, transport equipment, beverages, non-metallic mineral products, electrical machinery and chemical products provide outstanding examples of industries enjoying relatively high levels of effective protection.

There are thus ample evidence of distortions in the price system and bias in resource allocation within the manufacturing sector. It is in this sense that protective system encouraged certain industries by rendering them relatively attractive. It may therefore be concluded that protection played a significant role in stimulating manufacturing production in Peninsular Malaysia.

There are evidence of escalation of tariffs with rates tending to rise from earlier to later stages in the production process. There are also evidence of strong bias against exporting in most cases, suggesting that the manufacturing production in Peninsular Malaysia has essentially been inward-looking, largely due to the nature of protection. Even

the exemptions from import duties on imported industrial inputs for export production do not apparently neutralize the bias in favour of production for the domestic market. It may be of interest to observe that for the years 1965-1970 there were no evidence of absolute waste of resources, since negative value added at world market prices were not found for any industry. But, negative value added has been found for motor vehicles, electrical appliances and petroleum products in 1973. Negative value added arises when the cost of tradable inputs at world prices exceeds the value of the final products at world market prices, implying that factors employed in domestic production have added no real value.

Although the system of protection in Peninsular Malaysia appears to be less severe than in most developing countries, it has tended to pamper certain industries with an unmistakable bias in favour of import replacements, and penalize export activities. The protective system seems to have assigned only a defensive role to the manufacturing sector. In recent years, however, serious efforts have been made to increase the exports of manufactures. Effective subsidies granted to export-oriented manufacturing activities have increased with the offer of various investment incentives to these industries.

(c) The Philippines

In the post-war era, industrialization in the Philippines assumed mainly the form of fabricating, assembling and processing along import-substitution lines. As a result, the import composition changed gradually in favour of capital goods at the expense of the consumer goods.

That the Philippines' import substitution programme had reached a fairly advanced stage is reflected by the fact that imports accounted for less than 5 per cent of the total supply (production plus imports) of manufactured consumer goods in 1965. The Philippines' exports are still dominated by primary products although manufactured exports account for a significant proportion of the total exports (14 per cent in 1977).

The dependence on import substitution as the industrialization strategy obviously required a fairly broad protective structure. Until the 1950s the free entry of American goods considerably weakened the protective effects of tariffs which served mainly revenue purposes. Tariff protection and exchange control were largely responsible for the rapid burst of manufacturing activities in the late 1950s. By 1962, tariffs became the main instrument of protection, with exchange decontrol.

The average nominal protection for import competing goods were 30 per cent, although it had a very wide range - from 1 per cent for dairy products to 252 per cent for jewellery, depicting a considerable degree of escalation in 1965. The average and dispersion of effective protective rates are considerably higher than those of nominal rates. The average effective rate of protection was around the region of 60 per cent, twice as high as the nominal rate. It is clear that the protective system has discriminated in favour of consumer goods at the expense of capital goods and intermediate goods while at the same time penalizing exports. Thus, there appears to be a fairly strong escalation of tariffs from lower to higher degrees of fabrication.

Potential rates of effective protection, calculated on the assumption that price differentials reflect nominal rates, exceed the

realized rates, based on direct comparisons of world and domestic prices, for non-durable consumer goods. As for intermediate products, protection at higher level of fabrication exceeds that at lower levels in terms of both potential and realized protection.

The general pattern of tariffs thus portray low rates for machinery, moderate rates for intermediate goods and high rates for finished consumer goods. The system thus strongly favours production of finished consumer goods with heavy dependence on imported supplies. The pattern of industrial growth and trade in the Philippines clearly reflect this bias.

Negative value added at world market prices have been found for several products including metal furniture, stationery, refrigerators and air-conditioners, photographs and televisions, representing extreme cases of inefficiency. For, imported material inputs cost more than the imported finished products - which may be interpreted as indicating absolute waste of resources.

A more recent study,[6/] which gives a time series of effective protection rates in the Philippines for the period 1949 to 1971 confirms the previously noted bias of the protective system in favour of consumer goods at the expense of exports, and intermediate and capital goods. It is also pertinent to note that the large differences in the levels of effective protection between commodity groups have continued to exist even after the dismantling of exchange and import controls in the early 1960s.

6/ Baldwin (1975), as referred to in Romeo M. Bautista, "Development of trade policies of the Philippines and ASEAN economic cooperation", in Seiji Naya and Vinyu Vichit-Vadakan (eds.), ASEAN Cooperation in Trade Policy, UNAPDI, Bangkok, 1977.

Manufacturing production in the Philippines has thus been heavily biased in favour of import replacements, especially at higher levels of fabrication, namely finished consumer goods. This inward-looking industrialization has been made possible by the protective system. The process of import substitution, which was most rapid in the 1950s, slowed down sharply in the 1960s, as the process has already reached the saturation point in many lines of activity, further expansion being constrained by the rate of growth of domestic market itself.

The prolonged import substitution phase of industrialization has sheltered high-cost industries and caused severe balance of payments difficulties, which had forced the Philippines to devalue its pesos in 1965 and again in 1970. In retrospect, it seems that the Philippines had learned the hard way the dangers of import substitution that is supported by a restrictive trade regime. The need to revitalize its ailing industries was strongly felt in the early 1970s. This called for a shift in the industrialization and trade strategies. It now appears that many industries in the Philippines have moved into the "export expansion" stage, thanks mainly to the various export promotion incentives made available by the Export Incentives Act of 1970 and the rationalization of the structure of protection which has been undertaken time and again in the 1970s.

(d) Singapore

The trade policies of Singapore traditionally have been rather liberal. The two main considerations which have determined Singapore's trade policies in the post-war years are entrepot trade and industrialization. Singapore's prosperity had been closely associated for a long time with its "free port" posture. Thus, it has been imperative for Singapore to ensure that the restrictions on trade flows are reduced to the minimum. Moreover, protectionist trade policies to promote import substitution were clearly inappropriate for the small city state of Singapore. There has been hardly any need for Singapore either to resort to import controls, since its balance of payments has been strengthened by its role as a financial centre for South-east Asia or to impose heavy import duties for revenue purposes, since its economy has been affluent enough to rely mainly on direct taxes.

Industrialization provided a challenge to the small city state of Singapore with its limited land resources and a population of 2 million people. The traditional source of income for Singapore has been mainly the entrepot trade owing to its convenient geographical location at the cross road of international shipping routes. Manufacturing became the main economic activity since 1964. Import substitution formed the main basis of industrialization in the initial phase, although under relatively mild protection. The shortcoming of the import substitution as the industrialization strategy became apparent sooner in Singapore than elsewhere, simply because of the extremely limited size of its domestic market.

The trade policy of Singapore traditionally has been rather

liberal, with tariffs serving almost exclusively revenue purposes. Indeed prior to 1960, Singapore with its free port status had import duties only on liquors, tobacco and petroleum products for revenue reasons. The protective tariffs on a limited number of itsms were introduced only in 1960. The Tariff Advisory Committee, established in 1962, was instrumental in extending tariff protection to many items. By the end of 1965, tariffs were imposed on 155 items of the Standard International Trade Classification (SITC).

By 1970, the number of items enjoying tariff protection rose to 343, with an unweighted average tariff height of 33 per cent of all tariff items and 4 per cent for all import items. The unweighted average tariff rate was as low as 1.1 per cent of total retained imports.[7] The 1970 average level of nominal tariff protection in Singapore amounted to only 5.1 per cent.[8] No estimates of effective rates of protection for Singapore are available.

It was in 1963 that imports quotas were first introduced in Singapore which was then within the Malaysian federation. By 1965, import licensing and quota restrictions were extended to cover a total number of 230 items. After the secession from the Malaysian federation in August 1965, the number of items under import restrictions was reduced to 88. The use of import quotas declined rapidly after 1966 and the number of items under quotas restrictions was reduced to six by 1970.

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[7] Chia Siow Yue, "Development of trade policies in Singapore", in Seiji Naya and Vinyu Vichit-Vadakan (eds.), op.cit., p. 265.

[8] Ibid.

Protectionist trade policy was subsequently reviewed in the light of the changes in the industrialization strategy in favour of export orientation. It is therefore hardly surprising that recent years had witnessed not only very few additions to the tariff lists but also the abolition of many of the existing tariffs together with the scaling-down of some others. A rapid liberalization of import controls took place in the first half of the 1970s. It was particularly rapid in 1973 under the pressure of full employment and inflation. As a result, import duties on 153 items were eliminated and tariffs on 58 items were revised. By the end of 1973, the number of protected items was cut down to 137, and all import quotas were abolished. And, most of the goods subject to import licensing were de-licensed by 1975.

The deproliferation of tariffs in the face of increasing export orientation has apparently forced the industries to be more efficient and competitive, judging from subsequent performance in exporting especially in the field of machinery and transport equipment. The liberal trade policy was necessitated by the realization that the domestic market was too small for efficient or sufficient industrialization, and the consequent emphasis on export orientation has resulted in a tariff structure that pales in comparison with those found in other ASEAN countries where tariffs and quotas have proliferated to a considerable extent.

(e) Thailand

Thailand seems to have had strange mixtures of liberal and restrictive trade regimes. In the early post-war years Thailand opted for a multiple exchange rate system, low tariff protection and absolute control on rice trade. The period 1955-196' witnessed a gradual liberalization of trade, the abolition of the multiple exchange rate system and the introduction of export tax and quotas on rice trade. It was in the 1960s that mild tariff protection was instituted together with strong investment incentives to promote import-substituting industries. In the first half of the 1970s, tax incentives for industries were relaxed, but tariffs were raised to protect domestic industries and at the same time, somewhat inconsistently, active measures were taken to promote manufactured exports.

Industrial promotion in Thailand was intensified since the early 1960s. Trade policies have accordingly been adjusted. The 1964 tariff reform, for instance, had resulted in an escalation and proliferation of the protective tariff structure, practically making all tariff rates multiple of 5 per cent. Tariffs were further revised mostly in the upward direction in 1970 in the face of a balance of payments deficit. Subsequent tariff changes, made in 1972 and 1973, were meant to adjust the protective effects and to offset the rising costs of raw materials. Thus, tariff rates on such items as white cement, glutamic acid, paper products, metal wires, plastic materials, carpets, electric wires and cables, etc., were raised, while the rates on iron wire, materials for paints and prints, etc., were lowered. In July 1974, the tariff rates for 306 main items, mostly chemical materials and products,

machinery, metal products and pharmaceuticals, were adjusted downward again to cushion the impact of rising raw material costs. For example, tariffs for chemical materials and products were reduced from 30 per cent to 10 per cent, for steel and non-ferrous metal from 10-30 per cent and for machinery from about 15 per cent to 5-10 per cent.

In 1974, the potential nominal rates of protection fell mostly between 20 to 50 per cent. For input imports such as chemical materials, paper and steel products, the potential nominal rates were lower than in the previous years. Since the potential nominal rates take into account not only tariffs but also other sources of protection especially the differential tax rates, the potential nominal rates frequently exceed the tariff rates.

Generally, the nominal potential rates were high for consumer products. For example, the rates were 44 per cent for textiles fabrics, 50 per for plastic products, 67 per cent for clothing, 80 per cent for storage batteries, 95 per cent for perfumery, cosmetics, 102 per cent for passenger cars and 132 per cent for monosodium glutamate.

The effective rates were generally higher than the nominal rates mainly due to lower tariffs on material inputs. In the extreme, there are several industries with negative value added at world prices, implying absolute waste of resources. The highly protected industries potentially include meat products, confectionery, sweet condensed milk, rubber products, clothing, perfumery, cosmetics, etc. These high rates are mostly due to low prices of domestic inputs and high nominal rates on the finished products. Industries with least potential effective

protection are the export-oriented ones such as petroleum products, chemical materials, non-ferrous metal basic industries, printing and publishing and non-electrical machinery.

In terms of realized effective rates, however, the number of industries with negative value added are considerably reduced. The results provide evidence of a wide dispersion in the realized effective rates which attest to the price distortions caused by the protective structure.

There is no doubt that the tariff structure in Thailand, as indeed in other ASEAN countries except for Singapore, clearly exhibit a bias in favour of production for the domestic market and against exports. There has also been a tendency for the potential protection, both nominal and effective, to escalate from lower to higher degrees of fabrication. But, when realized effective rates are considered the differential incentives do not seem to escalate strikingly. The fact that the realised effective rates are considerably lower than the potential effective rates strongly suggests that a certain degree of tariff redundancy prevails in Thailand.

A strong bias in favour of production for the home market obviously exists despite the incentive that imported material inputs are exempted from import duties and business taxes.[9/] Thus, the trade policy, as exemplified by the tariff structures, has been designed mainly to build up an industrial base that is essentially domestic oriented. It

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9/ In the 1960s 7/8 of these were refunded to exporters. Since 1972, 100 per cent exemptions were granted to exporters on imported material input items.

has obviously led to inductrial excess capacity and high production costs. Further industrial expansion thus requires either extension of production to the lower levels of fabrication or export promotion for existing production at the higher level of fabrication.

(ii) Trends in ASEAN Manufactures

There are unmistakable signs that manufacturers will figure prominently in the exports of ASEAN countries, except perhaps Indonesia, in the 1980s. Impressive beginnings in the exportation of manufactures have already begun. This trend is expected to gather momentum in the 1980s, judging from the changes in ASEAN's industrial structure in the late 1970s. The lessons of the past have shown Malaysia, the Philippines and Thailand that inward-looking import substitution will not take them far enough in industrial development, and the process of structural adjustments to reorientate their industries, which began in the 1970s, would continue into the 1980s.

The preference for large-scale industries based on capital-intensive technologies, which dominated the manufacturing sectors in the ASEAN region in the last two decades is expected to decline in favour of small-scale, labour-intensive activities based on domestic raw materials. ASEAN countries have discovered that their comparative advantage lies in the latter. ASEAN countries are likely to benefit from any industrial restructuring that would take place in advanced industrial countries, in the sense that several industries which get weeded out in the process may be relocated in ASEAN countries in the 1980s.

That the export orientation of industries in the ASEAN region will increase in the next decade does not necessarily imply a

deproliferation of tariff protection given to the import-substituting industries. Powerful vested interests in the region may prevent the relaxation of tariff barriers and other import controls. The tariff schedules may be modified in such a way as not to alter markedly the nominal protection given to major import-substituting industries, and resources may be guided towards export manufacturing activities through changes in effective subsidies.

It is, however, dangerous to make sweeping generalization in this regard. Singapore's manufacturing sector is almost exclusively oriented towards the foreign markets. Nonetheless, it appears that Singapore's industrial structure will undergo important changes in the 1980s in the face of rising labour costs and growing affluence. There are already signs that Singapore will continue to make structural adjustments which began in the second half of the 1970s and increasingly concentrate on capital-intensive, skill-intensive and technology-intensive industries.

Indonesia's problems in this regard are quite different from those of other ASEAN countries, particularly Singapore. Indonesia is a late-comer in the field of industrialization. Industrial development in Indonesia seems to be at a standstill, firmly rooted in the initial phase of import substitution, facilitated by the existence of vast domestic market and sustained by restrictive tariff and non-tariff barriers. Consequently, industries in Indonesia have remained inefficient, import-dependent and uncompetitive. The oil bonanza of the 1970s seems to have rendered the promotion of manufactured exports unnecessary. But, it appears that a turning point will be soon reached and there are two

compelling reasons forcing a departure from the past pattern. First, the import substitution strategy has failed to absorb the labour surplus and to create linkages between the modern manufacturing sector and the traditional primary sector. Second, the growth of extractive exports is expected to slow down in the first half of the 1980s. Projections particularly for petroleum are pessimistic: it appears that the present high rate of domestic petroleum consumption (14 per cent per annum) will not permit net growth of petroleum exports during 1980-1985.[19] Indonesia may therefore be forced to reorientate its industries towards export markets. The recent devaluation of the rupiah may be seen as an attempt to correct the market distortions caused by the previously over-valued exchange rates. However, this devaluation may trigger off another inflationary spiral because of its direct effect on domestic costs and prices.

Malaysia, the Philippines and Thailand lie between the polar cases of Singapore and Indonesia. These three countries are likely to pursue the promotion of manufactured exports more vigorously in the 1980s than in the 1970s. There is no question of going back to the import substitution phase for these countries, since the domestic markets are already saturated, although one cannot rule out the possibility of a second round of import substitution in the manufacture of intermediate and capital goods.

While we can safely conclude that ASEAN countries are poised to become important exporters of manufactured goods in the 1980s, we must

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[19] Iwan J. Aziz, Sumbar dari Luar Negeri dan Minyak Bumi: Peranan dan Implikasinya di Indonesia, unpublished thesis, Faculty of Economics, University of Indonesia, 1978, p. 157 (quoted by Douglas S. Paauw, "The Indonesian Economy in the 1980s", op.cit.).

also stress that it is not going to be easy. ASEAN countries will have to not only overcome the protectionist barriers in advanced industrial countries but also to compete with other developing countries. ASEAN, as a group, will, of course, continue to press for significant tariff reductions in advanced countries through the multilateral trade negotiations (MTN), and for concessionary access to the markets of developed countries through the GSP schemes. It is, indeed, difficult to predict the outcome of such efforts.

There is very little doubt that the export markets for manufactures will be highly competitive in the 1980s. ASEAN countries had to face, in the 1970s, stiff competition from Hong Kong and the Republic of Korea. It however appears that, in the 1980s, these countries will increasingly concentrate on those manufactures which are intensive in skill and technology. Thus, ASEAN's manufacturing sectors in the 1980s are likely to be complementary to, rather than competitive with those of Hong Kong and the Republic of Korea. But this statement needs an important qualification: Singapore is industrially very different from other ASEAN members, but strikingly similar to Hong Kong and the Republic of Korea. And, as such, Singapore may continue to face tough competition from these two far-eastern countries.

The opening up of China to the outside world may affect adversely the export prospects of ASEAN countries expecially for labour-intensive manufactured goods in the 1980s. While China's capacity to export low-cost labour-intensive manufactured items is admittedly enormous, it is unlikely that China will be able to organize its outward-looking manufacturing sector quickly and smoothly enough to pose a formidable threat

to ASEAN countries' exports of manufactures in the early 1980s. The adverse repercussions on the share of ASEAN exports may thus take longer than it would appear at first sight. At the same time, the possibility of a complementary trade relationship between China and ASEAN, emerging as a result of the modernization of the Chinese economy, cannot be discounted altogether. Be that as it may, China's modernization implies that China will emerge as a competitor to ASEAN in the importation of capital and technology from advanced countries. ASEAN countries may then have cause for concern about a possible slow down in the inflow of foreign investments in the 1980s or an increase in the cost of foreign capital and imported technology in the 1980s.

(iii) Implications for Regional Cooperation in the Field of Industry

It is possible to draw inferences from the above analysis regarding the potential for ASEAN cooperation in the field of industry. Evidently, the ASEAN entity consists of an unique mixture of national economies at different stages of industrial development. The range is rather wide. At one extreme, there is the Singapore economy which is poor in natural resources, rich in skill endowments, highly industrialised and heavily export-oriented with an overtly outward-looking development strategy. At the other extreme, there is the Indonesian economy which is rich in natural resources but poor in skill and technology, specialising in primary production mainly for the export market, with "infant" industries that are domestic market oriented, based on an inward-looking industrialization strategy. Between these two extremes lie the economies of Malaysia, the Philippines and Thailand whose export specialisation in

traditional commodities is gradually giving way to export orientation in modern manufactures. Thus, there are marked differences in the industrial and trade policies of ASEAN countries.

Although there is enough complementarity in the natural resource endowments of ASEAN countries to permit a meaningful division of labour, the existing industrial patterns, which are the result of years of import substitution efforts, are strikingly similar in all ASEAN countries with the notable exception of Singapore. Most of these import-competing industries are operating at high costs, behind protective tariff walls, with substantial unutilized capacity. Industrial complementation would certainly bring about a more rational allocation of resources in the ASEAN region but many marginal production units will have to be closed down in the process. Although this solution would make a lot of economic sense, it may not be politically acceptable. Seen in this perspective, the setting up of <u>new</u> industries under the package deal should prove to be less difficult than rationalization of <u>existing</u> industries under the industrial compementation programme.

ASEAN countries, with the possible exception of Indonesia, have reached an industrialization stage where the manufacturing of intermediate and capital goods are being considered seriously. It also appears that some of these countries have been contemplating a second round of import substitution for the production of intermediate and capital goods. However, these countries have learned from past experiences that import substitution has serious limitations, given the small size of the individual domestic market. Industrial cooperation offers a way out of the dilemma. Industrial projects which are not competitive on an international basis nor viable on

a national basis, may well be viable and efficient on a regional basis.

Given the diversity of resource endowments, and the present stage of industrial development in the ASEAN region, the potential for regional cooperation in ASEAN for large-scale industrial projects under the package deal appears to be enormous. Each country will then be able to host an industrial project which is compatible with its own resource endowments, serving the entire ASEAN market, and enjoying substantial scale economies in the process. This broad conclusions is, of course, based on the assumption that economic rationality prevails over all other considerations. Economic nationalism is still a force to be reckoned with in most ASEAN countries and the question of free market access to the products of ASEAN projects in some countries may prove to be a vexing issue. Much would, however, depend on the selection and location of the projects.

CHAPTER IV

THE ASEAN MECHANISM FOR AIPs

It was already seen earlier that conceptually ASEAN regional cooperation in the field of industry in general, and large-scale industrial projects in particular, is sound and appealing. It was also seen that there is a prima facie case for AIPs, given the stages of industrial development the five ASEAN countries have reached. To top it all, there is the political will which seems to exhibit strong determination on the part of the member states to have industrial projects established on a regional basis fairly quickly. To translate all these into reality ASEAN needs a workable mechanism. In this chapter an attempt is made to look somewhat closely at the ASEAN mechanism for AIPs.

To begin with, it will be useful to first look at the organizational structure of ASEAN. The meetings of Heads of Governments of ASEAN states represent the highest form of ASEAN deliberations although such meetings are to be held on an ad hoc basis, as and when necessary. The meetings of Foreign Ministers are held annually, on a rotation basis, in each of the five countries. There are also provisions for special meetings of Foreign Ministers as is deemed necessary. In addition, meetings of Economic Ministers are held on a regular basis to discuss economic matters of common interest. The meetings of the ASEAN Economic Ministers represent the highest decision-making body for economic matters. It is of interest to note that Ministers of specific economic areas also meet as

and when necessary for the purpose of accelerating the process of regional economic cooperation. Thus, there are meetings of the ASEAN Ministers with industry and energy portfolios.

The Standing Committee consists of the Foreign Ministers of the host country as Chairman and the resident ambassadors of the other ASEAN countries as members. This means that the seat of the Standing Committee shifts with the site of the Meeting of Foreign Ministers. The role of the Standing Committee is to maintain continuing operations of ASEAN regional cooperation in between the Meetings of ASEAN Foreign Ministers. Prior to 1977, the Standing Committee comprised only Foreign Ministry officials; in 1977 it was expanded to involve other Ministries as well.

Each country has its own national ASEAN secretariat which manages matters relating to ASEAN regional cooperation. A central ASEAN Secretariat was set up in 1976 in Jakarta. The ASEAN Secretariat is headed by the Secretary-General who is responsible to the Foreign Ministers and through them, to the Standing Committees. The Secretary General is charged with the main responsibilities of (a) initiating plans and programmes of activities for ASEAN regional cooperation and (b) harmonizing, facilitating and monitaring progress in the implementation of all approved ASEAN activities.

The ASEAN Secretariat has three bureaus, viz., economic, science and technology and social and cultural affairs.

ASEAN economic cooperation is being promoted by five economic committees established by the ASEAN Economic Ministers, viz.:

1. Committee on Industry, Mineral and Energy (COIME)

2. Committee on Trade and Tourism(COTT)

3. Committee on Transport and Communication (COTAC)

4. Committee on Food, Agriculture and Forestry (COFAF) and

5. Committee on Finance and Banking (COFAB)

In addition to all these, there are Special Committees and Ad Hoc Committees. An example of the former is the Special Coordinating Committee of ASEAN Central Banks and Monetary Authorities, while the Committee of ASEAN Senior officials on Sugar provides an example of the latter.

It appears that the economic committees, referred to earlier, will be reshaped. Remodelled line up seems to be as follows:

1. Committee on Mineral and Energy chaired by Indonesia,
2. Committee on Transport, Tourism and Communications, chaired by Malaysia,
3. Committee on Industry and Trade, chaired by the Philippines,
4. Committee on Finance and Banking, chaired by Singapore and
5. Committee on Agricultural and Forestry, chaired by Thailand.

The ASEAN- Chambers of Commerce and Industry (ASEAN-CCI) is also an important part of the ASEAN machinery. The ASEAN-CCI is a confederation of the chambers of commerce and industry of the ASEAN member countries. The ASEAN-CCI was set up, in fact, at the suggestion of the ASEAN Foreign Ministers who met in March 1971 in Manila. The role of the ASEAN-CCI, which was inagurated in Jakarta 1971, is not only

to translate government initiatives into private sector actions, but also to discuss and formulate suggestions for considerations in ASEAN government fora. It is of relevance to note that the ASEAN-CCI has set up a number of Working Groups such as those on banking, shipping, tourism etc.

The organizational structure outlined above provides the framework of the machinery for ASEAN regional cooperation.

Prior to the Bali Summit held early in 1976, ASEAN affairs were handled almost entirely by ASEAN Foreign Ministers. However, that ASEAN Economic Ministers have played an active role since 1976 is a clear manifestation of the increased importance attached to the economic aspects of ASEAN regional cooperation. At the ASEAN Economic Ministers Meeting barely two weeks after the Bali Summit, the five industrial projects, referred to earlier, were identified for possible adoption as ASEAN industrial projects. An expert group was set up to review the industrial cooperation programme and to examine the feasibility of establishing the five ASEAN Industrial Projects (AIPs). The responsibility of undertaking the feasibility study for each plant was given to the country wishing to set it up. In 1978, the ASEAN Economic Ministers approved the Basic Agreement on AIPs. According to this Basic Agreement, inter alia, the product of the AIPs were to be accorded preferential access to the market of the member countries, and the host country should have 60 per cent of the equity of the AIP, with the rest being shared equally by the other four ASEAN countries (i.e., 10 per cent each). However, at the meeting of the ASEAN Ministers of Industry held in September 1980, it was resolved that the participation of all five member countries would no

longer be required in future ASEAN Industrial Projects.

ASEAN has adopted a cautious step-by-step approach involving protracted and complex procedures and negotiations. There appears to be at least 10 steps involved, as shown in a UNIDO study.[1] In sequence of the steps in the case of the urea fertiliser project allocated to Indonesia, for example, was as follows:[2]

1. Identification of Indonesia for the purpose of undertaking the feasibility study of the first AIP;
2. Commissioning of the feasibility study;
3. Policy formulations with respect to equity participation, production volume, product pricing, infrastructure cost and raw material cost (natural gas from Pertamina);
4. Completion of detailed feasibility study;
5. Evaluation of the feasibility study by the Committee of Senior Officials and formal adoption as on ASEAN Industrial Project;
6. Negotiations on the terms of project financing;
7. Discussions and negotiations of the articles of incorporation and by-laws of the AIP Corporation;

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[1] Sanchez, Conrado Jr., "Industrial Redeployment in the Context of Economic Integration among Developing Countries - The Case of ASEAN", draft (1979) IS/GLO.

[2] See: UNIDO, "ASEAN Cooperation in the Field of Industry - A Background Study on Past and Present Activities", prepared by Regional and Country Studies Branch, Division for Industrial Studies, UNIDO/IS. 204, February, 1981, pp. 15-16.

8. Incorporation of ASEAN Aceh Fertiliser and subscription by stockholders;

9. Organization of the Board of Directors and Appointment of Management Staff;

10. Finalizing loans, and invitation to bid for equipment supply and plant construction.

In addition to the Preferential Trading Arrangements (PTA) which are designed to stimulate intraregional trade within ASEAN, special trading arrangements are to be worked out in respect of the products of AIPs. This, however, represents one of the most difficult items to negotiate.

The importance of the private sector participation for the success of ASEAN industrial cooperation is fairly obvious and is duly recognized by the ASEAN governments, although the ASEAN governments have assumed the responsibility for establishing the AIPs based on the belief that the Governments are better equiped than the private firms to handle large-scale projects involving huge capital investments. However, the private sector is given a significant role to play in promoting ASEAN Industrial Complementation (AIC) projects, in view of their extensive network of business linkages. Be that as it may, it must be stressed that the private sector has not been denied a useful role in the AIPs. As mentioned earlier, there are provisions for private sector equity participation in the AIPs.

As mentioned earlier, the equity structure of AIPs permits 60 per cent of the total equity to be owned by the host country and the

remaining 40 per cent to be allocated among the other four member countries. Equity participation by private sector interests might account for as much as 40 per cent of the host country's 60 per cent, depending on the attitude of the host country. It has also been agreed that 70 per cent of the infrastructural costs of these projects would be financed by foreign aid while 60 per cent of the balance would be met by the host country, the other four member countries contributing 10 per cent each. It is also of relevance to mention Japan's offer of US$1 billion loan towards the financing of the AIPs. It appears that Japan's financing of the infrastructure components of these projects would be on concessional terms under its Overseas Development Assistance (ODA), while its financial assistance for purchase of equipment would be on commercial terms. It is also of importance to note that Japan's commitment, whether commercial or concessional, would be subject to the viability of the projects based on the results of the feasibility studies.

References may also be made to ASEAN cooperation efforts in industrial financing. After considering for more than two years several proposals for institutional arrangements concerned with the financing of ASEAN's industrial development, it was finally agreed in principle at the Third ASEAN Banking Conference, sponsored by the ASEAN Banker's Council, in Jakarta in February 1980, to pursue the development of an ASEAN Finance Corporation (AFC). The AFC, inaugurated in June 1981 at Singapore, represents the first ASEAN-wide joint venture and partakes of the character of some sort of a capital corporation. Investors from each ASEAN country (mainly banks) own 20 per cent of its S$100 m (US$46m) paid-in capital. It is now envisaged that the AFC will be actively

promoting and financing ASEAN enterprises. There are firm plans for the AFC and the newly established Japan-ASEAN Investment Corporation to set up a fifty-fifty joint venture namely ASEAN-Japan Development Corporation (AJDC) before the end of 1981. The AJDC will focus specifically on ASEAN joint ventures with Japanese participation. It is also of relevance to note that the AFC has indicated its interest in concluding similar arrangements with other national groups.

There is no point in discussing here the industrial clubs, which operate under the wings of the ASEAN-CCI, for such a discussion will be of greater relevance to the AIC projects rather than AIPs. Suffice it to note that there are about 18 active industrial clubs operating under the guidelines that have been approved by the ASEAN-CCI. These industrial clubs are intended to play an important role in the industrial complementation programme.

CHAPTER V

LESSONS OF EXPERIENCE

That ASEAN is fully aware of the potential economic gains of industrial cooperation is apparently manifest. Political will in favour of regional economic cooperation in general and industrial cooperation in particular has gained considerable strength in recent years. There are evidence of a sense of commitment on the part of the ASEAN leaders to forge ahead and yet the rate of progress appears to be too slow. The first package of AIPs seems to have hit serious snags. Of the initial five projects, two have taken off the ground, one is in the process of serious evaluation and two have been withdrawn. Does it mean that there is a gap between theory and practice? What has really gone wrong? And why? To attempt to answer these questions, we will have to examine the first package of AIPs systematically, and to look at other possible packages which would lend themselves to industrial cooperation in the ASEAN region. We may be able to learn valuable lessons from such an enquiry.

(i) Review of the first package of AIPs

(a) Urea Projects: Indonesia and Malaysia

It is not difficult to understand why the urea projects were chosen for ASEAN industrial cooperation and how Indonesia and Malaysia qualified as possible locations. There is an urgent need and a growing

demand for increased use of fertilizers in the ASEAN region which depends heavily on agricultural activities not only to feed its population which grows at the average rate 2.6 per cent per annum but also to earn a substantial proportion of the foreign exchange earnings which originate from the agricultural sectors. Since the use of fertilisers is so important for stimulating agricultural productivity and since the bulk of the fertilizers consumed within the region are imported, it is not surprising that regional production of fertilizers is seriously considered by ASEAN. Indonesia and Malaysia are apparently the logical choice for locating the ASEAN urea projects, since these countries have abundant supplies of natural gas, which is the main raw material in urea production, while Indonesia in particular already has some experience in urea production that is geared towards the national market.

ASEAN demand for nitrogen fertilizers is expected to increase from 0.3 million nutrient tons in 1975 to 1.9 million nutrient tons by 1985. About one-half of the ASEAN demand for nitrogen fertilizers is presently met by imports from outside the region. The existing nitrogen fertilizer capacity in the ASEAN region will be unable to meet the region's demand for nitrogen fertilizer, unless of course ASEAN urea projects materialise. Indonesia presently accounts for 71.2 per cent of total nitrogen production in the ASEAN region while Singapore produces no fertilizer at all. With the implementation of the ASEAN urea project, Indonesia and Malaysia will develop substantial surpluses which will not only meet the deficits in Philippines, Singapore and Thailand, but also leave an overall surplus which needs to be marketed outside the region.

The demand for urea, in particular, is expected to increase

from 1.4 million metric tons in 1976 to 3.5 million metric tons by 1985. Urea output from plants which are already in operation and under construction in Indonesia, the Philippines and Thailand will not be sufficient to meet the urea demand of the whole ASEAN region. In fact the rate of growth of urea consumption in the ASEAN region is expected to outstrip the rate of growth of urea output from the existing plants and plants which are already under construction, so that the region's deficit is estimated to grow substantially by 1985.

Indonesia presently has two urea plants, i.e. PUSRI I and PUSRI II, at Palembang in South Sumatra. Pusri I with a capacity of 100,000 tons per year has been in operation since 1963, while PUSRI II with a capacity of 380,000 tons per year came into operation in 1974. In addition, two new plants, PUSRI III and PUSRI IV, which are also located at Palembang, are known to have reached completion. Two more urea plants are under construction: the KUJANG plant at Cikampek in West Java, and the East Kalimantan Plant which were scheduled for completion in 1979 and 1981 respectively. All these four new plants will produce each about 57,000 tons of urea per year, while the East Kalimantan plant will also produce 165,000 tons of ammonia.[1/]

Indonesia accounts for 92 per cent of urea production in the ASEAN region, while the Philippines and Thailand account for the rest, i.e., 5.4 per cent and 2.7 per cent, respectively. Although there are

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[1/] Indonesia also has planned two plants to produce di-ammonium phosphate (DAP) and nitrogen-phosphate-potash fertilizers (NPK) which are scheduled to come on stream in January 1981. Petrokimia which presently produces ammonium sulfate also plans to produce ammonium sulfate as a by-product of caprolactam by 1982.

no urea plants under construction in any ASEAN country except Indonesia, the Philippines has plans for a Fertiphil project to be located at Limay with a capacity to produce 490,000 tons per year of urea and 33,000 tons per year of ammonia. Thailand's Mae Moh Industries producing urea and ammonium sulfate is expected to be phased out by the end of 1981.

As mentioned earlier, the urea capacity already in existence or under construction in the ASEAN region will not be sufficient to meet the whole of ASEAN's demand for urea. If the planned ASEAN urea projects in Indonesia and Malaysia as well as the Filipino Fertiphil project are taken into account, the projected picture will be very different. Total urea production will increase from 0.5 million metric tons in 1976 to 3.7 million metric tons in 1985. The deficit in urea will disappear by 1984 when the planned plants are expected to begin operation. In fact, the ASEAN region as a whole will have surpluses over and above regional urea requirements from 1984 onwards. This surplus is estimated to reach its peak of 0.6 million metric tons by 1986.

Indonesia ran into surplus in urea for the first time in 1979 when the Kujang plant came on stream. Excess of production of urea in Indonesia over Indonesian consumption will grow with the completion of the ASEAN urea project at Acheh. Malaysia, which presently produces no urea, will suffer growing deficits until the end of 1984, and the ASEAN urea project which is allocated to Malaysia will render Malaysia a net exporter of urea. The Philippines which presently has a small urea capacity is expected to remain in the deficit, although the size of the deficit will be reduced considerably if the Fertiphil project materialises by 1981 as planned. Obviously, Singapore has only a tiny market for urea

which will have to be met by imports. Thailand's growing demand for urea will continue to be satisfied through imports, since Thailand is expected to phase out the existing small plant with no planned new capacity for the future. All in all, it is clear that the Philippines and Thailand will provide the markets for the surplus urea from Indonesia and Malaysia, although they cannot absorb the entire surplus. The net results is that ASEAN will have to look for extra-regional markets for the excess urea.

The ASEAN urea project allocated to Indonesia is to be set up in Acheh where large proven reserves of natural gas are available. The proposed plant will consist of two modern large-scale, singe-train units incorporating an ammonia unit with a capacity of 330,000 tons per year and an urea unit with a capacity of 570,000 tons per year, at fixed capital cost of US$244 million.[2/] The Filipino urea project designed to cater to the Philippine's domestic market also consist of an ammonia unit with a capacity of 330,000 tons per year and a urea unit with a capacity of 495,000 tons per year. The ASEAN urea-ammonia project, allocated to Malaysia and based on Bintulu natural gas, is also designed to have a capacity similar to the ASEAN project to be located at Acheh in Indonesia.

With the implementation of the planned urea projects the ratio of urea in total fertilizer production in general and the ratio of urea in nitrogen fertilizer production in particular will rise sharply by 1985.

2/ Imoed Joesoef, "Indonesia's Preparations for the Development of ASEAN's Project on Urea", Mohd. Ariff, Fong, R. Thillainathan (eds.) ASEAN Industrial Cooperation, Kuala Lumpur, 1977.

The relative importance of Indonesia, as an urea producer which presently accounts for nearly 92 per cent of ASEAN urea production, is likely to decline with the emergence of Malaysia and the Philippines which are expected to jointly account for about 25 per cent of total urea production in the ASEAN region by 1985.

The above analysis clearly suggests that there will be a glut of urea supply in the ASEAN region by 1984 when the planned projects commence production. Indonesia's national urea projects will render Indonesia more than self-sufficient in the early 1980s. The ASEAN project allocated to Indonesia would therefore have to rely on the regional market outside Indonesia. Malaysia's dilemma in this respect is fairly obvious. The planned urea capacity is much larger than what the Malaysian market can possibly absorb. Malaysia, of course, has to choose between a smaller national urea plant with a higher unit cost and a larger regional urea plant with a lower unit cost. At the first sight, the second choice would seem to be economical, as the alternative national plant entails 10% higher capital requirement and 16% higher unit cost of production[3/] compared with the regional plant, but the above analysis does not suggest that it is also practical in view of the expected glut of urea within the ASEAN region. However, if the Philippines does not go ahead with her Fertiphil project, Malaysia should opt for a bigger plant to exploit the scale economies. There appears to be no room for two ASEAN urea projects, unless of course the ASEAN urea can be sufficiently com-

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3/ United Nations, Journal of Development Planning, No. 7, 1974, p.109

petitive for extra-regional exporting. That the ASEAN projects apparently require tax holidays and common external tariffs to be economically viable, implies that extra-regional exporting cannot be seriously counted upon to solve the surplus problem at least in the short run.

While the above analysis suggests that there may be an excess of supply over demand for urea in the ASEAN region as a result of the setting up of the ASEAN urea projects, there is no doubt that Indonesia and Malaysia provide the ideal locations for these resource-based projects. The cost advantages presented by the availability of raw materials and the political will to initiate regional projects provide the compelling reasons for the establishment of these projects. The Indonesian Acheh Plant (North Sumatra) has a planned capacity of 570,000 tons of urea and 330,000 tons of ammonia per year, with a total investment of US$323 million. Indonesia accounts for 60 per cent of the equity of the Acheh plant while Malaysia, Philippines and Thailand account for 13 per cent each, with Singapore contributing a nominal 1 per cent of the total equity.

The other ASEAN urea project allocated to Malaysia, i.e., the Bintulu plant (Sarawak) has a planned capacity of 530,000 tons of urea and 360,000 tons of ammonia per year, with a capital input of US$245 million and a debt/equity ratio of 70:30. The Bintulu project which was formally approved by the ASEAN Industry Minister's Meeting at Bali in September 1980, will rely mainly on the Malaysian market, with the Philippines absorbing most of the excess. Both the Acheh and the Bintulu plants are expected to commence operation in 1984.

(b) Rock Salt/Soda Ash Project: Thailand

Soda ash is an important ingredient in the manufacture of glass; and infact about one-half of soda ash consumption is accounted for by the glass manufacturing industry. Soda ash is also used in a number of industries including sodium-based chemicals, pulp and paper, and scrap and detergents.

The Philippines is the largest consumer of soda ash, accounting for 40 per cent of the total ASEAN consumption. Malaysia and Singapore each account for about 22 per cent, while the share of Indonesia and Thailand together is only 16 per cent.[4/] Nevertheless, the share of Thailand in soda ash consumption is estimated to have increased to 24 per cent by 1980. The proposed regional project has been assigned to Thailand despite a bid by the Philippines because of the huge rock salt deposits estimated at 2,000 billion tons in the northeast Thailand.

The soda ash project which has been estimated to cost US$160 million[5/] (with a capacity of 1,200 metric tons per day) has been questioned by many Thai economists who find it economical to import soda ash from outside the region than to produce it within the region.[6/] The main thrust of the argument in favour of the regional soda ash project is that it will ensure the ASEAN region a regular supply of soda ash at predictable prices, security situation permitting.

[4/] United Nations, Ibid., p. 111.

[5/] Richard Nations, "Complexities of Thai Soda Ash", Far Eastern Economic Review, January 6, 1978, p. 70.

[6/] See for example, Narongchai Akrasanee, "Economic Cooperations with ASEAN: A Proposal from the Economic Society of Thailand", paper presented at the Second Conference of Federation of ASEAN Economic Association, mimeographed, Jakarta, October 1977.

Even if one is prepared to accept that the security problem in the northeast Thailand where the rock salt deposits are concentrated is not serious, the heavy infrastructural cost of the project appears to be formidable. Rock salt mining site is to be located at Bamnet Narong about 260 kilometers from Bangkok with estimated reserves of 318 million metric tons, while limestone will be mined from a nearby quarry at Khao Pang Sok with estimated reserves of 104 million metric tons. The rock salt and limestone deposits are separated from the new port of Laem Chabung by a distance of about 430 kilometers. This calls for the construction of a 80 kilometer rail link at an estimated cost of US$20 million and port facilities costing another US$15 million to accommodate 50,000 ton vessels. Under present conditions the project appears to be uncompetitive. The cost of extracting rock salt itself seems to be fairly competitive by world standards at US$3-4 per ton. The transportation cost under present conditions amounts to US$7, raising the F.O.B. price of rock salt to about US$10 per ton.[y] Unless the transport costs can be halved by the proposed railway developments, the Thai rock salt cannot be competitive at the world market F.O.B. price of US$7-8 per ton. This would obviously inflate the production cost of soda ash. Besides, it has been estimated by Japanese analysts that the freight costs would have to be kept below US$60 per ton in order to make the Thai soda ash project competitive with salt projects planned

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[y] This is based on the estimates by Thai Asahi Caustic Soda which operates a solution salt mine. See: Richard Nations, op. cit.

by Indonesia and Sri Lanka.[8/]

The ASEAN rock salt/soda ash project assigned to Thailand is planned to have a production capacity of 400,000 metric tons per year. The project is estimated to require an investment of US$233 million with a debt/equity ratio of 70:30. It has been resolved that the host country will absorb the entire infrastructure costs involved in the construction of rail road and port facilities, without passing these costs on to the consumers in the form of higher product prices.

The Thai Government plans to hold 20 per cent of the equity, with private sector in Thailand accounting for 40 per cent. The bulk of the private sector equity in the project is going to be taken up by Thai Asahi Glass Co. Ltd., while the Thai Government's share of 20 per cent will come mostly from the Japanese $1 billion financial aid earmarked for the AIPs. Singapore is expected to take up only a nominal 1 per cent share, with the other three member countries accounting for 13 per cent each.

The first meeting of the shareholder entities for the project was held in Bangkok in October 1979, but no significant progress has been made since then. The feasibility survey has been carried out by Surveyor, Nenninger and Chenevert (JNC), a Canadian firm, under a technical assistance grant from the Asian Development Bank (ADB). The project is now said to be still being evaluated by JICA of Japan.

8/ Asian Wall Street Journal, September 9, 1977.

(c) Superphosphate/Ammonium Sulfate Fertilizer Project: Philippines

The selection of phosphatic fertilizer production as an ASEAN project may be explained mainly in terms of the existing and growing demand for fertilizers in the ASEAN region, while the choice of the Philippines for its location was perhaps prompted by the availability of one of the raw materials, namely sulfuric acid from the Philippines' copper smelting project which was scheduled to be operational by the end of 1979. But, one of the most important raw materials, i.e., phosphate rock, will have to be imported from outside the region.

Phosphates is second only to nitrogen in fertilizer consumption in the ASEAN region. The demand for phosphate fertilizer (P_2O_5) is estimated to have reached 416,000 tons by 1980. The current ASEAN capacity in phosphate production amounts to 71,000 tons of P_2O_5, and Indonesia has plans to set up a plant with a capacity of 18,000 tons of P_2O_5. There was a shortfall of 122,000 tons of P_2O_5 in the ASEAN region in 1975 and this shortfall would increase to 287,000 tons in 1980 if no new productive capacities come into existence in the region,[9/] warranting a regional phosphatic fertilizer project. Indeed, the growth of demand is estimated to overtake that of supply leaving the ASEAN region in a bigger deficit by 1985 compared with the situation in 1980. The surplus that the Philippines would run into with the implementation of the ASEAN superphosphate project may well be small enough to be easily absorbed by Thailand, Indonesia and Malaysia, which are the main consumers of

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9/ United Nations, op. cit., p. 109.

phosphatic fertilizers in that order of importance, provided prices are fairly competitive.

It is, however, extremely doubtful if the ASEAN project can be competitive, especially in view of the high cost of imported phosphate rock. It has been estimated that the production costs per metric ton of P_2O_5 would range between US$308 and US$379 depending on raw material prices and these estimates compare rather unfavourably with the world market prices of US$180 - 188 during 1976/1977. The raw material costs account for roughly 60 to 65 per cent of the total production costs depending on the raw material prices.[19] Countries which presently have comparative advantage in phosphoric acid production are those which also produce phosphate rocks. The Philippines, to which the ASEAN superphosphate project was assigned, would have to rely on imported phosphate rock from California unless of course domestic or regional sources of phosphate rocks are discovered.

The size of investment in the phosphatic fertilizer project was to have been small relative to what was planned for other ASEAN fertilizer projects. The phosphoric acid plant with a capacity of 410 metric tons per day (mtpd) would involve an investment of about US$44 million, while a project consisting of a 355 mtpd phosphoric acid (P_2O_5) and granulation plants (DP/NPK) would call for an investment of US$65 million.

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[19] For example, a US$5 per metric ton charge in the price of phsophate rock will effect a US$15 change in the cost of P_2O_5.

The viability of the project, however, would depend crucially upon the cost of imported raw materials as well as the regular supplies of these raw materials, especially phosphate rock, from extra-regional sources and above all on the world prices of phosphatic fertilizers. Given the present world prices of phosphatic fertilizers and phosphate rocks, the project could not be competitive, even if regular supplies of imported raw material can be secured. Assuming, on the average, a product cost of US$344 per metric ton of P_2O_5 and a world price of US$200 of P_2O_5, the project would have required a common external tariff protection of more than 72 per cent to be commercially viable. Obviously, there could be no economic rationality in sheltering such a project. It would be simply uneconomical unless, of course, the domestic or regional reserves of phosphate rock, in commercial quantities, are discovered and/or the world market prices of phosphatic fertilizers show a sharp upward trend.

The project had also hit another snag. When the Philippines opted for a phosphate fertilizer project its intension was to use the sulphuric acid by-product of its proposed copper smelter. But with the world copper market in a doldrum, even the US$220 million copper smelter is by no means a certainty, and it is also relatively cheap to import sulphuric acid.

Therefore, it is not surprising at all that the superphosphate fertilizer project was given up in mid-1978 on the basic of findings of Japanese feasibility study. As an alternative, the Philippines proposed ammonium sulfate fertilizer project at the 9th COMC meeting in November 1979. The project which was to have cost US$320 million, was really

an expanded national project which other member countries were reluctant to consider as an AIP. Besides, the findings by Arther D. Little and associates, US consultants, cast serious doubts about the viability of the project. The project has been, therefore, abandoned as an ASEAN project, although the Philippines has indicated that it will proceed with it as a national project. It is of interest to note that the ammonium fertilizer project has now been substituted by an integrated pulp and paper project. This substitution has been agreed upon in principle by the ASEAN Economic Ministers, while a detailed feasibility study is now being undertaken.

(d) Diesel Engine Project: Singapore

The selection of diesel engines for industrial cooperation in ASEAN was apparently based on the existing and projected demand for diesel engines in the region, while the allocation of the project to Singapore was presumably due to the skill-intensity of diesel engine manufacturing based on the principle of comparative advantage.

Diesel engines may be classified according to application and/or HP range. Major stationary applications of diesel engines below 20 HP are power tillers, rice hullers, small pumps and other agricultural machinery, while larger HP ranges of stationary variety are used as power generators, air compressors and as power units for tractors, earth-moving equipment, forklifts and miscellaneous construction machinery. Marine applications include the main propulsion and auxiliary engines for various types of marine craft ranging from small boats to coastal vessels. Automotive applications are mainly for passenger vehicles and commercial

vehicles including light goods vehicles, trucks and buses.

All in all, especially in the case of stationary and marine applications, diesel engines of less than 20 HP constitute the major proportion of the total demand. The demand for diesel engines of less than 20 HP is expected to grow at 5 per cent per annum, although higher HP ranges are estimated to grow at a much faster rate.

The existing production capacity in the ASEAN region is extremely inadequate when compared with the demand for diesel engines. This implies a residual demand for diesel engines especially in the HP range below 300 HP range which is substantially large.

Diesel engine's production capacity in the ASEAN region is presently confined to less than 300 HP range in Indonesia, Malaysia and the Philippines. Thailand and Singapore do not manufacture or assemble diesel engines. If one takes into account the new production capacity which is already underway, the residual for diesel engine below 20 HP range in the ASEAN region will be considerably less.

Indonesia presently produces diesel engines up to 120 HP and it is also known to have firm plans to produce diesel engines up to 500 HP. Malaysia, in addition to several diesel engine projects which are already in operation, has firm plans to produce engines up to 200 HP. It is also known that Malaysia has approved a few projects to manufacture stationary engines up to 1,000 HP and marine engines up to 800 HP. The Philippines has a number of existing diesel engine projects up to 45 HP as well as a planned project of automotive category within the range of 45-400 HP which could also be counted for certain non-automotive applications. Thailand has definitive plans to manufacture small stationary

engines within 5-50 HP range and automotive engines covering the range of 50-300 HP, which could be converted for non-automotive applications, as in the case of the Philippines. Singapore does not have any diesel engine plants in existence, although it had planned to manufacture marine diesel engines of large HP.

As it was noted earlier, the residual market for diesel engines in the ASEAN region, taking into consideration the national projects, is somewhat small. Infact, if one takes account of all planned projects which are scheduled to materialise in the 1980s, the residual market for diesel engines especially in the lowest HP ranges will be extremely narrow. The adverse implications of this for the projects of the ASEAN diesel engine project allocated to Singapore, is readily clear.

The member countries have been unwilling or unable to allow the ASEAN project to compete with their national projects. Thus, Indonesia wanted to restrict entry for ASEAN diesel engines within the range below 500 HP. By the same token Malaysia would not allow free entry for ASEAN diesel engine below 200 HP, and Thailand below 300 HP and the Philippines less than 400 HP. Such a restriction would seriously hamper the viability of the ASEAN diesel engine project, since it is the lower HP ranges which constitute the bulk of the demand in the ASEAN region.

It might appear that the ASEAN project could still supply the CKD packs in the lower HP ranges to the member countries which only assemble, and not manufacture, diesel engines of such HP ranges. But most countries also have planned progressive manufacturing programmes.

At best, the ASEAN diesel engine project could only attempt to supply the CKD packs or components where they are not yet produced

within the country, the entire CBU market which is not served by the national projects and the residual CBU market which is already served by the national projects under some preferential trade arrangements. But, it became clear that engines of less than 200 HP will not be granted preferential tariffs. This, in effect, ruled out the production of agricultural engines which represents the most important segment of the diesel engine market, and that Singapore could only concentrate on marine engines and larger power generators. Such restrictions, which cast serious doubts on the appropriateness as well as the economic viability of the ASEAN diesel engine project, could not justify an investment of US$200-225 million in Singapore for the project.[11/]

The [redacted] diesel engine project, which was designed to manufacture diesel engines with 5-21,000 HP, with a planned capacity of 100,000 units per year, has been shelved for good. At the 9th COIME Meeting in November 1979, Singapore made it clear in no uncertain terms that the ASEAN diesel engine project assigned to Singapore could not take-off until and unless other member countries decide not to go ahead with their planned national diesel engine projects. However, Indonesia, Thailand and the Philippines made it equally clear that they were going to implement their plans for their national projects. Consequently, the ASEAN diesel engine project was abandoned quietly.

11/ This figure is from the Wall Street Journal, Official estimate was US$140 million.

(ii) The Second Package of AIPs

In addition to the five projects for industrial regional cooperation considered above, ASEAN has identified seven new projects, namely newsprint, potash, metal working machine tools, electrolytic tin plating, heavy-duty tyres, TV picture tubes and fisheries which would form the second industrial package for regional cooperation. The projects have been allocated for purposes of pre-feasibility studies to member countries as follows:

Indonesia:	heavy-duty rubber tyres
Malaysia:	metal working machine tools
Philippines:	newsprint and electrolytic tin-plating
Singapore:	TV picture tubes
Thailand:	potash and fisheries

(a) Heavy-Duty Tyres: Indonesia

Apparently, the selection of heavy-duty tyres is most appropriate not only because there is a large and growing demand for heavy-duty tyres in the ASEAN region, but also because the region itself is the major producer of the basic raw material, natural rubber. Although scale economies will justify the setting up of a large regional plant rather than a multiplicity of small national plants, the member countries either have domestic rubber tyre capacities already in existence or have planned capacities at various stages of commitment and implementation.

Indonesia has two rubber tyre plants in operation, producing about 10,000 units per year. In addition to these two, a new plant,

namely the Indonesia Tire, with a capacity of 4,000 units per year is being planned to begin operation in the early 1980s. Although the classification of rubber tyres is not readily available, the percentage share of heavy-duty tyres in Indonesian rubber tyres output is apparently small, for Indonesia is known to meet its demand for heavy-duty tyres mainly by imports from the United States and Japan.

Malaysia is the only ASEAN country which exports heavy-duty tyres. Malaysia has a plant, the existing capacity of which is 22,500 units per year. An expansion of the capacity amounting to 45,000 units of heavy duty-tyres has recently been completed. Malaysia has a fairly strong prima facie case to bid for the ASEAN heavy-duty tyres project, for Malaysia is the principal producer of natural rubber of SMR (which is ideal for heavy-duty purposes) variety with considerable experience in producing and exporting heavy-duty tyres at competitive prices, although the prefeasibility study of the project has been assigned to Indonesia.

The Philippines presently has an existing plant which produces rubber tyres including heavy-duty tyres, but there are no plans for the expansion of this capacity. A substantial proportion of the demand for heavy-duty tyres in the Philippines is met by imports mainly from Japan and the United States. Singapore produces heavy-duty tyres mainly for it domestic market but a sizeable proportion of national requirement is met through importation. Thailand's existing capacity for tyre production being small, the bulk of her demand for heavy-duty tyres is satisfied by imports mainly from Japan and the United States.

Indonesia, to which heavy-duty rubber tyres project has been

assigned, is presently undertaking a pre-feasibility study. However, it appears the study has been constrained by lack of pertinent data on market projections and expansion plans of existing manufacturing facilities in the ASEAN region.

(b) Metal Working Machine Tools: Malaysia

There are considerable scale economies in the manufacturing of machine tools and the ASEAN market for these machine tools is fairly substantial, thus warranting a pre-feasibility study as an ASEAN project.

Indonesia presently does not manufacture any machine tools. However, a workshop constructed to recondition machine tools has recently come into operation. This workshop has been designed to meet only about 10% of the total domestic requirements. Indonesia's current demand for machine tools are met by imports mainly from Japan, Taiwan, Germany, China and Hong Kong.

Malaysia, which is known to be bidding for the ASEAN machine tools project, currently has no plants to produce machine tools. Its entire demand is met from imports, the major sources of which are Japan, Taiwan and China.

The Philippines began to produce machine tools only in 1976 when the plant producing lathes started operation with a capacity of 1,900 units per year. In addition, two drill press plants with a total capacity of 2,120 units per year are nearing completion. The Philippines, however, will have to continue importation of machine tools to meet its shortfall. There are several firms in Singapore currently producing and exporting lathe drilling and grinding machines and Singapore has a number

of machine tools projects already under construction. On this basis it would appear that Singapore is an economically ideal centre for machine tools manufacturing in the ASEAN region. In Thailand there are five small firms engaged in the production of lathe drilling and shaping machine. But, Thailand depends also on imports for meeting her domestic demand for machine tools.

Malaysia was initially keen on hosting the ASEAN metal working machinery project. The pre-feasibility study seems to have revealed that the metal working machine tools manufacturing industry consists of a large number of sub-sectors which are at various stages of development in the ASEAN member countries. The situation appears to be somewhat similar to that existing in the diesel engine manufacturing industry. It is therefore unlikely that the project will ever materialise. However, the metal working machinery manufacturing may lend itself to ASEAN industrial complementation scheme. It is learned that Malaysia has, in-fact, suggested the coversion of the project from AIP to AIC status and COIME is seriously looking into the Malaysian proposal.

(c) Newsprint: Philippines

Southeast Asia has enough tropical timber resources which could be utilised in the production of newsprint for which there is already a large market in the region. The inclusion of the newsprint project in the ASEAN regional industrial package is thus appropriate.

Indonesia presently does not produce newsprint and relies completely on imports. However, a project is already underway in Indonesia to manufacture newsprint meant for domestic consumption. The project,

envisaged capacity of which is about 85,000 metric tons per year is expected to be in operation by 1985. The Indonesian newsprint project to be located in Kotog in Central Java, will make use of local raw material, long-fibered Pinus Merkussi.

Malaysia's demand for newsprint is satisfied by imports from Canada, Norway and Japan. It is of interest to note that Malaysia has signalled her interest to host the ASEAN newsprint project with a proposed capacity of 70,000 metric tons per year.

The Philippines, which is also a keen candidate for hosting the ASEAN newsprint project, has an existing capacity which turns out 84,000 metric tons of newsprint output per year which is barely sufficient to meet the domestic requirements. About 95% of the country's requirements is met by supplies from one large manufacturing firm under 30% tariff protection. This firm is presently using a 100% mixed hardwood pulp for its production. The present capacity is to be expanded to 105,000 metric tons by 1979. The Philippines has proposed to set up an integrated newsprint mill based on wood pulp and/or local materials such as sugar cane, rice straw, etc.

The Philippines has already conducted a pre-feasibility study of an ASEAN newsprint project and has a proposal to put up an integrated mill with a capacity of 350,000 metric tons per annum which is substantially larger than minimum economic-sized plant of 200,000 tons suggested by UNIDO. The ASEAN market appears to be large enough for a project of such an ambitious scale.

Singapore is the only ASEAN country which has no existing or planned newsprint capacity. Its newsprint requirements are met by imports.

Thailand, which has no existing newsprint capacity, plans to establish an annual capacity of 60,000 metric tons.

Presently, the ASEAN region relies heavily on foreign sources for supplies of newsprint. Supplies from within the region form less than one-fourth of the total requirements of the region. However, with the implementation of the ASEAN newsprint project the region can supply itself about 86 per cent of its total requirements.

Although four possible locations in ASEAN have been considered seriously for establishing the newsprint project, it is the Philippines which is bidding most strongly for it. It is also of interest to note that a FAO study on the prospects for the development of pulp and paper industries has been adopted as a planning guide.

(d) Electrolytic Tin Plates: Philippines

Despite the fact ASEAN countries, especially Malaysia, Indonesia and Thailand are the major producers of tin, the region has not been producing electrolytic tin plates, except in the case of the Philippines. Since the region has abundant supplies of tin as well as a fairly large market for tin plates, it is perhaps timely that the production of electrolytic tin plate is considered in the regional context so as to exploit scale economies which are substantial.

Indonesia accounts for about 23% of total demand for electrolytic tin plates in the ASEAN region. All of Indonesian requirements are presently met by imports from Japan, Australia and England. Three plants with a combined capacity of 40,000 metric tons per year have been planned. There are also plans to expand the capacity to 50,000 metric tons in the

near future.

Malaysia, world's largest tin producer has no tin plating plants and apparently has no plans to undertake such plants in the near future. Malaysia's demand for electrolytic tin plates, which represent 16 per cent of the region's total demand is met by imports mainly from Japan, Australia and the United States.

The Philippines is the largest consumer of tin plates in the ASEAN region, accounting for about one-third of the total region's consumption. The Philippines meets its requirements from its domestic supplies, the present capacity of which is 150,000 metric tons per year. The Philippines is keen to host the ASEAN electrolytic tin plating project, as it has the experience and expertise in the field.

Singapore, which is the most industrialised among the ASEAN partner nations, is second only to the Philippines in tin plate consumption. But all of Singapore's requirements are presently met by importation.

Thailand accounts for 16 per cent of ASEAN consumption of electrolytic tin consumption. There is a plan to put up a plant capable of producing 80,000 tons per year, sufficient to meet her domestic requirements.

Even if the planned capacities of Indonesia and Thailand materialise in the early 1980s, the ASEAN would only be able to meet about 60 per cent of its requirements and the shortfall of more than 193,000 metric tons is large enough to warrant an ASEAN electrolytic tin plating project.

The Philippines, to which the feasibility study of the electro-

lytic tin plating project has been assigned, has sought multilateral assistance for undertaking a detailed study.

(e) Colour TV Picture Tubes: Singapore

As much as 70 per cent of ASEAN's demand for TV picture tubes (black & white and colour) is already being met by national supplies within the region. However, rapid expansion of demand would significantly lower the level of self-sufficiency in the region despite a planned expansion of capacity by 224,000 units.

Indonesia imports most of its TV picture tubes mainly from Japan, Taiwan, the United States and the Benelux countries. There is one existing plant producing black and white TV picture tubes in Indonesia and there is also a plan to expand this capacity to 200,000 units per year in the near future.

Malaysia meets all its TV picture tube requirements through importation, the major sources of which are Holland and Japan. There are no firm plans to produce TV picture tubes locally.

The Philippines produces only black and white TV picture tubes and there are three existing plants with a combined capacity of 260,000 units per year. The Philippines is thus able to meet its domestic demand for black and white TV picture tubes. There is a plan to expand this capacity to 484,000 units per year. This might however result in a glut of TV picture tubes in the Philippines, unless the products are competitive enough to be exported.

Singapore currently produces 360,000 units of black and white

TV picture tubes per year. But Singapore's imports of TV picture tubes are substantial, owing to its entrepot trade. Thailand does not manufacture TV picture tubes and imports its requirements mainly from Japan.

Singapore has, however, found that the ASEAN market for colour TV picture tubes is too small to support an economic-size ASEAN plant. It is also of interest to note that Singapore is already in the process of implementing a national project to manufacture colour TV tubes for the world market, which can also supply the ASEAN requirement. Singapore has, therefore, made it clear that she is not interested in pursuing the project as an ASEAN industrial project.

(f) Potash: Thailand

The region's entire potash consumption is currently met by imports. The average consumption per head is estimated to 1.6 kg. per head. Thailand is the largest potash consumer, accounting for about 41 per cent of total ASEAN consumption, while Singapore's consumptions on the other extreme is negligible.

Indonesia accounts for about 14 per cent of total ASEAN potash consumption, and has a potash plant with a capacity of 10,000 metric tons per year.

Malaysia which is second largest consumer of potash in the ASEAN region, has no existing or planned capacity for the production of potash. The country's entire domestic requirements are being met by supplies from Canada, Africa, West European and the Middle-east countries. The Philippine's domestic requirements are met by imports from the United States, Canada and Israel, there being no local production of potash.

Singapore does not produce any potash and consumes potash only in negligible quantities.

Thailand, as noted above, is the largest potash consumer and thus apparently qualifies to host the ASEAN potash plant, even though Indonesia already has a small potash plant which supplies a part of its domestic requirement.

There is a close link between the potash project of the second package of AIPs and the rock salt/soda ash project of the initial package of AIPs. Although it is known that vast quantities of rock salt and potash deposits exist in the Northeast Thailand, the proven deposits of potash have not been accurately determined. Nevertheless, the chances of successful establishment of the potash project as an AIP appear to be bright for a number of valid reasons. First, there is a rapidly growing market for potash not only in the ASEAN but also in the rest of Asia. Second, there is hardly any existing potash producing plant in the ASEAN region with the exception of the small Indonesian plant to which references were made earlier. Finally, and perhaps most importantly, production costs could be minimized so that the product would be internationally competitive now that rock salt and potash could be extracted simultaneously from the same sites in the Northeastern Thailand.

(g) Fisheries: Thailand

The ASEAN countries import substantial quantities of fresh water and marine fish, owing to the poor harvest which is insufficient to meet the domestic demand. The existing capacities in the ASEAN countries are based on traditional methods which are responsible for the low produc-

tivity in the fisheries sector. The establishment of capital and technology intensive modern fisheries will help increase the harvest at reduced costs. This seems to make sense especially because of the apparently rich fishing ground in the ASEAN region.

Indonesia and Malaysia do have commercial fishing fleets, although no data are readily available regarding their capacities. Malaysia imports fish from Thailand, Taiwan and Japan while the Philippines imports from Japan, Morocco, the United States, Peru, Thailand and Japan. Singapore depends almost completely on imports while Thailand is the only ASEAN country which exports fresh water and marine fish.

Thailand has a developed special expertise and skill in fishing so much so that other ASEAN countries lag far behind Thailand in the field of fishing. Thailand, in fact, can be rightly regarded as the fishing nation in the ASEAN region. While Thai fishing experience, expertise and skill render Thailand as the most eligible candidate for hosting the ASEAN fishery project, there are formidable political problems to be overcome. Thais are often accused of encroaching into the fishing grounds of its neighbouring countries and it is unlikely that other ASEAN countries would allow their fishing grounds to be exploited by the Thais even for the sake of industrial cooperation.

(iii) Problems and Prospects

(a) Market constraints

The main thrust of the argument in favour of package deal agreements is that they would pave the way for the establishment of "new" industries on a scale which cannot otherwise be accommodated on a national basis. But, the contents of the industrial packages are not totally new to the ASEAN region in that there are already existing or planned capacities in one or more member countries. It is the presence of such capacities which cast serious doubts on the viability of the ASEAN projects. For, countries which already possess or have firm plans to put up such plants, will be unwilling or unable to open their markets to the products of the ASEAN project.

This indeed was the case with the proposed ASEAN diesel engines project. Indonesia has already indicated that it will close its market to diesel engines below 500 HP, while Malaysia and the Philippines would follow suit by closing their markets for ASEAN diesel engines below 200 HP and 400 HP, respectively, to protect their national diesel engines projects of corresponding HP ranges which are either in operation or being planned. Many of the projects contained in the second industrial package, especially newsprint, machine working tools, heavy duty tyres, TV picture tubes seem to have encountered similar problems. It therefore appears that no package can be designed with the entire ASEAN market in mind. All that these projects can possibly aim at is the residual ASEAN market. The size of the residual market will of course depend on the project in question, i.e., whether it competes with the existing or planned projects in any of the

ASEAN member countries.

This problem can be totally avoided by designing the package in such a way as not to step on the toes of any project which is already in existence or which is firmly planned in any member country. This approach would however seriously limit the range of industries. For, many useful projects which can be better organized on a regional basis are already being considered on a national basis. The problem can be resolved in the long run if the members agree to phase out existing domestic capacities and to scrap planned capacities. This however presupposes the prevalence of a strong spirit of regionalism within ASEAN. Such a possibility is clearly far-fetched in the present ASEAN context.

(b) Political realities

Package deal agreements are considered suitable for introducing new industries that do not at present exist in ASEAN. Package deal agreements will help set up giant industrial projects that cannot be sustained on a national basis, i.e., projects that entail substantial savings stemming from scale economies, with strong polarizing effects. Politically it appears to be easier to initiate package-deal agreements for industries that do not exist than to implement complementation programmes for rationalization of existing industries which are complicated by the existence of pressure groups in the member countries. This explains why an automobile complementation scheme proposed by the Philippines has apparently failed to win wide support in the ASEAN circles. ASEAN has chosen to avoid in the initial stages dangers of disagreements that are likely to arise from any complementation programme; and to concentrate on package deal agreements certainly makes good sense. Be that as it may,

both the first package of five projects as well as the second package of seven projects seem to be running into serious practical difficulties which may be ascribed to the political realities of the ASEAN region.

Despite the gradually rising tide of regionalism in Southeast Asia, ASEAN countries are strongly nationalistic in their outlook and approaches. ASEAN has found it easier to cooperate with each other on external issues of common interest, than on intra-regional matters. Experience has shown that ASEAN countries are not ready yet to make economic "adjustments" which seem to be painful in the short run, although such adjustments may well be in the long-term interest of all member countries. The inability or the unwillingness to grant preferential treatment to the AIP products simply because it would hurt existing domestic industries, is evidently clear. Some ASEAN countries have been unwilling or unable to abandon national projects which are still in the planning stage, let alone phase out the existing plants for the sake of industrial cooperation. It is mainly for this reason that several AIPs, including diesel engine, machine tool and colour TV tubes projects, have suffered abortive take-offs.

(c) Alternative approaches

It is possible to identify two different approaches to regional industrial cooperation. One approach calls for industrial planning which determines the choice, location, financing and other aspects of industries, while the other seeks private market solutions. The former approach requires specific trade policies to facilitate intra-regional movement of goods of selected industries through reduction if not elimination of intra-regional tariff and non-tariff barriers and to protect the chosen regional industries

from extra-regional competition through the establishment and enforcement of common external tariffs. The second approach, on the other hand, assigns a more active role to trade policy which will then provide an economic environment conducive to regional specialisation in manufacturing production and trade.

That ASEAN has opted for the first approach is manifest from the manner in which the first package of five projects has been identified and allocated among member countries. The experience so far with these five projects has brought to light some of the shortcomings of this approach. It appears in retrospect that the Bali decision on the projects was made too hastily, prompted by political will rather than by any serious preliminary study. In fairness, however, it may be pointed out that the Bali decision was merely to allocate the projects among member countries for the purpose of examining the feasibility of establishing the five plants.[12/] Implicit, however, was the understanding that the countries which undertook the feasibility studies would also host their respective projects if they were found to be economically viable. This was tantamount to placing the cart before the horse in the sense that the projects were allocated before their feasibility could be established.

The Bali-type approach contains two possible dangers: a good project may be rejected and a bad one may be implemented. For example, project A may not be economically viable if it is to be located in country X, which undertakes the feasibility study, but may well be economically viable if it is to be located in country Y, and the chances

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12/ Arndt, H.W., "Malaysia and ASEAN Economic Cooperation", Asian Studies Association of Australia and National Conference, Sydney (mimeo), 1978.

are that the project will be thrown overboard in the process; country Z which is keen on project C and which undertakes the feasibility study may make a case for it, even if its economic viability is in serious doubt, and use its political influence to persuade other members to extend preferential treatment which would render the project financially viable. These dangers can, however, be minimised if feasibility studies are undertaken by a supra-national body prior to project allocation.

As discussed earlier, the industrial projects, except for the urea project allocated to Indonesia, seem to be heading towards impasse even in the initial stages. Some others may be implemented for political reasons. Some of these projects are regarded with an air of scepticism in the ASEAN private sector, the active role of which is crucial for their successful implementation.

It is still possible, although unlikely, for some people to be implemented for political reasons. They may be supported by trade and other policies which are incompatible with efficient allocation of regional resources. The danger here is that trade policies might cause price distortions which affect adversely the economic welfare of society in general and of consumers in particular.

The second approach presents an almost diametrically opposite strategy for regional industrial cooperation. Under this approach, trade liberalisation becomes a prerequisite for industrial cooperation in the sense that free intra-regional trade will provide an atmosphere in which opportunities for efficient investment become apparent to private investors. The fact that the initiative comes from the private sector without solutions being imposed on it will facilitate an efficient

allocation of resources and the successful implementation of industrial projects.

Regional industrial cooperation should not necessarily be left entirely to private markets. Efficiency is not the only criterion for assessing any regional industrial project, and in any case, political realities may not permit the free play of private forces within the regional framework. These realities impose constraints upon the second approach, but they do not render it inapplicable. Complete removal of all trade barriers is too ambitious a goal, but selective trade liberalisation would preserve important elements of the second approach. The establishment of regional industries may proceed along the lines suggested by the following sequence of steps:

1. Identification of large-scale 'infant' industries which require a regional market to be viable during infancy.

2. The removal, complete or partial, of intra-regional trade barriers facing these industrial products.

3. Declaration of government policy support (effective subsidy) for investment in these areas (that is, how much society is willing to pay over and above world market prices and for how long).

4. Response from the private sector.

5. Institutional arrangements to impose such conditions as may be required to achieve other goals such as equitable distribution of benefits and costs.

Some of the problems associated with the present package of five industries would not arise if such an approach were adopted. But conflicts of national interests and political issues cannot be avoided totally. If it is necessary to find solutions that are completely acceptable to all parties, the range of eligible industries will be so narrow that the full benefits of regional cooperation will not be secured, and regional cooperation itself will become a futile exercise. A requirement that no member country feels that it is hurt by any single industrial project would clearly be the antithesis of the spirit of regional cooperation. Although one member country may not benefit from an individual project, it is possible for the nation to gain from a programme of industrial cooperation of which the project forms a part, with the negative effects associated with a given project more than offset by the positive effects associated with some other project.

CHAPTER VI

SUMMARY AND CONCLUSION

Between the Bangkok Declaration in 1967 and the Bali Concord in 1976 ASEAN had remained rather inactive in the field of economic cooperation in general and industrial cooperation in particular. After a long gestation period, ASEAN has finally taken positive measures to promote regional cooperation in the field of industrial development. The "package deal" approach towards establishing large-scale ASEAN Industrial Projects (AIPs) has so far provided the main thrust in the direction of industrial cooperation.

The concept of AIPs seems to be theoretically sound. It certainly makes a lot of sense for a group of countries which already have had considerable experience in industrial development. Economies of scale provide the main argument for the setting up of industrial projects which would serve the entire region. Enormous savings in costs and capital investments for regional projects vis-a-vis national projects are possible.

ASEAN countries are apparently at different stages of industrial development. This variation coupled with considerable variety found in resource endowments, would permit a fair degree of complementarity in new industrial projects which can be set up under the package deal programme. Politically, too, it appears that it would be a lot easier to initiate "new" package-deal projects than to reorganise or rationalise

the existing industries.

Theoretically, therefore, the prospects for AIIs appear to be fairly good. Inspite of all this, the progress of AIPs has been only modest. Of the initial five projects, diesel engine and superphosphates projects allocated to Singapore and the Philippines, respectively, have been abandoned. Of the three surviving projects, the Indonesian and Malaysian urea projects have already reached the implementation phase, while the rock salt/soda ash project allocated to Thailand is now under close scrutiny. ASEAN experience with AIPs thus seems to suggest that theory and practice are somewhat at variance.

Explanations for this "variance" are not difficult to find. In the first place, ASEAN exhibited considerable haste in the initial stage in identifying and allocating AIPs. A lot of embarrassment could have been avoided if preliminary studies had been undertaken before public announcements were made. It must however be pointed out that although ASEAN had shown haste in the identification and allocation of AIPs, ASEAN was not hasty in implementing them. This restrain of the part of ASEAN has prevented costly mistakes in the case of some projects, especially the superphosphate project, which were found to be uneconomical. It is also of interest to note that all these projects have been subject to close scrutiny and that no uneconomic projects are being bulldozed for political reasons in the name of regionalism. Even in the case of urea projects where some excess capacity is indicated in the feasibility studies, the ventures seem to be competitive enough for the product to be marketed outside the region eventually.

While it is comforting to note that the ASEAN cooperation

machinery ensures that no uneconomical projects would be implemented, it is disturbing to observe that ASEAN is not strong enough to overcome nationalism in member countries, that thwarts the establishment of good industrial projects on a regional basis. References may be made in this context to the diesel engine project in the first package and the colour TV picture tubes project in the second package, which could not be set up simply because some member countries were unwilling to wind up uneconomic national projects to make way for the regional project.

It appears in retrospect that the projects chosen for industrial cooperation were not "commonly acceptable". Some projects, which were acceptable to some member countries where no similar national projects were in existence, were unacceptable to others where similar national projects were either in existence or being planned. This "commonality" criterion would require that AIPs should be carefully chosen so as to avoid those industries which are already in operation or in the advanced planning stage, on a national basis, in any member country.

However, the commonality criterion, which excludes projects that are likely to bring national and regional interests into open conflicts, imposes serious constraints upon the scope for ASEAN industrial cooperation. While it is desirable to avoid such clashes or conflicts between regional and national projects especially in the beginning, the inevitability of stepping on each other's toes in the process of industrial cooperation should also be appreciated. Otherwise, many useful projects will be unnecessarily excluded, rendering regional economic cooperation a meaningless exercise.

Also, it is important to take a macro view of economic

cooperation and to consider project packages as a whole, because a strictly micro view of individual projects and a cost-benefit evaluation of individual projects in isolation can be highly misleading. For, a member country may lose a little in one project and gain a lot in another. Every member cannot expect to gain in every regional project. Besides, regional cooperation is not a zero-sum game. Seen in its entirety, regional economic cooperation can be worthwhile for all members, although some members may gain more than others in the process. What is sadly missing and badly needed in ASEAN is the spirit of give-and-take. It is in this sense that ASEAN still seems to be immature.

So far, the private sector response to the AIPs has been somewhat lukewarm, partly because the private sector participation in planning and decision-making has been almost nil. Private businessmen are not happy to let the bureaucrats make investment decisions for them. It is therefore necessary that private sector is consulted at every stage, if the private sector were to play any important role in the promotion of AIPs. But, the ASEAN approach seems to deny the private sector such a role in so far as AIPs are concerned. In this regard, ASEAN appears to rely heavily on central planning. The selections of industrial projects and the geographical allocation of them are strictly programmed, although the role of the market is not eliminated in the implementation phase. The danger inherent in this approach in terms of allocative inefficiency are fairly clear. Besides, such a heavy reliance on central planning requires a strong regional bureaucracy which ASEAN does not have.

The wisdom of customs union treatment for these projects through the imposition of common external tariffs can be questioned

seriously on both economic and political grounds. Economically, it is undesirable as it might shelter inefficiency; politically, it may not be possible for all members with different trade regimes to agree to any common external tariff. An alternative approach would be to eliminate trade barriers and create a climate conducive to investment so that the private sector can exploit the business opportunities in such a way as to bring about efficient allocation of resources in the region, with Governments playing an important role in providing funds, infrastructural and other supportive facilities. Other policy objectives such as equitable distribution of projects may be achieved through other means in such a way as not to stifle market forces.

That AIIs require the private sectors' support and participation in their implementation is readily obvious. While the need to consult the private sector seems to be generally acceptad by the ASEAN Governments, the present arrangements for consultation between the ASEAN-CCI and the ASEAN Governments are inadequate. It is important that ASEAN-CCI is placed in such a position that it can associate closely at various stages in the deliberations and decision-making process.

It is also important that decisions arrived at by the ASEAN Governments filter down fairly quickly through out the bureaucracy. There is no doubt that political will necessary for regional cooperation extends to the ministerial level of the ASEAN Governments, but this is not reflective of their entire bureaucracies. The political will necessary to promote regional cooperation must permeate the whole government bureaucracy. Thus, there is a need to develop closer linkages not only between the Governments and private sectors but also among the

various levels of the Government sector.

Having said all these, one must hasten to add in all fairness that ASEAN's achievements so far are by no means insignificant. No doubt, ASEAN's experience in industrial cooperation shows that there is much left to be desired, but the strength of ASEAN lies in its capacity to avoid costly mistakes, its courage to retreat if it is in the common interest of all, and not to let any set-back to dampen its spirit to try something new.

The atmosphere within ASEAN is now fertile and conducive for effective economic cooperation. Thorns in interstate relations have been removed, misunderstanding and distrust between member countries have been largely cleared, and teething troubles have been successfully overcome.

All these provide a basis for optimism. The ASEAN market is expected to grow by 2.3 times its present size in 10 years and to quadrupple by the year 2000. According to the World Bank projections, ASEAN consumption will expand four times to US$250 billion; investments will rise 4.5 times to US$80 billion; exports will grow 1.5 times to US$55 billion; and imports will increase 1.5 times to US$62 billion during the 1980s. It is important to note that none of these projections take into account the impact ASEAN regional cooperation could have in the 1980s. ASEAN economic cooperation particularly in the field of industrial development can be expected to multiply literally the economic opportunities within the ASEAN region far beyond those depicted in the above projections. This would further enhance the scope for AIPs. For, nothing succeeds like success.