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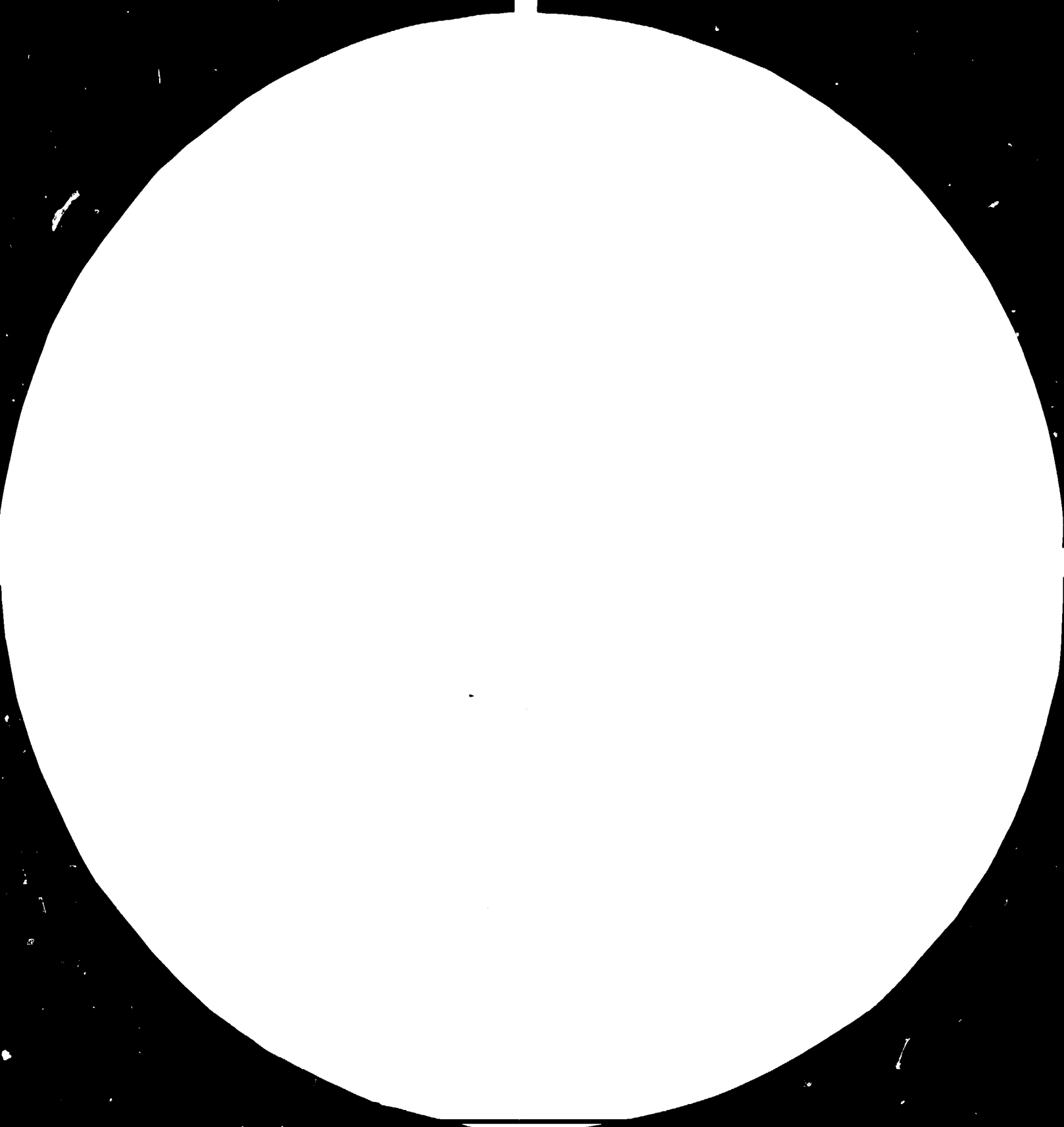
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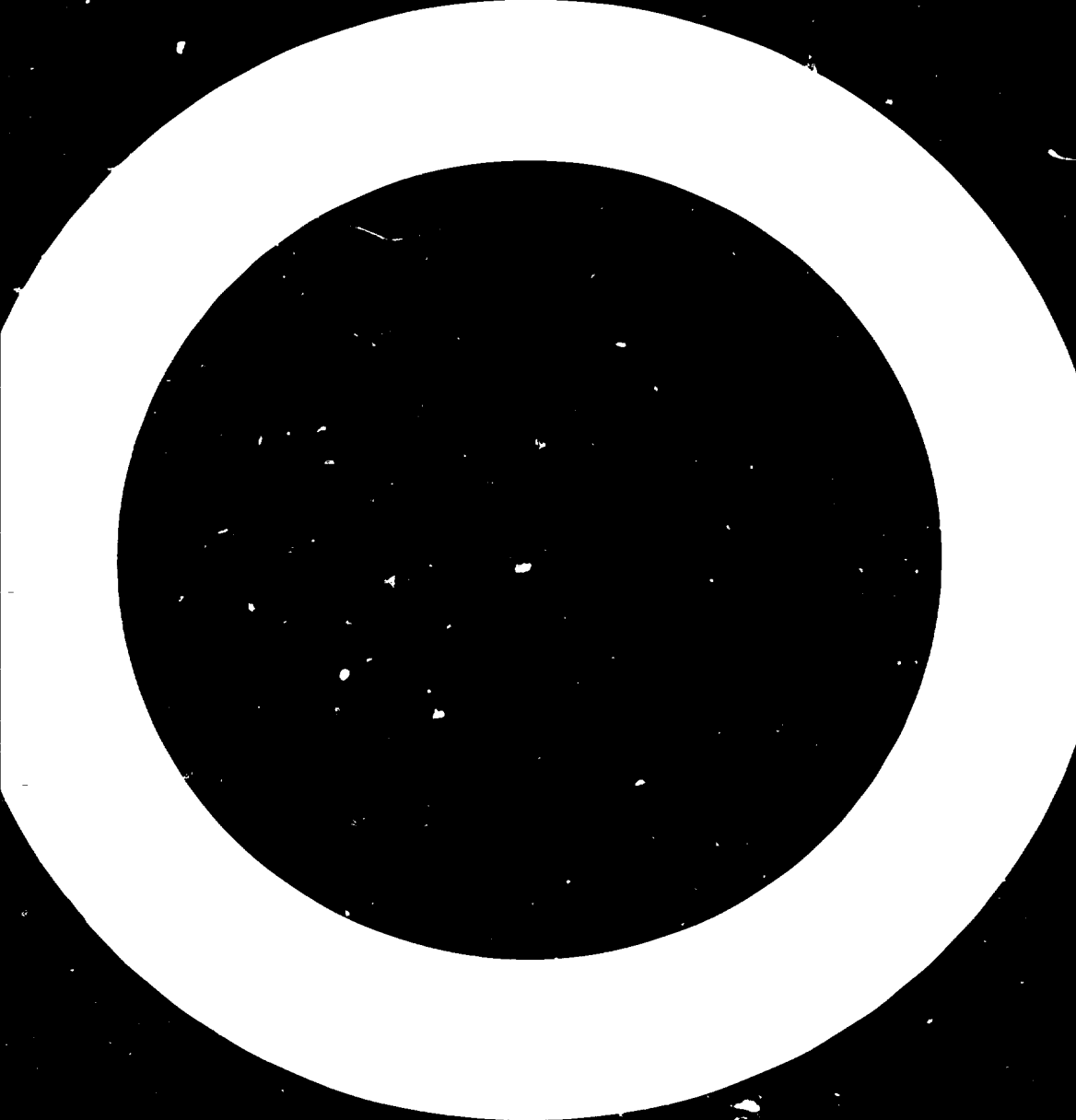
INDUSTRIAL RESEARCH IN AFRICA

Seminar organized by the RESCOM Secretariat and UNIDO
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Organized by the
Regional and Country Staff of the
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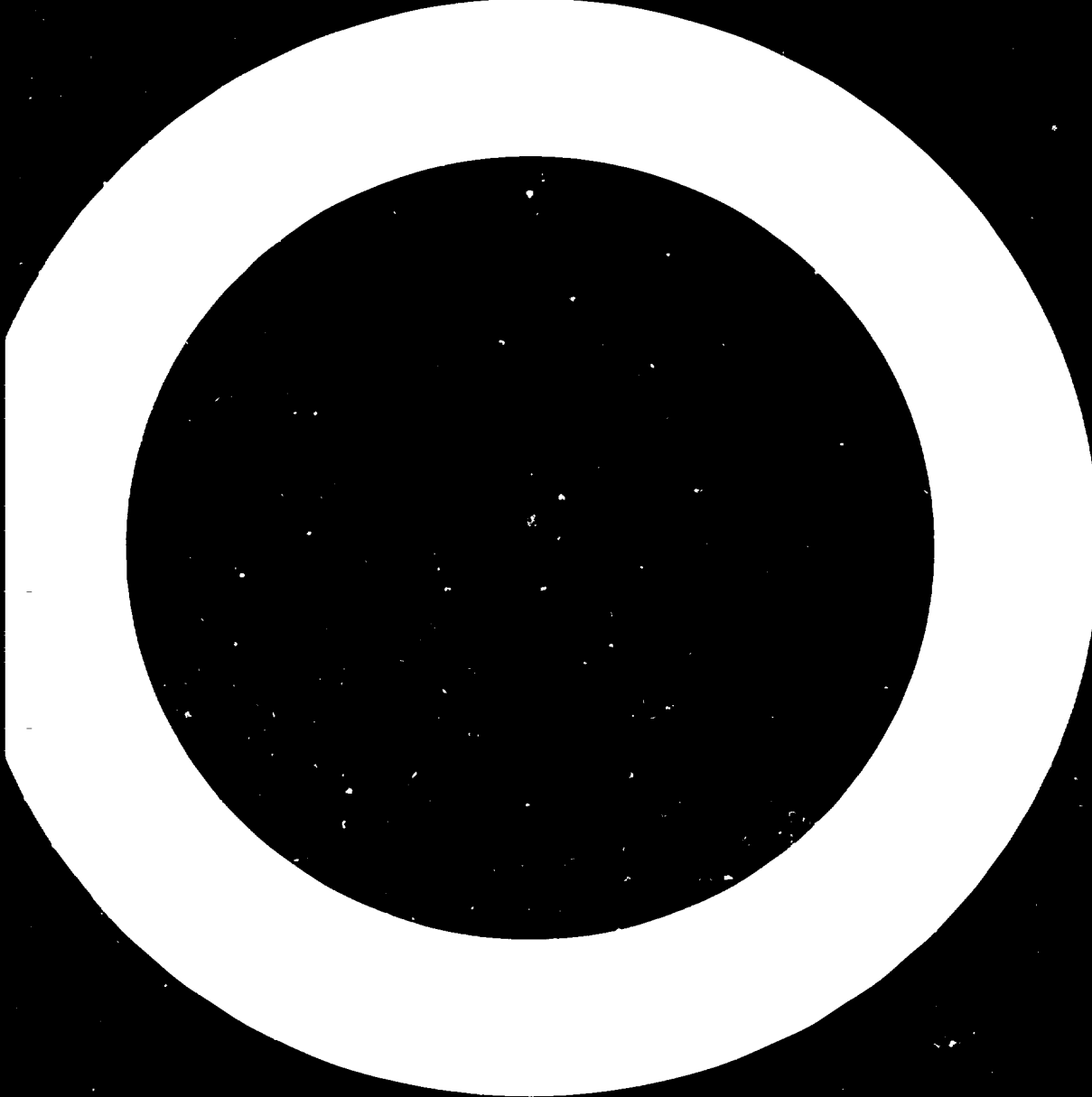
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EXECUTIVE SUMMARY

Introduction

The Fifth National Economic and Social Development Plan of Thailand 1982-1986, attaches high priority to the manufacturing sector as the leading sector for the country's economic development. Increased attention is therefore given to enhancing industrial development by better utilizing the potentials for and re-orienting the pattern of industrial development. Past developments have led to an impressive build-up of manufacturing capacities but the industrial structure did not generate sufficient growth impetus and employment, and was highly import dependent without attaining significant export proceeds. Production tends to concentrate in the Bangkok area and lacks integration between small-scale and large-scale industries.

In order to reactivate industry and to meet emerging challenges a programme of industrial restructuring is to be implemented during the current plan period 1982-1986. To this end the Government initiated a systematic review of the pattern of industrial development. The inter-ministerial Industrial Restructuring Committee (RESCOM) is responsible for the carrying out of these tasks. The National Economic and Social Development Board (NESDB), as secretariat of RESCOM, provides technical support to this work.

In the first half of 1983 the RESCOM secretariat had completed a series of studies on specific aspects of restructuring. In late 1982 UNIDO began collaborating with the RESCOM secretariat in this field. UNIDO missions provided inputs to the work of RESCOM through special subsector analyses.

It was envisaged that, after the completion of a first series of economic analyses in the framework of the restructuring programme, a review of the work of RESCOM and the findings and recommendations of the UNIDO missions during this initial phase 1982/83 should be undertaken. Such review was seen important for stocktaking the results, and ensuring feed-back and continued involvement of all agents concerned.

Seminar on Industrial Restructuring

General discussion

The Seminar on Industrial Restructuring in Thailand, jointly organized by the RESCOM secretariat and UNIDO, was held 22-23 October 1983 at Pattaya, Thailand. A group of some 35 high-level Thai officials and industry representatives, together with UNIDO staff and international experts, met for the purpose of jointly examining the results of the work relating to restructuring hitherto and enlisting comments and suggestions for RESCOM's future programme and the emanating recommendations for policy action. The intention was to assess the various identified elements of the restructuring programme, to get a response from the business community and to lay the ground for continued joint work towards structural changes and growth in the manufacturing sector.

In opening the Seminar, the Deputy Minister of Industry, H.E. Wongse Pohnikom, stressed the full commitment by the Thai Government to the country's industrialization along an own strategy and style. Although the country was not particularly rich in mineral-resources it has a solid agricultural base. Industry should be oriented towards utilization of this base. With a population of about 50 million and a per capita income of \$800 the domestic market was quite large, and there was thus more domestic market potential and less export-oriented industrialization than in several other countries in the region. However, the population was widely dispersed throughout the country. The pattern of industrial development should therefore be designed so as to integrate the various segments of the population to the largest extent possible into the development process.

The Seminar deliberations started with an overview on trends and forces in international industrial restructuring. It was mentioned that as part of the global process of structural change in industry, in the past decades developing countries have built up a significant industrial base and have become increasingly integrated in the world production system. The current international crisis had, however, revealed deficiencies in the production structure in the developing countries. New emerging challenges to existing

structures call for a process of adjustment of these structures with several dimensions - the international, the national, the institutional, the resource and the technology dimensions.

The international process of structural change continued to proceed but along different routes and more erratic and unpredictable as compared with previous decades. The restructuring process in OECD and the changing nature of this process had severe implications for the developing countries. There was therefore an increasing need for individual developing countries to continuously gather information about the rapid changing conditions especially as concerns technology and markets, and to assess this information in direct consultations between the government and the industry concerned. Only by such continuous awareness and active pursuance of industrial restructuring could developing countries regain momentum in their industrialization.

It was against this background the programme of restructuring in Thailand was launched. The Fifth Plan identified the major constraints facing the Thai industry and specified the broad goals of development to 1986:

- The rationalization of production structure and investment incentives;
- Increase in manufactured exports;
- Establishing industries in rural areas; and
- Integration of small-scale industries into the industrialization process.

RESCOM being entrusted with the task to analyze and co-ordinate the programme had established a detailed timetable of industrial subsector studies. On the basis of these a set of reforms of relevant financial, taxation, foreign trade and technological policies and institutional measures had been and was being conceived. It was felt that this ambitious and complex programme had made substantial progress. Restructuring of industries had advanced through the work of the Joint Public/Private Sector Consultative Committee, under the Chairmanship of the Prime Minister. It proved to be essential for the progress of the work that through this arrangement it had received the required political backup.

It was felt that some key issues concerning subsector strategies, policies and institutional reforms now needed to be moved forward to a decision. Continued work in close co-operation with the industries and the other government authorities concerned was also needed in respect to further industrial subsectors.

The experience of other countries in the region in terms of the development and restructuring process in industry was seen as essential to analyse and consider. In this context the policies of the Republic of Korea were briefly reviewed. The country's first Five-Year Development Plan, launched in 1962, had placed heavy emphasis on economic growth through export promotion and started a growth explosion which continued unabated for about 20 years and transformed Korea from a largely agricultural economy into an industrial economy.

During the last years, the Korean government had decided to adopt new strategies that would be geared to the changing international economic environment and thus be able to ensure sustained growth in manufacturing. These strategies implied that since the Korean economy had become large and complex, policy-makers in the government were confronted with increasing challenges which required involvement of the industry itself in interpreting and reacting to the market mechanism so as to ensure efficiency in resource allocation and efficiency at the plant level. It was noted that obviously the signals of the international markets are not necessarily parameters that can provide a firm basis for a country's strategies. These signals needed to be analysed extremely carefully and their likely impact on the respective country's industry assessed. Economic research in this context was indeed indispensable both for government policy formulation and for the corporate strategies.

Korea had conceived a forward-looking policy concerning the inflow of foreign technology as a key element of the industrial strategy which was conceived towards achieving both stability and growth. It was stated that one important lesson to be drawn from the Korean experience and the structural transformation that had evolved over the past two decades, was the importance - given the right circumstances - of an outward-looking development strategy as result of judicious utilization of Korea's comparative advantage in the

world market. It was suggested this strategy had been based on a conception on the part of the major entities, public and private, in the Korean economy regarding the kinds of structure Korea was striving to attain by an assessment of the growth dynamics and the prospects of development of particular industrial sectors.

Korea had in the early stages not been taking adequate account of agriculture and of the rural sector. This had serious effects in terms of loss of real income in the rural area leading to migration to the towns and to increased dependency of food imports for quite a while. Korea has since endeavoured to rectify the policy and to create a broad base for overall development.

It was emphasized that there was a necessity of awareness in various countries, about the internal dynamics of industrial growth for development. Reference was made to the problem of trying to increase industries' competitiveness through trade liberalization in a period of fierce and erratic international competition and protectionism in major markets.

In conclusion it was stressed that in its restructuring programme the RESCOM secretariat should monitor both international and national developments. It would be essential to check, on an annual basis, whether the restructuring efforts were going in the right direction, policy-wise, strategy-wise and management organization-wise.

Restructuring in electrical and electronics industry

The electrical and electronics industry had been subject to a RESCOM secretariat study. The study identified several key issues which needed to be tackled:

- The industry was subject to an inappropriate protective structure, giving more incentives for certain kinds of production and less to other (without rational grounds);
- The tariff structure discouraged production of parts and components;

- Some products were subject to an exceptionally high business tax rate (30 per cent); this had resulted in the establishment of a number of illegal (unregistered) factories;
- Government procurement policies were not directed to systematically promote local industries; there would be significant scope for such policies;
- Export promotion measures were not sufficiently effective;
- No systematic promotion for rural location of small- and medium-scale industry was pursued;
- Technological developments were not promoted to any significant degree.

Four specific objectives of the restructuring of the sector had been borne in mind, namely (i) the need to promote production for exports; (ii) the increased production of parts and components; (iii) the creation of an ancillary relationship between large and small firms; and (iv) locating industries in rural areas.

The study had suggested a policy package comprising proposals in the fields of rationalization of tariff and tax structures; of public procurement policies; of export credits and export marketing services; and of industrial services, technology contracts screening, testing and standards. These proposals, it was noted, had to various degrees been followed up. One problem was, however, how to incorporate and affect the informal sector.

Another problem was to avoid a narrow sectoral approach when considering changes in tariff rates. Experience showed that, when attempting to reduce tariff rates for final goods, difficulties emerged regarding tariffs on parts and components and materials used in production of these parts and components. On the other hand free import of such items would have adverse effects on the local parts production.

It was noted that there were real long-term prospects for the development of Thailand's electronics and electrical industry, but that no self-propelling development could be expected. There was need for a spark that sets development in motion. One key question to be examined concerned the choice of market orientation of the industry. A number of significant changes could be observed in the world and it could be expected that, for

instance, there could be a shift of location from some of the established exporting centres, like Hong Kong, Republic of Korea, Malaysia and Singapore, to new locations for products that have become standardized. These new locations might include Thailand, as well as countries such as Bangladesh, the Caribbean countries, China, the Philippines and Sri Lanka.

Restructuring in the automotive industry

The specific situation of the Thai automotive industry should be seen against international development and trends in the industry. It should also be noted that the problems facing Thailand were not unique for developing countries. Special policy measures were in fact taken in many countries of the Third World to restructure the auto industry.

In Thailand data was readily available both in the industry itself and in government on the current structure and development. However, it was suggested that more should be done in terms of compiling and analysing this information so as to be able to more systematically use the data for policy formulation and implementation.

The local Thai automotive industry, having been established on basis of import substitution involving assembly operations with successively increasing parts production, should now move from mere import-substitution towards exports. Account had thereby to be taken of the fact that the international auto industry is dominated by large transnational corporations which have their own strategies and channels of organization of production and trade. Consequently if Thailand was to pursue production for exports, e.g. in terms of components, intra-corporation channels would necessarily have to be used. The future of the Thai auto industry would thus have to be paved through negotiation with these entities.

In this connexion the current comparative advantages would be of limited importance when negotiating with the large corporations as these were deciding on strategic locations of production on the basis of a wide range of factors and policy considerations. Indeed there could not be fixed sets of recipes or guidelines for building up an automotive industry. Due

to the rapid technological changes in the industry the building up of local content over time would be a difficult task.

It was found that, if Thailand wanted to keep various types of automotive production and components manufacture, there would be a need for negotiating new types of agreements with the companies. As these were possessing thorough knowledge in terms of technology and markets, the building up of technical, market and financial skills needed for effective negotiations would be an urgent requirement in the Thai situation. Even then, these corporations which were making investments as part of an integrated international network may be reluctant to renegotiate or modify prevailing arrangements.

Financial institutions and industrial restructuring

The subject of financial institutions in the context of the Thai industrial restructuring process required significant attention. Three specific aspects of the restructuring programme were singled out, namely, financing related to (i) export promotion, (ii) support of small and medium industry and (iii) decentralization of industry out of the Bangkok metropolitan area.

It was indeed crucial to give due prominence to the financial institutions and the development of the financial system. It was noted that there was a lack of suitable long-term financial instruments for restructuring. It was true that the banking system had certainly been able to channel funds to the industrial sector and that IFCT was providing long-term finance but the expected new requirements could probably not be met fully in the present system. In particular, the needs of the small and marginal borrowers were not adequately met. Suggestions had been made for the establishment of a new institution for small and medium industry or a reorganization of the existing one, the Small Industries Finance Office (SIFO). It was also proposed that a scheme may be developed with the commercial banks in the form of an industrial credit guarantee scheme, to reduce risks of these banks and other financial institutions

Exporters faced severe financial constraints. One issue was the system of export credit guarantees for the small and medium exporters. This matter which had been examined by the Export Development Committee needed to be further pursued. Other issues were export (trade) financing and financing for export production. It was noted that the recently approved UNIDO/ITC assistance included expertise for the carrying out of the basic work with the Bank of Thailand regarding the export credit guarantee and export (trade) financing schemes. The third item - financial support for production for export - was an important area which remained to be looked into.

Export promotion

In the context of the Thai industrial restructuring process three main export promotion issues - apart from the above-referred issues on financial support for export industries - emerged, namely, (i) the role of the Export Development Committee, (ii) the role of the Board of Investment in respect of the country's export promotion system and (iii) the support by the Ministry of Industry to export industries.

It was recognized that the Ministry of Commerce, and especially the Export Services Centre - under the general guidance of the Export Development Committee - were carrying out important promotion programmes, such as the Bangkok Gems Centre Programme. A number of other initiatives had also been taken. The main attention had, however, been given to the removal of major administrative obstacles affecting the export efforts of the private sector. This was no doubt an essential endeavour which needed to be continued.

The suggestion was made that an export industry division or unit be set up within BOI to review applications for investments aiming at exports. The aim would be to assess the envisaged export potentials and the need for special consideration of the project by BOI already at the stage of investment and production planning.

It was also suggested to strengthen the Industrial Services Institute at the Ministry of Industry so that it could play a more effective role for guiding the country's small- and medium-sized industry in manufacturing for export in terms of quality control and quality improvement as well as technology choice.

Investment incentives

The investment incentives - tax incentives and non-tax incentives and institutional issues - were seen to play an essential role in the Thai industrial restructuring process.

It was stressed that the present granting of BOI incentives was based on priority criteria fully consistent with overall development objectives. The criteria included the consideration of the market (domestic or export), the size (big firm or small firm), the location (Bangkok area or in other provinces) and the employment generated. There was, nonetheless, a need for more precision in the decisions and rules for providing an adequate amount of incentives. Such precision would facilitate the work of the BOI committee and the mini-BOI when deciding on how much incentives should be granted to achieve the desired effect.

The existing structure of tariff rates, it was noted, favoured raw material imports, and could thus be seen to serve as a positive incentive to manufacturing. However, there was need for adjustment of tariffs in the case of intermediate goods and capital goods. As concerned rebate and refund for exports, the Ministry of Finance was said to operate these in an increasingly expedient manner. Regarding non-tax measures, it was noted that there were a number of important measures exercised by different government departments. In order to better co-ordinate with the BOI policies, the Ministry of Industry had, for instance, recently announced that no factory permits would be granted to those industries for which BOI had introduced a policy to limit or temporarily freeze new investments.

In order to meet the objectives of the location policy, more effective incentives and support would be needed. The difficulty for the Industrial Estate Authority of Thailand (IEAT) in providing inexpensive sites and facilities was noted. It was important to have (budgetary) support to create new locations. There was a tendency for industries to establish on inexpensive sites just outside the estate area and thus utilizing the infrastructural facilities without actually moving into them and contributing to the operation of the industrial estate per se. This matter required closer examination.

Regarding the institutional aspects, it was felt that the establishment of a mini-BOI had gone a long way to increase the expediency of the granting of promotional privileges. However, it had also made apparent the still limited capacity of the BOI secretariat to make the necessary preparatory assessments before the projects were presented to the mini-BOI. There was thus an urgent need for a strengthening of the Project Evaluation Department of BOI. Consideration was also to be given to the possibilities of simplifying the project forms for projects to be considered by the mini-BOI. Another measure that could shorten the time of the project evaluation work was the, so called, sectoral approach to promotion.

It was felt that the 'one stop service' put into operation early in 1983 at the Ministry of Industry had been of great help to those applying for factory permit in the Bangkok area. Corresponding services would be needed outside Bangkok to promote the location of industry there.

Technical assistance for engineering industries

There was a strong notion that, in the Thai society and industry, proper status and priority should be accorded to the engineering industry as the backbone of the country's industry sector. In order to assess and more systematically utilize its growth prospects there was a need to analyse prospective domestic demand for this industrial subsector on the basis of the internal growth dynamics in the Thai industry and agriculture, and to assess in detail public sector demand, for instance in terms of the public

utilities' plans for procurement of equipment and other engineering goods. The experience of other countries was referred to in respect of building up, expanding and/or upgrading their engineering industry in the course of major infrastructural investment programmes, such as transport.

Reference was also made to the possibility of unpackaging foreign projects. Both in the case of bilateral projects and through foreign investment, there was a tendency to provide a complete package of engineering products, some of which could have been economically and technically feasible to subcontract locally. The experience of other countries in negotiating local inputs could be examined.

Besides carrying out these programmes to build up the demand side, the supply side should be attended to simultaneously.

In this connexion an action plan for the provision of a comprehensive and co-ordinated technical assistance for the engineering industries was proposed. One major measure would be to strengthen and restructure MOI's Industrial Services Institute. It was proposed to rename it to the "Industrial Services Division", and to establish an Engineering Industry Development Section in this Division.

A second essential measure would be the establishment of the Technological Development Centre. Moreover, it would be important to formulate a government incentives package for technological development. Other measures would concern the proper handling of standards in the engineering industry as a vital step in increasing the scope for both local and export sales and ensuring rationalization of the linkages within the subsector and with other subsectors. To this end the strengthening of the capability of the Thai Industrial Standards Institute (TISI) and the establishment of a National Measurement Standards Board would be essential first steps.

Attention was given to the need to establish and strengthen the country's engineering consulting capacities. It is through these capacities that the products of the engineering industries are brought to

the clients, the clients can provide feedback to the producers and the engineering production can be upgraded and geared to the requirements of the domestic and foreign markets.

The role of the Thailand Institute of Science and Technological Research (TISTR) was emphasized in connexion with institutional support to the engineering industry. The Board of TISTR was actively looking into the possibilities of establishing a direct connexion with the engineering industry restructuring programme. The Minister of Science and Technology, who is responsible for TISTR had given his full agreement to such a move.

Follow-up Discussions at Bangkok

Following the Seminar, a meeting was held in Bangkok (on 25 October 1983) to discuss follow up activities connected with the industrial restructuring work. In particular the future implementation work in three areas, namely, export promotion, investment incentives and technical assistance for engineering industries was discussed.

Regarding export promotion, most attention was given to the ways and means of streamlining the administrative and organization aspects of the promotional programmes. The question of collection and dissemination of export market information was seen as important issue. Lessons could be drawn from the Republic of Korea which had actively enlisted the support of large trading corporations and trading houses in the promotion of exports.

As regards the investment incentives it was emphasized that incentives should be more systematically designed and applied according to government priority in terms of subsector development, the market orientation, location and other development objectives. To this end a series of analyses would need to be made on, for example, subsectoral growth potentials. Moreover, it could be important to investigate in greater detail what sort of specialized incentives would be most effective in promoting the various sectors and how the incentives should be applied so as to ensure the respective subsector to grow and adjust over time.

The proposed action plan for the technical assistance to the engineering industry involved, inter alia, institutional reform, strengthening of the R and D system and establishment of an incentives package for technological development. There was a strong need to analyse in detail and monitor the development of each subsector of the engineering industry so as to ensure effective support and a more dynamic approach. In this connexion reference was made to a subsector study on foundry work and on tool and die making recently carried out by the Industrial Services Institute of MOI.

There was a need for establishment of linkages between the small- and medium-scale industries which are locally owned and traditional with the large industries, often foreign owned or joint ventures. There was very significant benefits to be reaped, especially in the engineering industry from such linkages. In order to help establish such emphasis, the supply side and the market side (including government procurement) should be brought in closer contact. It was proposed that in order to give due recognition of the capabilities and prospects of the engineering industry, a "day of the Thai engineering industry" should be organized in 1984. An exhibition could be held simultaneously on products of the large- and the small-scale sector. A high-level seminar should be organized with working groups so that the various matters concerning the engineering industry would be systematically reviewed and considered by policy-makers and planners as well as industrialists. The seminar would stress the central role of the engineering industry in the country's future industrial development and restructuring.

Summary listing of proposals and recommendations

A great number of specific proposals and recommendations for action in furthering the Thai industrial restructuring were put forward at the Pattaya Seminar and the Bangkok Follow-up Meeting. In the following listing an attempt has been made to systematically present these proposals and recommendations.

I. Overall framework, assessment and monitoring

- (a) There is a need for a macro framework for the entire approach.

There is a need for more attention to be given to the monitoring and interpretation of the restructuring development. A check has to be made on an annual basis, whether the country's restructuring is going in the right direction, policy-wise, strategy-wise and organization-wise.

- (b) The monitoring should be against the targets set and provide a picture of the policy measures.

Targets to relate to: - Exports
- More resource-based and intermediate products, including parts and components
- Non-metropolitan location
- Small industries and their linkages

As far of production growth rate and export targets are concerned it is recognized that these do not necessarily reflect the full dimensions of dynamic growth.

Framework for assessment or criteria would be (i) the correspondence to the development objectives and (ii) the efficiency or expediency in the implementation of the measure.

There may be a tendency to check off the items of the restructuring programme, instead of having a flow concept.

- (c) One would like to strive for a general system whereby things would be taken care of by themselves rather than needing people to take up actions all the time, or more automaticity through the general system.

The Thai Government is now moving towards a stage where it would liberalize and lessen the interference and let the market mechanism operate fully; however this means they have to fight against the fierce international competition.

II. Export promotion issues

- (a) In order to achieve the targets set it is important to try, above all, to remove obstacles to exports, before introducing a variety of new subsidies to push exports.
- (b) There was general agreement that the information system or marketing could be improved. The best ways of improving might be to involve the private sector more in the collections and dissemination of the information.

One other measure might be the introduction or expansion of instruments in the area of quality control.

Exhibitions and trade fairs was one thing, but in order to better launch such promotional offensives, the strategic planning or research type of activity should be invested in more.

Export promotion development work in specific programmes had been successfully undertaken on basis of co-financing. Such activities should be intensified.

III. Location issues, small industry development issues

- (a) Regarding decentralization through incentives, it should be borne in mind that the incentives themselves are only one factor. Much more important is the development of the area where one would like to have industries located (like the Eastern Seaboard Development).
- (b) There is a need to establish linkages between the small engineering industries and the larger more modern ones, so these industries would benefit from each other.

For the small (engineering) firms, the government or any local institutions should put in much more efforts on making the world market as well as the local market for intermediate goods transparent, because there are many possibilities for the small firms to supply large firms; in other words there is need for action to ensure that guidance is provided regarding the kind of demand that would have to be recognized by small firms.

- (c) In the restructuring of industry full account should be taken of the possibility of expanding domestic-market oriented industry into the regions, other than the Bangkok area.

IV. Industry sector issues

- (a) There is a need for strategic decision of the future position of subsectors. It is important that the government has a clear grasp of what it sees as the dynamics of its own role and has a concern with the way particular industries sectors are being developed.
- (b) One should also avoid to come into a situation of a "flee forward" syndrome; that is, avoid to try to go into new projects as a remedy for existing ones, but rather be very careful and look at existing problems that one has in the industry in the sector concerned.
- (c) Close attention should be given to the monitoring and interpretation of international development that affects various subsectors. For instance, there was a need for continued monitoring of comparative policies in the auto industry with ASEAN.
- (d) Which type of firms should there be incentives for? One aspect here is the problem of the financial structure among the sectors. Attention should be given to the financial structure in different sectors and on the financial behaviour of the commercial banks which may be inconsistent with the restructuring programme.

- (e) There is a need for subsector studies of engineering industry and development of incentives packages (e.g. for technological development).

The Thai engineering industry production, the country's capabilities, problems, bottlenecks ect., may be discussed at a 'day of engineering industry'.

- (f) There is need for joint discussions between the industry and government to establish stable and clear policy guidelines for both vehicle and component production in the auto industry.

There is a need to specially investigate the possibilities of new investments by component producers in the auto industry.

- (g) There is a need for establishing functional relationships between the various subsector actions.

V. Investment, technology issues

- (a) The tariff structure is not very conducive to local intermediate products or parts production.
- (b) The investment project evaluation does not seem to have received systematic attention. BOI may, in particular, look closely at the possibilities of fulfilment of export prospects as envisaged in export-oriented projects.
- (c) Thailand does have significant capability in basic process engineering - but it is in universities, research institutes etc. When one is talking about production in the engineering industry and, in particular, in the small firms, these capabilities are not utilized.

VI. Domestic demand policy issues

- (a) There is a certain neglect of the tremendous potential of domestic demand, including government procurement. General guidelines for this procurement and specific assessments (of e.g. telecommunications' 10-years programme) are needed.

The importance of unpackaging of big foreign (turn-key) projects should be given attention to, including the building up of local consultancy services in this context.

- (b) More emphasis should be placed on the supply aspects (say, in engineering industry) both internally and at the international level, so that Thailand's relative competitiveness and potentials compared to other countries is given full attention.

VII. Institutional issues

- (a) The importance of institutionalization of the industrial restructuring was recognized, in particular, the institutionalization of public/private sector co-operation. Much had been done through the Joint Public/Private Sector Consultative Committee, because it had received the political backup. Much had been done in terms of politicising the industrial restructuring as such. However, the specific restructuring actions or measures, at e.g. subsector level, might be subject to more attention in that context.
- (b) There is evidence that - under conditions of openness to world systems, and conducive domestic organizations (by way of co-operation between public and private entities) - developing countries, like the Republic of Korea, are moving well into complex areas of production. For export-orientation to be successful the domestic organization has to be well geared to such tasks.

One thing which had been much underestimated in the Thai restructuring work was the limitation of government agencies.

- (c) There is a basic institutional problem related to the awareness among policy-makers concerned (as well as the private sector) with regard to the limitations of the existing industries structure and the need to decentralize industry.
- (d) The importance of having such seminars as the Pattaya Seminar on Industrial Restructuring with participation of policy-makers and industry representatives of concerned industry sectors was confirmed as constituting a much needed window to international development.

I. INTRODUCTION

The Fifth National Economic and Social Development Plan of Thailand 1982-1986, identified industrial manufacturing as a high priority for the country's economic development. Increased attention would be given to enhanced industrial development within overall economic growth by better utilizing the industrial potentials and re-assessing the pattern of industrial development.

The past development pattern had not only led to an impressive build-up of manufacturing capacities but had also led to the establishment of an industrial structure which does not generate sufficient growth impetus and employment. Industry tends to be highly import dependent without attaining significant export proceeds. Production tends, inter alia, to concentrate in the Bangkok area, lacking integration of small-scale with large-scale industries and to be energy intensive.

A lack of built-in flexibility to meet emerging challenges and overall economic goals prompted the Government to initiate a systematic review of the pattern of industrial development, and a programme of industrial restructuring was to be implemented during the current plan period 1982-1986. The major goals of this industrial restructuring programme as defined in the Fifth Plan were:

- to increase the proportion of manufacturing value added contributed by manufacturing exports from 15 per cent to 25 per cent in five years (by 1986). Production for exports was expected to grow by 20 per cent per year and production for domestic sales by about 6 per cent per year;
- to increase the proportion of manufacturing value added in areas outside Bangkok Metropolis and the four nearby provinces; and
- to increase the proportion for value added to small-scale industries.

These goals were to be achieved through a systematic pursuance of (i) rationalization of protection structure and investment incentives;

(ii) promotion of increased manufacture of exports; (iii) promotion of industries in areas outside the central region; and (iv) promotion of small-scale industries.

Effective policy measures to this end were to be conceived on the basis of analytical work. The National Economic and Social Development Board (NESDB), as secretariat of the Industrial Restructuring Committee (RESCOM), was entrusted with the task of providing technical support to this work. The inter-ministerial RESCOM is responsible for the management of the industrial restructuring programme under the Fifth Plan.

In late 1982, UNIDO entered into close research collaboration with the RESCOM secretariat. Specifically, a number of brief missions were undertaken with the purpose of providing assistance to RESCOM and its secretariat in carrying out the 1982/1983 Work Plan. These missions were as follows:

- October-November 1982, on general issues regarding industrial restructuring in Thailand (Ake Liljefors, Einar Muegge, Peter O'Brien)
- December 1982, on automotive industry (Peter O'Brien)
- February-March 1983, on promotion of industrial export production (David Wall)
- February 1983, on plastic industry (M. Youssef)
- May 1983, on chemical industry (M. Tsezos).

The findings and recommendations of these missions provided important inputs to the work of RESCOM in this initial phase. In addition, UNIDO/UNDP has been providing longer-term technical expert assistance to the RESCOM secretariat in the field of automotive industry since May 1983, and in chemical/petrochemical industry since November 1983.

During the first half of 1983, the RESCOM secretariat, furthermore, completed comprehensive studies on export promotion in processed food and textile products, technical assistance for the engineering industries and development of financial institutions for industrial restructuring.

It was considered at Thai policy-making level that, towards the end of 1983, a review of the work of RESCOM and the findings and recommendations of the UNIDO missions during this initial phase 1982/83 would be of great importance for preserving the high momentum achieved and widening the effects of the industrial restructuring programme.

In this light the Seminar on Industrial Restructuring in Thailand was held on 22 and 23 October 1983 at Pattaya, Thailand, organized by the RESCOM secretariat and UNIDO. A group of some 35 high level Thai officials and policy-makers and industry representatives, together with UNIDO staff and international experts, met for the purpose of (i) examining the results of the RESCOM work hitherto; (ii) exchanging views on, and discussing, these results; and (iii) enlisting comments and suggestions for RESCOM's future programme and the emanating recommendations for action. The intention was to assess the various issues of the restructuring programme in their entire context, to get a response from the point of view of the business community and to lay the ground for continued joint work towards structural changes and growth in the manufacturing sector.

To this end the participants, on the basis of their experience and of available documentation, were to analyze the pertinent domestic and international prospects and challenges for Thai industry in the 1980s and examine the sets of possible policies and measures at micro and macro levels conducive to the industrial restructuring required. Selected industrial subsectors were to be examined in particular detail. The programme for the Seminar is appended to this report as Annex 1 and the list of participants as Annex 2.

Subsequently, on 25 October 1983, a meeting was held in Bangkok for the purpose of providing for more detailed discussions on follow-up activities, with participation of the RESCOM Secretariat, selected government officials, UNIDO staff and some international experts. The programme and list of participants of that meeting are appended as Annex 3 and 4, respectively.

A listing of all documents distributed to the participants as well as those available at the Seminar as background documentation is provided in Annex 5.

The present Report of the Seminar is intended to provide a detailed account of the proceedings of the Seminar. While, owing to the need to limit the size of the report, the presentations made on various subjects and the subsequent discussions are being presented in a condensed form, the intention has been to provide the necessary details in particular whenever specific aspects were taken up of direct practical interest to the future work within the country's industrial restructuring process.

II. OPENING OF THE SEMINAR ON INDUSTRIAL RESTRUCTURING IN THAILAND

The Seminar on Industrial Restructuring in Thailand was opened in the morning of 22 October 1983 by the Deputy Minister of Industry H.E. Wongse Pohnikorn on behalf of the Minister of Industry H.E. Ob Vasuratna.

In the opening address to the Seminar, delivered by the Deputy Minister of Industry H.E. Wongse Pohnikorn, the background to and purpose of the Seminar were put forward in a succinct form as follows:

Mr. Chairman, distinguished participants, ladies and gentlemen,

On behalf of Minister Ob Vasuratna, I am very pleased to have the opportunity to open the Seminar on Industrial Restructuring in Thailand today.

First of all I would like to welcome the distinguished foreign participants who have travelled from afar to attend this seminar. It is a privilege for Thailand to have the opportunity to share with all of you, who are experts on industrialization, the various issues of industrial restructuring and how best to cope with them. I am confident that there will be many things that we could learn from each other, which would help us in designing ways and means to solve the industrial problems of Thailand.

I would like to take this opportunity to assure all of the participants at this seminar that the Thai Government is committed to the industrialization of Thailand. While Thailand remains a strong agricultural country, we are aware of the fact that agriculture alone will not be enough to fulfill our development needs. Also our work force is growing very rapidly, because of the high population growth during the last two decades. We must therefore create employment opportunities as much as possible. Industry is one of the areas which we believe can be developed to help alleviate the unemployment problem.

To develop industry in Thailand we must have our own strategy and style. While Thailand is not considered to be a resource-rich country, we do have a variety of natural resources compared with other developing countries. Thus our industry should be linked to our resources as much as economically possible. Secondly we have a population of about 50 million. With per capita income of about US \$800 our domestic market is considered to be very large. Therefore we do not need to have a completely export-oriented industrial sector like Singapore and Hong Kong. Thirdly, our population is widely dispersed throughout the country. We need to find a pattern of industrial development that can involve in one way or another as many people as possible. Rural industrialization is therefore very important to Thailand.

So far I must admit that our process of industrial development has not been as systematic as we would like it to be. As a consequence the pattern of industrial growth is not completely consistent with our development objectives. Furthermore certain industrial sectors are not strong enough to compete with imports at a more reasonable level of protection. This is the reason why we have started the work on industrial restructuring. We expect that by restructuring we will eventually have an industrial sector which is resource based, competitive domestically as well as internationally, employment oriented, and diversified to large areas of the country.

Our works on industrial restructuring have just begun. And already we are encountering several problems, some of which are technical in nature. That is why we need to have the research project on industrial restructuring and this technical seminar. I hope that these efforts can help us resolve some of the pending issues and make it possible for us to restructure our industry for further growth and efficiency.

I wish you all the best in your deliberations and a successful seminar. Thank you.

III. AN OVERVIEW ON INDUSTRIAL RESTRUCTURING

Morning session - Saturday 22 October 1983

During the initial morning session, subsequent to the formal opening of the Seminar, the concept of and, in a general way, the experiences and progress internationally and in Thailand of industrial restructuring were discussed under the chairmanship of H.E. Chirayu Israngkun na Ayuthaya, Deputy Minister of Industry.

The discussions started with a presentation made by Mr. Herman Muegge (UNIDO) on industrial restructuring in the global context, which is reflected in condensed form in following paragraphs.

When we talk about global restructuring of industry, we may start by having a look at the structural changes that the world has been undergoing, as seen in a number of dimensions. One dimension would be in terms of the structure of manufacturing value added between developed and developing countries. If we look back to the year 1948 and the period up to now, we can see that the share of developing countries in total world manufacturing value added has increased from 5.7 per cent in 1948 to 11 per cent today. However, we can also observe that since 1975, the year that the Lima Conference (UNIDO II) took place and set the 25 per cent target for the Third World share by the year 2000, upto 1982 the share has only changed from 10 to 11 per cent. This one per cent point increase since 1975, I do not think we can say is very dramatic. However, we can also say that these figures do not reveal all what is going on in the restructuring process of industry. We see only the developing countries as a group and we do not see what is happening between them and we see only the industrial sector as a whole. When we look a little bit closer in terms of a number of industrial subsectors, we can say that in many important industrial subsectors we have noted an advance of the developing countries. A few examples may illustrate this point. We see that, for instance, in food products that the developing countries have increased their share in total world manufacturing value added from 1970 to 1980 from 14 to 15 per cent, in footwear from 9.3 to 11.1 per cent; in petroleum refinery from 40 to 41.8 per cent and in electrical machinery from 5.1 to 6.6 per cent. While these figures show a structural change that has occurred in the world, they, however, do not reveal growth disparities, the social impact, the viability and other structural changes that are taking place. We have seen that there are growing disparities amongst some of the developing

countries that have not been solved by the industrialization process. There are doubts about the overall viability of establishing national production structures in the individual countries. Furthermore, we cannot see from these figures the fact that the structural changes industry have been accompanied by structural changes in other sectors as well as changing dependencies of the developing countries in respect of food, energy, technology, capital goods, industrial services, etc. We can conclude from such observations only that, first of all, there is no automaticity in the world restructuring process; there is no evidence that, by changing the gross output of industry in a country, it will solve these problems which are inherent to the industrial restructuring process. The restructuring process should be seen as having a normative component: that is, restructuring should entail achievement not only of physical production capacities, but also the reaching of certain capacities to manage, operate, expand and adjust the industrial sector. We can also observe that, rather than seeing the restructuring process as an automatic process, it is the outcome of a network of economic and geopolitical decisions and negotiations between the agents. Finally, we can also see that in today's world we have come to the point where a break has occurred in the trend in the restructuring processes as conceived in the 1960s and 1970s, when all the parties involved were anticipating certain fixed rules and a certain set of parameters that would guide the further restructuring process. The current world economic crisis has exaggerated and brought into focus a number of fundamental problems which now affect the industrial restructuring process. We can see that in the past, the expansion of industrial capacities in the developing countries took place through imports of equipment, intermediate products and know how mainly from the developed countries. We can see that industrial investments were sought and supported by developing countries in the expectation of relatively stable, set parameters, such as earnings from commodity exports, a stable level of interest rates, access to developed countries' markets for competitive, mainly labour-intensive, products, and also a general commitment by the international community to a certain type of international division of labour. The crisis has now revealed a progressive erosion of these assumed parameters and has shown the vulnerability of the established structures to external shocks. It now emerges that, due to the world economic environment, inadequacies in internal policies in many developing countries as well as the adoption in certain major economies of rigid monetarist policies, the international restructuring and redeployment process of the past has largely failed to attain the industrial and social economic objectives set. It has also failed to create a basis for sustained economic and industrial development in the developing world. When we analyze in the Third World the industrial structures that have been established, we will find that these are very highly import dependent and achieve in many cases only limited net foreign exchange. We find that the employment creation in industry has not proceeded as effectively as expected. We find unutilized capacities, lack of productivity, lack of integration with other sectors, agglomeration of industries in metropolitan areas,

environmental problems, increasing social costs. These are some of the features of the industries which were established under different conditions and different assumptions than what now seem to prevail. In the 1980s and 1990s we expect increasing challenges in terms of technology development, industrial processes and products and entrepreneurial organization. We expect changes in the conditions for market access, changes in the price structure and in foreign exchange flows. We can see now that the new element in the world's industrial development process, is the structural adjustment and that it is becoming increasingly essential. It is both in the developed and in the developing countries the central issue, namely, how to regain competitiveness or how to establish a viable industrial production structure in an increasing fiercely combative international market. We see in the OECD countries that new technologies emerge very rapidly for new processes, for new products and for new corporate structures and witness a technological race in which no country can afford to stay out. We see a, so called, positive adjustment race, a race in which you are going to reestablish your competitive position by trying to adjust your structure and introduce new methods. The question is about what is termed "positive adjustment" - a term used often in OECD countries and a term that we in UNIDO start to question. (In terms of "positive" for whom?) We can also witness that there is a race for attracting further investments. A race that makes it difficult to use the normal policy incentives for attracting foreign investment to a country.

We witness that these races, these new endeavours, are backed up by governments irrespective of the governments' political systems or ideologies. What we are witnessing is that governments are increasingly trying to achieve what may be called a "nationally preferred structure". All this means for the developing countries new challenges. It means strains on scarce resources. It means that resources that were set aside for advancing the expansion or creation of new industries will have to be used to try to adjust existing ones. The financial and the technological resources needed for this are of tremendous magnitude. We see for developing countries a strain on governments which will have to play an active role. We see a strain also on the solidarity of developing countries in a situation where the fierce competition on the world market tends to suggest that everybody rescue himself first. We can only see now the first wave of worldwide production systems changing and there is a great uncertainty of the new wave of changes that is about to come. There are also strains on national priorities. Finally, how can one reconcile the internal and external forces that are affecting the developing countries?

I would like to round up these observations by some concluding thoughts about various dimensions of global restructuring. The first to be mentioned, is the international dimension. This means that all countries, developed and developing, are integrated in a global production and trade system. The question is: In this adjustment race who wins? Somebody said we are all sitting in the

same boat but the question is who is the captain, and who sits on the first and who sits on the second floor. The second dimension is the regional dimension. Does the new restructuring process of industry constitute a strain on the regional groupings or does it mean a survival is possible only through joint action in a group of countries? There are evidences for both. There is evidence that each country would take an opportunity as it comes and seize this, although it may mean diminishing the loyalty of the group cohesion. There is also evidence that only through joint negotiations with the outside world can you achieve a firm position in the world restructuring process. Thirdly, there is the national dimension. This dimension means that the concepts of industrial restructuring cannot be seen as isolated ones. They need to be tied in with the country's economy as a whole. Agriculture and industry services, for instance, have to be seen in one context. Fourthly, there is the institutional dimension, which is the pressure on governments to assume different and increased roles both in production, trade, research and development. Can governments carry out these new demanding functions? There are various schools of thoughts, for instance, that governments are not equipped to take decisions on matters of such nature. However, there is another school of thought, namely, that, if these issues come upon the government, the government would have to change, it would have to assume these functions, and would have to change its features and characteristic skills. The question that here comes in is how to conceive an industry/government relation? Can governments identify the winners?

The fifth dimension is the resource dimension. Restructuring requires new resources, finance and skills. The issues here are: Are we using domestic or are we using foreign resources for our restructuring process? The struggle for capturing foreign investments is another issue, including the forms that now emerge for foreign co-operation. Increasingly we can see that direct foreign investment is being exchanged for international financing through banks. Does this mean that the resources that we get to our disposal are causing an increased load for the future, another commitment of financial nature? Furthermore, in this resource dimension the issue is really about the comparative advantage. I think it has been clearly shown in the last years' development that comparative advantage is not a gift given by nature, it has to be built up, it has to be changed. Due to the present uncertainties, what are the resources that we should put in to build up a new comparative advantage, along these lines?

The sixth dimension which I would like to call the technology dimension, means that no country is unaffected by the technological race which is taking place, primarily in industry. Can a developing country follow in this race, inspite of the huge resources the OECD countries posses? How to use the resources in order to build up technological capacity? The fact is that the developing countries cannot afford to wait for foreign technology to flow through new investment, but have to take a much more active role and a selective role.

Seventh and last, I would put the dimension which I would like to call the non-ideology dimension. I think we can witness the end of schools, systems, ideologies. There are no clear cut categories of strategies anymore. We used to talk in the 1960s and 1970s of export-oriented and import-oriented strategies, high technology strategies, low technology strategies, appropriate technologies. What is now emerging is that there is no one system that we can categorize, but rather that one has to define a preferred industrial structure. That is the reason we have come together here and I hope that in the discussion we can come nearer to what would be the preferred industrial structure of Thailand in a very difficult global situation.

Dr. Chirayu, in thanking Mr. Muegge for his concise and thought-provoking presentation, stressed in particular the summing up of the seven dimensions and would welcome if the seminar deliberations might follow along that system of thought. The job of describing restructuring at the world level, or global level, and finally link it at national, regional and international level, he said, was certainly a complex task because even at the national level it was found being very difficult to put together all thoughts and analyse the situation in a coherent manner.

Dr. Chirayu then invited Dr. Narongchai Akrasanee to make his presentation on industrial restructuring in Thailand.

Dr. Narongchai divided his presentation on the subjects: (a) industrial development and policies, (b) the policy of industrial restructuring in the Fifth Plan and (c) experiences and problems. The presentation, in condensed form, was as follows:

The most important thing for us to do as of now, after we have been through the Fifth Plan more than a year and a half, may be to check, what kind of problems we have encountered and what is the way that we can go about solving some of these problems. However, just for the records, let me first go to the process of industrial development and policies in Thailand. When we talk about industrial development and policies as far as the development is concerned, I think the situation can be summarized as follows:

Firstly, we have had very good economic performance in general and, particularly in the industrial sector, the growth performance has been very satisfactory up to perhaps the last years, 1981 and 1982. Before that, manufacturing value added had been growing at the rate about 9 to 10 per cent a year, but towards the end of 1980 we found that the manufacturing growth rate was slowing down somewhat.

During that time we were preparing the Fifth Plan and we were very concerned about the slowing down in the manufacturing value added growth rate. Another aspect that we also discovered was that the structural changes occurring in the manufacturing sector, were towards more sophistication. The industries being set up towards the end of the 1980s tended to become more and more complicated, implying that it would be more difficult to encourage or to promote industries of such nature unless we have proper instruments and policies.

The second aspect is the trade performance. We have also during the recent period had very impressive increases in the value of manufactured exports. We have presented statistics in the paper distributed to you, so just a few words by way of summarizing: Towards the end of 1980 the proportion of manufactured exports in our total exports stood at about 20 per cent, which was an increase from just about 10 per cent 10 years earlier. This proportion was considered relatively high and, if we also include a number of other processed primary products in the computation, then this proportion would go up to as high as 35 per cent. But at the same time, the import dependence of the manufacturing sector was still very high, even though we had that compensatory growth in manufactured exports. So, that was another concern we had at that time, namely, that the dependence on imports was very high and imposing a burden on our foreign exchange.

The third aspect is the location. When looking at the industrial location we have found that practically all of the industries, specially the modern ones, are located in and around Bangkok. There are very few factories outside this particular area. In fact, in terms of value added, about 80 per cent of manufacturing value added is generated from the industries located in and around Bangkok. We are also very concerned about this particular aspect.

And finally, there is the aspect of firm size. We have found that industries in Thailand are mostly small firms, or small- and medium-scale firms in terms of the number of them, although the value added actually comes largely from the large firms. There are very little connections between the larger firms and smaller firms. In fact, they exist in duality.

We feel that the above referred-to kind of structure is to be considered weak and that it would not be easy for the manufacturing sector to expand in the future towards a production which is more conducive to high growth, if we have this kind of structure, namely a production which is very much import dependent, a production which is concentrated basically in the urban area of Bangkok, and a production which emanates from two different kinds of firm sizes which are working independently of each other. This is the basic reason why we decided at that time that we would like to restructure or change the composition, change the location of our manufacturing sector. Perhaps that was the meaning of the restructuring.

In terms of policy there are a number of aspects that we have discussed earlier and I would just like to put the following up for your records. When we evaluate policy, we have to bear in mind, as far as Thailand is concerned, that we have what we call deliberate policy and accidental policy. In the area of industrial policy, or industrial development policy, a lot of measures are accidental, that is, different departments came up with different measures independently of other departments, without any conscious idea about what would be the impact on the industrial sector as a whole. There are a number of these policies that we have and they can be grouped into perhaps five areas of the policy measures. We have, first of all, the taxes, secondly, we have investment promotion, which is considered a part of a deliberate industrial promotion policy, then we have export promotion also a deliberate policy and we have the quantitative restrictions in value forms and these are usually not deliberate. Finally, we have some policies on finance which are really not a deliberate kind of policy measures used for industrial development work.

Now, I would like to move on to the second section of my presentation, that is the policy of industrial restructuring. I think, this is something that we need to consider very carefully when we look at the experiences and problems that we are now encountering. I would like to go back a little bit and see what we had in mind, what we tried to do and now what we are getting out of it. When we formulated the policy we had a number of what we called domestic considerations and international considerations at that time.

The domestic considerations that we took into account were as follows. First was the growth potential, and we reviewed at that time what would be the particular industrial sectors where we saw potential for growth and if we pushed them a little bit perhaps we could get a better performance out of them. The second consideration we had at that time was effective resource utilization. Third was the technological implications of some of the sectors and, finally, the equity consideration in terms of income and employment. So at that time, the formulation of industrial development policy was very much part and parcel of the macro-economic plan of the country, taking into consideration all these aspects.

As far as the international considerations were concerned, we knew at that time first of all that in the 1980s the world economy would not be able to grow at the kind of rate that the economy used to have in the 1960s and even the early 1970s. The international environment would be a slow growth and how do we live in that kind of international environment? The second aspect on the international considerations was the high real interest rate and also the very fluctuating one. Our anticipation at that time about this high real interest rate is certainly confirmed today as all of you are fully aware of. The last consideration was the protectionism. We knew at that time that lot of countries would be restructuring. Most of the countries would try to strengthen their manufacturing sector and some of the countries which are considered industrialized would be trying

to keep whatever industry that they have by way of protecting them and therefore the atmosphere of protectionism would likely to prevail through the 1980s. We knew this very well at that time and we are more or less confirmed about this aspect today, that the most industrialized countries are exercising the, so called, policy of protectionism.

Thus, if we have these kinds of considerations, both domestic considerations and international considerations, what are our choices? What can we do as an open developing country as Thailand is, a country which has to be concerned about the set development objectives as well as living in this kind of international environment? There are a few choices, of course, and each is not that independent. One is that we could go into competition by specialization, that is, follow the idea of comparative advantage, but take only one or two or a few sectors and concentrate on them, so that we can compete and let the other countries do what other sectors they want. Another one is that of direct participation, that is, we go in with international companies, we go in with other countries and participate in the process. The last one is to close our door. We were also considering that at that time but were not attracted by the prospects. We decided that we could not close the door but rather pursue a combination of the first and the second choices, that is, higher degree of specialization as well as some participation with the other countries, either with private firms or with governments from other countries.

Having considered all these aspects, we came up with what we call the policy of industrial restructuring. That policy could be summarized very briefly as follows, in terms of targets and strategy. In terms of targets we have to set the targets as follows, namely that we would like to see that the value added of production for export in the manufacturing sector would go up to about 25 per cent at the end of the Fifth Plan. When we started, it was about 20 per cent. Another target is that we would like to see more intermediate and resource based industry set up and developed in the country. That is, instead of producing final products we would like to see more production of parts and components and industrial materials. The third is the non-metropolitan location. We would like to see industry going out of the Bangkok area into other areas. Finally, on the promotion of more medium-scale industries, we would like to see them grow faster than the bigger industries.

These are the kind of targets we set at that time and the strategy we have adopted can be grouped into four areas. First is the rationalization of protection structure and investment incentives. We thought that protection structure and investment incentives will have to be designed in such a way that we could achieve the targets set. Second is the promotion of manufacturing exports in order to achieve the kind of value added that we expect out of production for export. Third is the promotion of industries in rural areas as otherwise the locational aspect will continue to

be a problem. Finally, there is the promotion of small and medium industry. These were the four strategies that we have adopted.

Next comes the policy measures. There were several measures we have been contemplating. Some of them we have already implemented, and they can be grouped as follows. Of course, most of the measures that we were designing were trying to correct distortions or to make their effects as distortion-free as possible. The first group was the setting up of mechanisms to promote basic industry. Secondly, we tried to work on subsectors. On the subsectors we started working on the automotive and electronic/electric industry in the first year, and are moving on to textile industry. We are also about to start work on chemicals and plastics. Then, in a second, in a third, fourth and fifth year we can move into work on metal-products, machinery, non-metallic and ceramic products, leather and wood work and other food processing industry. This is more or less the kind of subsectoral work plan that we have, in order to achieve what we set out to do in the policy of restructuring.

Another area that we think is important is that on tariffs and taxes. We thought at the time, that perhaps we should move towards uniformity in these rates. We can return to these aspects in the course of our seminar, as to the difficulties we have encountered here.

In investment promotion, we would like to see more automaticity and that such promotion would serve more directly the development objectives for the country. As regards export promotion, there are several measures that we need to implement. Government procurement is still another measure we think we can use for our industrial development and technology programme. We consider the technology programme to be a very important aspect.

Finally, we come to experiences and problems. After a year and a half or two years, what kind of experiences and problems have we encountered so far? First, concerning institutionalization, it can be said that the work on industrial development and industrial restructuring is now a little bit more institutionalized than before. Going from the bottom we have the secretariat and task forces. They are assigned to do a great amount of preparatory and investigatory work which has to be done at that level. Then, it goes up to the Industrial Restructuring Committee for further deliberation. After that the Committee submits recommendations to the Cabinet for final decision, usually to the Economic Cabinet.

On achievements, what have we achieved up to now? On the macro-level, I put this down with hesitation, the first what we thought we have achieved is the changes of attitude vis-a-vis prolonged protection in Thailand. Some people seem now convinced that they no longer would like to heavily protect industry, they would like to see industry more competitive. But, there are still also people who feel that they have to heavily protect industry.

Second, we have lower tariff rates. At the moment the maximum tariff rate is 60 per cent, of course, with the exception of the motor vehicle products and maybe one or two others. But on the whole the maximum tariff rate is now 60 per cent. That we have done. We have lower business tax rate for some products. We have put into effect a lot more measures for export-promotion. We have at the Board of Investment what we call the weekly mini-BOI meeting and I think there are a few gentlemen in this room who are members of the mini-BOI and they make decisions very quickly. In the past we had a kind of a monthly macro-BOI, now we have a weekly mini-BOI. This is much more efficient than before. We have reduced trade restrictions and import-control, we have abolished lot by way of price control, export control and import control. Also, the industrial control is kept to the minimum, in terms of not allowing certain firms to be set up, and so on. We have increased, with regard to export credits, the line of discount facilities at the Bank of Thailand. This has been growing very rapidly. We have set up policy guidelines for basic industry which have gone through the Cabinet. So, if we look at these eight aspects, I think we have gone quite fast during the last two years.

On the micro aspects, I do not know whether much can be considered as achievement. On the electronic and electrical industry we have had a first round of tax and tariff changes which was very well received by lots of people. Then came the second round which was very controversial, so we are not sure at the moment where we are. We were able to freeze the local content requirement for passenger cars at 45 per cent, and hoped at that time that we would proceed to implement a number of other measures agreed to earlier. But now some people have second thoughts about it, so we are not sure whether there is achievement or not.

Finally, regarding the problems. There are several problems that, I am sure, all of you are aware of. First is the world recession, which affects your possibilities when you try to restructure your industry, when you try to make it more competitive. We tried to do it the first time in 1982 but that was the period of deepened world recession which all of us know very well. If we were to allow more competition from imports at a time when everyone, every country is trying to dump cheap goods into the country, it would not be very easy. That was one of the reasons for resistance we had from our local producers. The second was the high and fluctuating interest rate. It is very difficult to get people to invest in industry when you have that kind of interest rate situation. The third was the constraints in technology. We learned at the time that a lot of things are not easy to do because we have limited technology. Fourth, was the constraints in skilled workers, which are quite obvious. The fifth one was the concentration of everything in Bangkok, which makes it difficult to do anything at all. Finally, perhaps the most important problem that we had, that we now feel that we very much underestimated at the time, was the limitation of government agencies. We thought government can do everything. But now we realise that it is really very little that

government can do. If you go through the government agencies that we have, we first come to the Ministry of Finance. It is not easy to get the Ministry to set up something like a team to work on tariffs and taxes, for example. Then, there is the Board of Investment. We continue to have problems there at staff level with project evaluation even though we have this weekly mini-BOI. Sometimes the mini-BOI wants to make decisions faster than the staff can give the cases to them. So, that is another problem we have. The Ministry of Science and Technology and Energy which is in charge of technology development has not really been able to set up properly what we call technology services schemes or to implement envisaged technology services. The Ministry of Industry itself has difficulties in providing technical assistance. Finally, there is the problem that we have in the communication with the private sector. We have a mechanism in the Joint Public/Private Consultative Committee. We have found it is most complicated when the government consults the private sector on specific matters, as what seems have to happened is that the government only meets with a building up of a lobby against what the government wants to do. So, this matter of proper communicating with the private sector is an issue that we, I think, may discuss further.

A third presentation was given by Professor Pil-Soo Park, (Dean, Graduate School of International Trade, University of Hankuk, Seoul) on experiences derived from the industrial restructuring process in the Republic of Korea. The presentation was based on a note, prepared by Professor Park and distributed to the seminar participants. This note is appended as Annex 9 to this seminar report. In the following pages an effort has been made only to highlight the main issues and results of the Korean experiences as presented by Professor Park.

At the time of reconstruction after the Korean War the Government of the Republic of Korea chose to base its efforts on a import-substitution development strategy but the most part of the economy survived because of grants in aid assistance from overseas until the end of the 1950s. Exports during that period contributed little to GNP or to foreign exchange earnings, as chronic inflation caused by large budget deficits and a severe overvaluation of the Korean currency, greatly weakened Korea's ability to export even agricultural and light industrial goods. The turn around in Korea's economic performance came in the early 1960s with the switch to export-oriented development. The first Five-Year Development Plan, launched in 1962, placed heavy emphasis on economic growth through export promotion and started a growth explosion which was to continue unabated for almost 20 years and would transform Korea from a largely agricultural economy into a newly emerging industrial power.

That Korea's export-led development strategy was an appropriate one, is fairly easy to see. Korea is a resource poor country, yet it has a well educated and highly skilled labour force and the decision to focus upon export production and promotion allowed Korea to reap the benefits of its comparative advantages in the production of labour-intensive goods.

A strong export performance helped Korea to finance increasing imports of raw materials and industrial goods, enabling, at the same time, quick economic growth and intensive industrialization. The share of total investment financed by domestic savings rose from less than 17 per cent in 1962 to 83 per cent in 1982. The investment/GNP ratio in current prices rose from 13 per cent in 1962 to 26 per cent in 1982. Growth in real GNP for the 20 years' period was five times, reflecting an average annual growth rate of 8.6 per cent. On a per capita basis, real growth for the whole period was more than threefold.

As the economy grew rapidly, important structural changes took place. The mining and manufacturing sector increased its share of GNP from 16 per cent in 1962 to 29 per cent in 1982, while the share the agricultural sector decreased from 37 per cent to 16 per cent. The development of the manufacturing sector in recent years was led by a rapid growth of the heavy and the chemical industries which increased their share within the sector from 29 per cent in 1962 to 58 per cent in 1982. Once again, there is little or no question that Korea's rapid economic growth and structural change stemmed from the surge in foreign trade. Commodity exports which were about \$55 million in 1962 grew at an annual average of 36.5 per cent to a total of \$21.6 billion last year. Commodity imports have also expanded markedly, rising from \$422 million to \$24.3 billion, an annual increase of 22.5 per cent. This growth in trade was accompanied by significant changes in its composition.

In the course of growth, Korea also had to deal with the problems of disparity in income distribution between the urban and rural sectors. The problem was twofold. Productivity increases in the agricultural sector lagged behind those in the industrial sector. In addition, the agricultural sector faced unfavourable terms of trade, particularly with respect to its principal crops, such as rice and barley. In order to deal with this problem, the government adopted the price support programme for the major grains, and helped the farmers remodel their houses, subsidized the fertilizers and other farm inputs, provided free agricultural technical services, and approved other similar measures, such as a comprehensive rural transport development programme, rural electrification and running water programmes or projects which were financed by the government, with people in rural areas providing their own labour. As a result of all these efforts, agricultural productivity improved and average rural household income began to overtake the average urban working household income in 1974.

During the 1970s, high growth and the accompanying structural changes, however, were not achieved without cost. Both direct government intervention and rapid growth itself produced structural imbalances in the economy. Comprehensive import restrictions and the government price controls to cope with the after effects of the oil shocks resulted in distortion of the domestic price structure and widened the productivity gap between protected and unprotected sectors. In addition, over-investment in the heavy and chemical industries also gave rise to several adverse side effects on the economy, including insufficient investment of light industries, distortions in the capital market and excessive real wage increases. There were wage increases of over 30 per cent during 1977 and 1979.

In spite of all these problems and of 20 years of rapid growth, there is still a substantial growth potential in the economy that remains untapped. It has become clear, however, that in order to make use of this potential the government must adopt a new strategy that is better geared to the new economic environment. First, the Korean economy is simply much too large and complex to be efficiently managed by a handful of policy makers in the government, and secondly, it is also clear that the nation must increasingly rely on the market mechanism for efficiency in resource allocation and equity in income distribution. To this end, the nation is liberalizing the economy both internally and externally. The process of liberalizing the economy is well on the way now. In 1980, prices on most of the commodities were decontrolled. Furthermore, in 1981, the government put in force the Fair Trade and Anti-Monopoly Act. The purpose is to minimize direct government control and promote competition throughout the economy.

The current liberalization policy on imports is intended to result in raising the import liberalization ratio to the level currently prevailing in the advanced countries by 1986. The ratio now is 81 per cent. The policy of expanding imports in areas where the nation lacks comparative advantage will enable the nation to allocate resources more efficiently and increase the welfare of consumers. Korea's policy on the inflow of foreign technology is already very liberal. There are virtually no significant barriers at all. In the past, Korea relied heavily on foreign borrowing to meet her foreign capital requirements and was conservative regarding joint participation requirements in direct foreign investment. However, the new policy which was adopted in September 1980, allows a foreign equity share of up to 100 per cent in virtually all industrial fields, while retaining the existing tax incentives offered to foreign investors of 100 per cent corporative tax exemptions for three to four years, and a 50 per cent cut during following two years.

The Fifth Five-Year Plan largely shows that the government is committed to liberalizing all sectors of the economy with a view to promoting more stability and efficiency and the Fifth Five-Year Plan

differs from previous ones in a emphasis on achieving both stability and growth. One of the most important aspects we can draw from the Korean experience and structural transformation that has evolved over the past two decades, is a reaffirmation of the importance of an outward-looking development strategy. The Korean success during the past 20 years is mainly a result of judicious exploitation of her comparative advantage in the world market. Of course, critics often argue that Korea's heavy dependence on trade has made her economy highly vulnerable to outside influences, as has been demonstrated already through the painful experiences of adjustment to the oil shocks and the current wave of protectionism. Even though the outward-looking strategy is vulnerable to the external influences and shocks, it is still a better option than an inward-oriented strategy for Korea, a country which has no significant endowment of natural resources.

The second point is the importance of the role of the market. Both in the 1960s and 1970s, the most successful adjustments came when the incentive structure was based on market principles and the initiatives of private entrepreneurs. At the initial stage of development, the role of the government is important in maintaining broad development perspectives for the people, providing proper business climate for the private sector, mobilizing domestic and foreign resources for investment and in developing the infrastructure. As the economy grows, however, excessive intervention by the government is not a good substitute for a market mechanism which is the best means of achieving efficient allocation of resources.

In concluding my brief expose on recent experiences in Korea, I must add a few more words. I received and read with interest the studies provided by UNIDO, particularly the initial mission's interim report^{1/}, which gave me good insights and indicated many points to have more research on, related to your restructuring process and problems. These matters are certainly not uniquely Thai problems and some solutions may be sought from the Korean experiences. It was also very helpful the way that Dr. Narongchai pointed out all the problems in the later part of his explanation. That has given some further insights. Also the Korean economy is not problem free. Let me conclude with a few words on some issues the Korean economy is facing. Most recently and particularly in this year, Korea had again a very good result of her economy; for instance, during the closure part of this year its GNP grew at 9.6 per cent and our trade deficit seems to be lower than its original estimation, down to \$1.8 billion, while the original estimation was \$2 billion. Particularly encouraging is the price stability, (the consumer price inflation rate will be somewhere around 2.0 to 2.2 per cent) and the low unemployment rate (around 3 per cent at the moment). But these rosy figures should not detract attention from other problems, such as a recent series of banking scandals which is very shameful. There is also the paramount problem of the

^{1/} UNIDO/IS/R.5/Rev.1, Industrial restructuring in Thailand - Some observations by a UNIDO mission 28 October - 4 November 1982.

government to solve - the increasing external debt which amounts to \$40 billion at the moment. Furthermore, when you carefully look into the 9.6 per cent increase of GNP for the first half of this, year it was not led by export increases but increases in residential house-building and construction of luxurious entertainment facilities and other unwanted sector development. And lastly, which again links in with the recent banking scandals, there still goes on the process of correction and stamping out of government corruption.

Dr. Chirayu, in thanking Dr. Park for his presentation, draw attention particularly to Dr. Park's analysis that, in the initial phase of industrial development and restructuring, the role of the government is primarily that of providing the framework and promotional privileges and the infrastructure. After this has been fairly well established, it will then be passing on to the stage whereby it would liberalize and lessen the interference and let the market mechanism operate in its entire strength. I think that is a recommendation or analysis which we in Thailand certainly pay a lot of attention to. But for liberalization along the market mechanism to take place, means that we have to fight against the fierce international competition.

The subsequent discussion was started by Dr. Burenstam Linder (UNIDO consultant), who made following general comments in relation to the three introductions.

I found the three introductory statements extremely suggestive and interesting and I think they will form a good basis for continued discussions and deliberations here.

We, surely, do face not only in Thailand but also in other countries, problems. There are problems in Korea, as we have heard, and there are many problems not only in other developing countries but also in the industrial countries. I find that it is interesting to note that many of the problems are very similar; many of the difficulties that you may encounter, as shown, for instance, in Dr. Narongchai's presentation on the implementation of the Thai Fifth Five-Year Plan, some of the obstacles that you are encountering we also encounter in the industrial countries, in trying to implement good policies. Now, what are the good policies then? Well, I think that it may be, like Mr. Muegge suggested in his thought-provoking introductory remarks, many new dimensions in the present situation that will call for considerable rethinking of what the future strategies would be. But, when I tried to do that I reached the conclusion that, in fact, we do have a clear indication of what is a fruitful approach and what is not. There are many new things, as there has always been in world developments but the basics, I think, remain. It was from this point of view very interesting to hear Dr. Park's reflections on the Korean situation. We have very strong

empirical cases when we look around the world now, and see which countries succeed and which fail. The countries, to be sure, are widely different from any points of view, but they have certain things in common, the ones that succeed, and there are certain things in common for the ones that fail. Now, you in Thailand have had a very successful growth during the 70s, and you have been exposed to increasing problems as have other countries, so you probably know very well what to do and what not to do. When I read your Five-Year Plan, from my points of view I reached a conclusion that you have a basis of operations, that will give you future success, although I also reach, perhaps the wrong but nonetheless, the conclusion that in the end of the 70s you experimented with some policies that are now giving less successful results than could have had been achieved. The empirical case that we get when we look around the world, is that the successful countries have relied on outward-looking strategies, been trade-oriented, relied on general frameworks rather than far-reaching interventions, they have been decentralized in their decision making. (Even a country like Japan is not at all so centralized as many people will say; the MITI surely has had much to say in the development process but the MITI has not the all-dominant role that is often attributed to it as the orchestrator of the Japanese growth.) One must work through incentives. That, also is shown by the experiences and it boils down to relying to large extent on markets. It is in the markets and not in the ministries where the information is about the industrial affairs. Even if one hired every skilled industrialist in this country and put them into the Ministry of Industry, they would soon lose the information basis they had when they went into the Ministry and the opportunity cost of staffing the ministries in this way to get all the information centralized is enormous. Again, this is not the case only of your country, or in the developing countries, but also the case we find in many of the industrially advanced countries. Thus, one must rely on a development strategy that utilizes the information where information is and can be, namely out in the companies, out in the various firms, out in the market. I am not saying that we do not need information in the ministries. We need much information, but we need information about those things that politicians, in fact, can handle. In reading some of the background papers here, I see that there are large demands for more and more detailed studies on this and that industrial aspect. Well, I do not think it is the most important thing to get all those studies going because when they are ready, those studies, then things have changed so much that they are not really very relevant. In the ministries one needs information instead about the macro-economic situation, because there it is where governments have their real role, that role cannot be handled by the industry. It is the macro-economic policies that must be reasonable to give the framework for the markets and for the decentralized decision making to go. The macro-economic policies, to be efficient, must then rely also on micro policies that are not overly interventionist. Dr. Narongchai made a very interesting observation that it is very hard to consult with business people when you want to pursue industrial

reorganization and I agree with you it is sometimes very hard. It is hard when one has, through certain sets of policies, created lots of vested interests. Because when you have created, behind tariff walls or subsidizes and so on, far-reaching vested interests, and when you then consult those people, they will give their biased views. Now instead, if one has a system where there is a more general framework, rather than rent awarding under beautiful names of promotion and so on, then it is possible to consult business people. I would think that with the deep deliberatization that goes on in Korea, for instance, you will find it much more easy to consult with business and get correct, good and consistent policies. I find from my experience having served in government that there are certain sets of business people who one can talk to and some others you cannot talk to. We cannot talk to the textile people because they are all for more protection but you get a lot out of talking to the engineering people because they are working on export markets. You get good advice, you should listen to it, you learn a lot.

Now, Mr. Muegge in a provoking way suggested many new dimensions one must take into account. I would agree with him, but I would not agree if the conclusion would be that all those new dimensions would in the end mean that we cannot rely on the evidence of who has succeeded in the development and who has not. We should not make things more complicated than they are. They are very complicated, economically and politically as they are. We should not make them more complicated than that, by enumerating all these new things. For instance, the ways positive adjustment are posing threats to developing countries. I will say it is the other way round. It is rather inertia, the lack of ways for adjustment in the industrial countries, that are posing threats in the way of protectionism, to the developing countries. You should not be afraid of the developed countries' drive to change, you should be afraid of a drive not to change. However, in spite of difficulties of protectionism and inertia in the advanced countries, one should not adopt a strategy of export pessimism, that would also be wrong. In spite of low growth in the developed countries and in spite of increase in protectionism it should be possible for a new set of export initiatives to enable developing countries to gain important footholds with focus on the right products.

Mr. Fateh Chauduri (Senior Economist, World Bank) draw attention to some further dimensions and perspectives. Mr. Chauduri noted, inter alia, the following:

Before we get too much deeper into the more complex, difficult and exciting issues of industrial restructuring, I thought it would be interesting to give another dimension to the setting and perspectives of the seminar, that is, development in certain other areas of the national economy which have a very direct and important

bearing on the industrialization process. One is the labour force. If you look at the very high growth in the population in the 60s, this is now hitting the labour force. The labour force is increasing very rapidly in the 80's, almost 3 per cent per annum, adding about 700,000 new entrances. The labour force is about 76 per cent in agriculture and output share in GDP-terms is only 35 per cent. As a result, you can see the labour productivity in agriculture is very low. Now, the structural adjustment process in agriculture which is moving from more extensive kinds to more intensive kinds of cultivation will definitely not absorb as much labour as it has done in the past. In fact, it may release a lot of labour. The question is what other sectors have a very important role? It is clear that the industrial sector will have a very important role, compared to the 60s and 70s, in facing up to this labour employment situation. The other important thing that I thought may be mentioned is that, in the 60s when industrialization was going on at fast speed, employment increase was very slow; one per cent per annum in industry itself. But in the 70s, when industrialization became more and more export-oriented, employment growing in the manufacturing sector started picking up - it was very fast, almost 10 per cent per annum. So, my feeling is that this perspective is important, that labour-intensive, export-oriented manufacturing output in the 70s has given lot of opportunities for more and more employment. I think with these two general observations, we can now get into the industrialization issues.

Dr. Chirayu expressed some further views on some of the points raised in the introductory or early stages of the discussion along following lines.

The first thing is that, as you commented on the Five-Year Plan, the highlight of the Plan is on restructuring, and I think it is very important to look at the way the Plan came about. It came about after about one year of continuous discussions among government officials, university people and private sector and, I would like to now highlight and emphasize once again, it took about a year of hundreds and hundreds of hours of work, of secretariat work as well as discussions in committees and seminars. There were many seminars like this before the Plan actually came out. So, I think, we can believe, or even have a little bit of faith, that through this process every kinds of thoughts, every kinds inputs did go into the formulation of the Plan, as best as it is humanly possible to do within the constraints of planning. Maybe, although the people who have to implement the Plan may not have taken part throughout these hundreds and hundreds of hours of work, maybe they would have a little bit of faith in the Plan, which has restructuring as the highlight.

Secondly, I think that the politicising of the concept is extremely important. One thing that maybe Dr. Narongchai did put

down in the paper^{1/} and only mentioned briefly this morning is the institutionalization of public/private sector co-operation. Fortunately, this aspect has been politicized; success has been achieved in terms of politicising this kind of institution, although the restructuring itself, I am afraid, we have not succeeded in politicising sufficiently. However, restructuring of industries is an aspect which is important in the Joint Public/Private Sector Consultative Committee, and much of the work has been done there, because it has received the political backup. This is also an aspect which is very important institutionally and politically. I hope that these two aspects may be considered in some of your comments in order to have the restructuring plans to become more effective in the future.

Dr. Somchab Chaiyavej (Vice Rector, King Monkut's Institute of Technology) provided some important further comments of basic nature of restructuring as follows:

I would first of all like to thank the organizers and writers of the distinguished papers and introductions, but I seem to have some difficulties in understanding what is the strategy and what are the concepts of industrial restructuring. I feel that, in the explanations given in the papers, the context of the restructuring is directed towards exports while another aspect is the relocation of industry to the provinces. These sort of things do not appear to me as structure at all, as far as the industry is concerned. It may be a structure in policy, or policy structure. Probably I have to blame myself for not being convinced like you, but do I have to understand that this policy structure could lead to industrial structures? But again, there is probably a different dimension to it. As an engineer, as a teacher who is dealing with producing the technicians and engineers, I feel I need to see the real structure that industries require, in terms of industry structure itself. I think that that is probably the dimension that we may talk more about. At this moment we all recognize that the industrial structure in Thailand is very weak. But, the cause of the weakness is probably the lack in the foundation, the base structure of it which we will talk about again later under the engineering industries. Again, are we talking of the super structure of industries? What level of structures are we talking about now, and what directions of structures are we talking about? I think the paper of Dr. Park from Korea has indicated, that the Koreans have looked into different aspects from those in the paper presented by Dr. Narongchai. Probably we need to explore in this direction a bit more when we talk about engineering industries tomorrow.

^{1/} 'Industrial development and industrial restructuring', by Narongchai Akrasanee. Paper No.1 prepared for the Seminar on Industrial Restructuring in Thailand, October 1983.

In thanking Dr. Somchab for his intervention, Dr. Chirayu suggested, regarding the definition of restructuring that, maybe, the main point is that it is the economists who have not used the word as rigorously as the engineers do. He then gave the word to one of the participants from the Association of Thai Industries, Mr. Kittirat Srivisanvacha (Adviser, Thai Electrical, Electronics and Allied Industries Club) who put forward some issues seen from the industry's point of view in his intervention along following lines.

This morning Mr. Muegge, Dr. Narongchai and Dr. Park has explained to us and pointed out in general the factors basic to how to develop and proceed with industry. Thanks should also be given to Dr. Linder who reinforced all the structures that we have been talking about this morning. I would now like to go deeper into the sector problems.

What we in the electric and electronic branches feel in our field is first that up in the sky we have United States, the EEC, and Japan fighting it out in the clouds. This covers high technology, and low technology. Now, the developing countries' problems are that we will have to reach with our products into the world market. Well, this is difficult because we are starting from nearly nothing, from the lower end. It is high technology that made the product into low technology and, like Dr. Narongchai said, we are doing the assembling at that end. It is when it is coming to the components, that we assemble it, at the low technology end. So, if we are not fully into the development process, then we can only note that this is the low technology end, and that, actually, we come up against a big mountain behind it.

Now, further on the micro level, we encounter unorganized portions of the sectors. In the electrical industries sector, according to Dr. Narongchai's paper^{1/}, we have 50,000 workers, but to our estimate (that is, that of the Thai Association of Industries) we would have about 25,000 in the organized sector and 50,000 in the unorganized sector. This is a major difficulty; this is why Dr. Narongchai said, that they are trying to co-operate with the sector, but do not get the desired co-operation. I would like to point out, that a year ago this branch, the electrical and electronics branch, had only 17 members but then the Ministry of Finance announced certain tax reductions about a year ago on CBUs (completely built-up units). The number of registered industries in

^{1/} 'Industrial restructuring and the electrical and electronics industry', by Narongchai Akrasanee. Paper No.2 prepared for the Seminar on Industrial Restructuring in Thailand, October 1983.

the branches increased because of this to over 120 members. Now, each country has to protect its own industry. Eventually every country being member of GATT is imposing quotas and we cannot export to any country without going against a quota. But at the same time we do not have quota in this country and you find all the brands of any products you can name or, say, at least 40 brands here. This is different from other countries where they often have, say, only less than half of all brands in their country.

To sum up, it is, of major concern that the unorganized sector has been taking a very big share once it can get away with it, with the consequence that the organized sector could not move very fast. The unorganized sector always is a step ahead of us. These are the main factors which I would like to put forward for your consideration.

Dr. Chirayu, moving from the "specific sector picture" of the problem (which would be expected to be subject to further attention later in the seminar), took up the question of what was really meant by industrial restructuring.

You see my view of what Dr. Somchab said is this. We have an existing structure which we built up in the past. There are strong parts of that structure which I think it is our duty to strengthen and promote further or keep on its strength. There are also weaker parts which we would like to strengthen or, if they have no chance, like Mr. Muegge said, to build up a comparative advantage in the future, to try and phase out, meaning that there is a time element involved also. This is a very difficult task. But there are also parts that we want to add to the structure, that is, new activities, and we should really be careful to see to it that these parts are the ones, as Mr. Muegge has already suggested, that are winners. They are the ones that are likely to be able to stand on their own strong feet when we liberalize everything and if the system is set up properly in terms of the government institutions and infrastructure and promotion incentives. So, this is a sort of scenario which we were working at.

This matter was further commented upon by Mr. Staporn Kavitanon (Assistant Secretary-General, NESDB) whose intervention was as follows .

The most difficult part on the whole restructuring process, I think, is on, should we say, the institutional framework covering the whole spectrum of the government sector work which is involved with the private sector. The industrialization in various countries may be different from one to the other. But also the way that they arrange the institutional framework to reflect the policy and some programmes, is very important. Dr. Narongchai pointed out that in Thailand there are two aspects, one is deliberate and one is

accidental when the government carries out the policy. Well, trying to divide into two categories is very easy to understand. But, perhaps, it is too much to generalize that the measures which the government launches are accidental; I am not really thinking it being so. Because, behind the 'accidental' efforts which a ministry has proposed to a government, there is certainly a more broad-based underlying thinking in the preparation before submitting to the cabinet. The question really is, that one has to look, to contact and try to understand why a ministry is proposing a recommendation or set of recommendations. I do not really think that it is all that accidental, although perhaps a kind of comprehensive understanding of the knowledge or the co-ordination among the departments has been lacking. If we look deeper, we may find the policies are not accidental but stemming from their, the departments', level of understanding of industrialization. This point, I think, is particularly relevant in the case of Thailand which is run in many agencies. Many agencies have a good thinking, but perhaps the opportunity to exchange thoughts among them may be lacking.

Only finally, when we are asking what the ministry really has in mind by proposing this or that measure to the government, they will precisely tell you what is their thinking. So, the problem of the institutional set up seems to me is a most important one. I am not looking at the institutional framework in terms of agencies which as I mentioned vary from country to country, but I am looking at the institutional side in the larger context of understanding and of practices both in the public and private sectors.

The floor was then given to Dr. Pasuk Pongpaishit (Economist at ARTEP - Asian Regional Team for Employment Promotion) who made following points.

As an economist and noting, as has been already indicated several times, that economists do not seem to provide any single clear definition of the restructuring process, I feel that I should try to give my suggestion. The way I understand it, industrial restructuring seems to mean that you are unhappy with the existing situation, that is, the existing structure. There is something wrong with the existing structure. What is wrong may be different things, it may be because you are not exporting as well as before; it may be that you are not exporting a certain kind of manufacturing products as well as before, those kinds of products that you have been trying to load on the market. In this respect, I think several countries in southeast Asia are now experiencing problems of the limitations of export-led industrialization based on labour-intensive technology and this is, lastly, because we are coming up against import restrictions or protection from developed countries. As Dr. Linder mentioned, this is certainly the result of developed countries trying to maintain or keep up the kind of more

skill-intensive industries that they have traditionally had and been good at. The problem of industrial restructuring comes in, I think, because now countries in southeast Asia would like to restructure the industries so that they do not have to be so much relying on labour-intensive export industry. Certainly of course, Thailand may not be reaching that stage yet, but for sure in a few years time we may be there and, once we realise this, we want to go into different kinds of industry for which we think that the export market would be better. The Republic of Korea and Singapore have gone into this. They have gone into more highly skilled, medium-technology exporting industries. To do that, it means industrial restructuring and this industrial restructuring is involving more than tax policies or promotional policies. I think, you have to look into the questions of, firstly, how you would change the institutions. The existing industrial promotion organization or the kinds of institutes we have now, may not be geared towards this kind of restructuring that we would like to see taking place in the country. For instance, it may be too much urban-oriented and it may be too much concerned with foreign investment. It may be that there has not been much attention paid to other kinds of transitional problems, such as, how you would train or retrain the labour-force, when about 90 per cent of the labour force only have about 2-4 years education. If you want to restructure the industry towards medium or higher skilled technology, I think, something has to be done with regard to the educational system or job training.

Stemming from that, the question of restructuring would then involve serious thinking on the manpower planning aspects; on educational planning and training aspects. Before you can do that, however, I think there is a basic institutional problem, related to the awareness among the policy makers concerned, as well as the private sector with regard to the limitation of the existing industrial structure and the need to decentralize industry which is concentrated in greater metropolitan Bangkok, as industry in the metropolitan area has been growing much faster than industry outside of that area. On the other hand, basic statistics tell us that the income growth has been expanding faster in the regional areas and that consequently the market - talking about the domestic market for industry - has been most significantly expanding in the regional areas. In the attempt to restructure industry, you have to take into account the possibility of expanding domestic market oriented industry into the regions. This goes back to what I said before, namely, that drastic changes would be required in the institutional structure of the industrial promotion policies which at present are so much concentrated in the urban or Bangkok metropolitan area.

In commenting upon the various interventions at this stage Mr. Muegge noted the following.

I believe by now a definition of the word industrial restructuring has sort of emerged, as I think there is a general notion. One can go on and try to find the exact meaning and, I feel, that is not necessarily so important. I think, it is more important that we have an understanding that restructuring means moving industry towards some defined goal and are defining the means for doing so, whoever does it. I would like to quote here what Professor Hans Singer said once about definitional problems. He said that it is extremely difficult to define what a giraff is. But once you see it, you know what it is! I think that one could apply a similar thinking here. I think it is the intentional policy of the government towards a particular aim.

In this connexion, maybe I should make a few comments on the type of signals that, in this restructuring process of a given country, come upon you as a country, from outside. Of course, again, there are schools of thoughts here but, I think, basically governments and economists are realizing that not all signals coming from the international markets are parameters which you can trust. In the, so called, good old days there was this notion that you may orient yourself towards what is emerging in the international markets. Today, it is much more difficult and I think no government, for instance, in the OECD, is failing to analyze extremely carefully and thoroughly what is happening in their own industry and in the international markets. In other words, research, although it sounds academic, I think, is indispensable for any government policy. And not only for government policy, the major corporations in the world, they have very distinct plans and strategies based on very systematic assembly of international data, forecasts about the technological development, efforts to find new niches, efforts to find new markets, efforts to make new agreements, etc.

Before I come to the final question, one other little thing may be taken up. Dr. Linder was referring to the positive adjustment and the implied scepticism that I conveyed in my earlier statement. I certainly agree with him that this type of adjustment in the OECD countries that is forward-looking and positive, warrants a greater, I would say, positive notion than, what we say is the protectionist approach where you fix your production structures. My only worry was that it is extremely difficult for the developing countries to judge, even where it is a positive adjustment policy in an OECD country, whether that really is going to be having a positive effect on the developing countries. For instance, in the OECD countries it is very common that, in industries suffering from lack of competitiveness, let us say the textile industry, that the government is supporting it directly and indirectly towards new technologies. It is trying to search for ways of bringing this industry up to new levels of competitiveness, that is called positive adjustment. The effect for a developing country that tries to export to that OECD country would be the same, in the sense that they have again to meet the same difficulties to penetrate that market, unless of course the product changes and the product mix is such that developing countries can make use of it.

Finally, we have been talking about the information and about the difficulties for governments to undertake these tasks. That is, I think, well appreciated by everybody, but it is, of course, a give and take. It is a process in which governments are going to necessarily have to have an insight. Some governments rely on research institutes. All governments need information for industry. There is no doubt that the industrial sector - the corporations - do have crucial data or should have the crucial data. Governments would have to, all the time, tap that data. And vice versa, all the corporations are queuing to find out what is in the minds of policy makers. So there is this give and take. I am now coming to a question to Dr. Park. I think it could be interesting to learn how and to what extent Korea has had this possibility of getting the government and the industry in, what I believe, a very tight communication system. I think also there was a lot of foresight in the Korean Government to allocate resources for research and development and for investment. The question is, how was this built up institutionally between government and industry?

In direct response to Mr. Muegge's question about the information exchanges and communications between the government and industry in the case of the Republic of Korea, Dr. Park replied as follows.

This information exchange and relation between the government and industries differed in the various stages of development. During the earlier stage, as early as 1960 and the early part of 1970s the government provided first of all the financial aspects for the project/sectors. Total planning was done by the government, mostly by the Economic Planning Board, and in this the financial allocation of funds was the most important aspect in providing incentives to the private sector. During the course of this allocation (some were saying that this was not an allocation but rationing of a certain amount of money) the private sector followed the government's sharing up, including instructions and requests to focus in certain areas. However, after a certain period of time there was constantly a very high demand for the money, both internally and externally, and as a consequence of this, right now, as I mentioned, there is an accumulated external debt amounting to \$40 billion. In view of this, questions have recently arisen on how the government plan can be understood and implemented through the private sector without rationing the funds or money or capital. Very recently, you have heard about what is going on in the very large-scale electronics industries in Korea. There were three major entities - three major and large electronics industries now doing fine jobs. In addition to these three, Hyundai has now come to the picture. Hyundai is going to invest over \$100 million, only for the assembling of one specific product. There is now a great argument, whether this is proper or not. But the government was not in a position to influence whether or not Hyundai was to be one of the members of the electronic industries. Hyundai itself decided to go

into that particular area, by borrowing money locally and by borrowing money overseas (for which they did not need the government's clearance), even though we are in such a difficult situation of borrowing overseas capital. This shows how the private sector has its own intentions, to cope with the rapidly expanding or rapidly changing specific industries, such as those in the electronics area. This, example shows, it seems to me, that for the most part, the market mechanism again has played a great role, rather than the government planning or government instructions which were mostly prevailing in the past days.

The discussion continued with further comments by Dr. Linder in response to Mr. Muegge's intervention.

I think that Mr. Muegge was very right when he said that it is difficult to judge the future. It is also evident that we cannot trust the signals that come through the markets, through the international markets, in the sense that we cannot trust them to give certainty for the future, that nothing will change. I think, it is very important to be aware of the changing environment in which we and politicians and the industrialists will have to live. But we must then also recognize that the alternative to change is stagnation and I am sure that none here would like to praise a situation where there was no change. The conclusion to which I come from Mr. Muegge's interesting observations, is that we must formulate a system that permits us to handle change. And how do we do that? Well, I think here again, that the experiences (and I think we should look to the experience; empirical matters should provide support, we should not be thinking in lofty empty rooms) are, that the countries that, during the last decades, have concentrated on export-oriented structures have had much more resilience to change, have had it much easier to handle change. I think that point was specifically made by Dr. Park in his paper. On the other hand, the countries that have gone in for import-substitution have found themselves extremely dependent on imported inputs because they set up such a structure that they had only foreign exchange for, so called, essential imports (petroleum, for instance). Then, when you are met with energy price increases, you cannot get the spare parts, the raw materials, and the fuels to propel your industrial set up. In many of these countries the tragedy had been that expensive investments, factories are running at half capacity. Those who have gone for outward looking strategies have been much more successful to handle change, although they have also been much more exposed to change on the world market.

I think, that it is also important to have a decentralized decision-making system. It will be much easier in an industry to handle change if one relies on decision-makers widely dispersed in the system, then if one relies on a very centralized make up.

I agree with Mr. Muegge, that we need much research. I want to have research in the various companies to handle the future. I want

to have governmental policies that facilitate research, or R and D, efforts. I also want to have governmental research, but on the relevant problems in the policy-making and those are of primarily macro-economic nature, on general frameworks, promotional structures or incentives, rather than detailed studies on specific industrial aspects.

Professor Jacques de Bandt, (UNIDO consultant) made an intervention of general nature at this stage along following lines.

I would like to make some basic comments on the restructuring, on the notion of restructuring. I would like to start first and try to give some content to the notion of restructuring. There are, I think, four aspects of the notion of restructuring in this particular case. One is the fact that the pace of structural change has been increasing quite substantially in the 70s. The second one is the fact that the international context within which the process of structural changes is taking place has been changing quite dramatically. The third point is the fact that on these changes we have to take account of the impact of the north-south relations. The fourth point is, of course, the specific situation of Thailand within the international system.

Let me try to make some short suggestions on those four points, leaving out for the moment the problem of the normative aspect as Mr. Muegge has been using the word, which means what kind of structure is a country like Thailand planning to have in the near future or in the long-term, and the final aspects which are concerned with the ways and means of implementing this new structure. But, limiting myself for the moment to the restructuring notion itself, the first point is the fact that the pace of structural changes has been increasing. I have been participating for many years now within OECD on the analysis of structural changes within most of the OECD countries. When we started this study work (that was in 1974) the OECD forecasting model was predicting after the first oil shock that the growth rate would be reduced substantially and, during the year 1975, the forecasts were reduced three times. But, within the model it was implied that the rate of structural change was proportionate to the growth rate, so reduction of the growth rate would mean reduction in the pace of structural change. But already from the beginning (in 1976-77 or, let us say in the second half of the 70s) it was, I believe, obvious that, contrary to the hypothesis built in within the OECD model, the pace of structural change within the industrial system of all the OECD countries had been increasing very dramatically, when you speak of structural change in terms of the composition of value added within different sectors and, systematically more so, when you speak in terms of employment within the different sectors. This is a first element; structural change has been increasing, although the growth rate has been reduced.

The second element is concerned with some fundamental changes in the international context. When we look at what happens within the international industrial system, we see that there are some fundamental changes which can be depicted in terms of restructuring processes within industrial sectors in relation with some basic technological innovations. These are changing completely the situation and the prospects for the different sectors. Let me take an example. In 10 years time the role of the basic industries has been changing quite a lot. For various reasons, if you take steel, the steel content of industrial activities has been very drastically reduced. If you take chemicals, chemicals which had been in the period before 1973 one of the driving forces of most of the industrial sectors, has seen its role completely changed during the 70s. We may continue with most of the sectors. One aspect of this is the fact that new sectors, new activities are coming out, and related with those new activities is the fact that the relations between the different sectors within the industrial system are completely changed. When we compare, for example, the OECD countries in 1975, (when we made the first study) and in 1980, the meaning of the industrial product classification has been changing. The frontiers between the sectors are not the same any more. Some of the fundamental changes are concerned with the changing configuration of the inter-industrial relations within the system. Of course, related with this are some new technologies. I would mention only three which have a very big impact on inter-industrial relations. One is micro-electronics, the new system which is built together in the electronics and mechanical sectors. The second one is the problem of the new materials, composite materials, which is completely changing the relation between, for example, some chemical sectors and some steel sectors and so on. And the third one which is only beginning to change, is the bio-technology revolution which is changing the relation between agriculture, food industries and chemical sectors and so on. So, I think there are some fundamental changes which should be taken into account when we speak of restructuring. This means restructuring is taking place at the moment when the definitions of the sectors are changing.

The third aspect is the fact that the north-south relations are affecting the restructuring process. I would not have to go further into this, because Mr. Muegge has been giving the example of positive adjustment and that was the same point I wanted to make. When you look, for example, as he did, at textiles, it is very clear that what positive adjustment is meaning in the case of OECD-countries, is completely changing the comparative advantages' situation of the textile industry within the northern countries. This, of course, will affect, necessarily, the restructuring process in the south.

The fourth aspect is concerned with the specific situation of Thailand. The problem - leaving out for the moment the terms of the ultimate structure that is wanted for Thailand - is, of course,

concerned with the relative position. This means the constraints and degrees of freedom which are available for Thailand in order to adapt within this international concept. As has already been mentioned, the industrial basis is still quite weak. I would say from what I know and what I have read, that the Thai industrial system or industrial base has not really grown up to a consistent system. You have, as you mentioned, Dr. Chirayu, good components and weak parts. What is very important, I think, is the fact that the degree of co-ordination and inter-industrial relations seems to be quite weak. That is one point. Of course, when one look at the relative position of Thailand, one could say that, to a certain extent, the Thai industry appears to be in an intermediate position within the developing world. An intermediate position which imposes very specific constraints on the industrial system and specific requirements in terms of the kind of combination that has to be found, for competitive purposes, of relatively low wages and levels of productivity, and so on. I cannot go further into this for the moment, but it means that specific requirements are set for the restructuring process in Thailand. But I may insist on attention to the questions of the management of the international relations of Thailand with other countries, because the Thai industrial system is dependent on imports of machinery, etc. The problem is to know, how to manage the whole set of relations that come through technology, foreign investment and so on. I think this is an important point.

The second important point is to know how to improve the technological capacities of the Thai system, in accordance, of course, with the targets which will have been chosen. As I said at the beginning, I would not like to go now into the targets, so maybe I will leave it for another time within this seminar, which in now concerned with ways and means. Concerning essentially the problem of the availability of information, I think, I would quite strongly disagree with Dr. Linder, although some of the best information, of course, is at the level of firms. But, I think, the information which is needed in the special actual global crisis context is not available at the level of firms here. The problem is to know at what level this information can be made available. I was two days ago in a very big French firm. They have a very sophisticated information system, with lots of people working only on what other firms are doing and so on. We came to the conclusion that they are unable actually to digest all this information. They do not know what to do with the information. They have a lot of information, but the problem of restructuring is multi-dimensional. There are so many dimensions and they get information on all those dimensions and they do not know how to organize, how to use the information just for decision purposes. This is, of course, related with the fact that the market signals give only very short-term information while other informations give some ideas concerning the strategies of countries or of other firms and so on, but they do not know how to relate short market signals with the whole problem of what is happening and what is likely to happen, taking account of new technologies, at the

level of a specific sub-system, i.e. not just the textile industry or the food industry or the automobile industry, but the way this particular sector will play a role within the whole industrial system. This intermediate analysis is, of course, terribly lacking. I think it is only possible for the state to organize this kind of information system, which is just not pure information, but the way to handle the information. Of course, the problem is not to make forecasts, because as Dr. Linder said, and I agree on that point, it is not possible to make forecasts. But, it is possible to discuss between state and enterprises on the likely impact of some of the events which are taking place at the international level.

The discussion continued with an intervention by Mr. David Wall (UNIDO consultant) who was focusing on the lessons to be learned from the Korean experiences, as follows.

I just would like to change the subject a little and go back to the paper on the Republic of Korea. I think we tend to get carried away by what I call the Korean syndrome. The Korean list is fantastic, their statistics impressive and I am sure they got everything right. But, in fact, there are several things which are not so good with the Korean system. I think it would be wise that countries like Thailand take advantage of learning from these mistakes. The most serious one is the concentration of the policy packages with respect to gross foreign exchange flows and not to net foreign exchange flows. The consequence of this was illustrated in Dr. Park's talk, when he indicated that the Korean foreign debt is now twice its annual export flow and roughly two-thirds of national income. This is quite a serious foreign exchange over-head and is the function of the over-emphasis on gross foreign exchange flows.

A second point is that Korea is still suffering from a repressed financial system characterized by mis-allocations of capital through the guarantee of foreign exchange payments to foreign investors, through portfolio investment as well as direct investment and through the operation of the severely repressive preferential credit system. There is serious over-investment in heavy capital goods sectors, and heavy goods industries in which Korea does not have short to middle run and possibly not even long run comparative advantage, and these mistakes are beginning to be realised in Korea now.

A third point, which Korea has fully recognized and is now undertaking a crash programme to make good (and, I think, is the most important lesson to countries facing industrial restructuring strategy) was the failure in the early stages to take adequate account of the needs of agriculture in the rural sector which had serious effects in terms of loss of real income in the countryside and reducing markets, leading to migration to the towns or producing

social unrest, and to increased dependency of the economy on imports of food stuffs for quite a while. In the last three years, I have been looking at industrial restructuring programmes in other countries, like Bangladesh, Sri Lanka and, recently, Zambia. All these countries are making the same mistake in trying to encourage industrial restructuring through a high-incentives promotional structure that is turning the terms of trade against the rural and agricultural sector. This is leading to a situation where investment in the agricultural sector is falling, with short and long run consequences for the supply of food and raw materials. As Dr. Park said, Korea has now realised this mistake and has a crash programme of rural reconstruction and agricultural support. But other countries have not yet realised this. Thailand could benefit from this lesson.

The discussion continued with some observations by the UNIDO consultant Mr. Peter O'Brien as follows. The observations were put forward within three main areas or headings.

The first area concerns some of the changes in world market structure and their implications for industrialization strategy. The word strategy has been noticeably absent from most observations this morning. The second point concerns a central bone of contention in the debate so far which is the nature and handling of information systems, of communication between different agents in national economies. The third point links up with the comments Dr. David Wall has just made and relates to the question of experience; what we should learn from experience.

On the first point, the world market structure and some of the dynamics of change, I would like to emphasize a couple of things. First, it has been common for a long time in debates concerning export policies, in particular, to emphasize the importance of finding 'niches' in the world system. It is as if we had a kind of honeycomb in front of us and the question is to find the little interstices in the honeycomb in which each and every person can eventually get to the sweet liquid to be found inside. Now, I think the notion of niches is one which is currently undergoing (or ought to be undergoing) a serious re-examination. In particular, the technological changes, taking place in the OECD countries, and Mr. Kittirat has earlier shown this very clearly in the case of the electronics industry, are not fiddling around with niches they are blowing holes wide open. They are drastically altering the nature both of corporate structure in the international system and, as Dr. de Bandt has mentioned, indeed the very definition or understanding of what we mean by industrial sectors, inter-industry linkages or inter-firm linkages. At the level of international market power it is extraordinary to observe, during this period of crisis, the remarkable degree of mergers and takeovers which have been occurring among transnational corporations. Particularly in the early 70s

there was a view that an individual transnational corporation was a permanent entity, shielded from the forces of being consumed by other firms. The experience of the last two or three years has refuted that type of consideration. We are now talking about collaborations and takeovers on an enormous scale in which some of the world's largest firms can no longer regard themselves as being safe from change, safe from absorption. What is the relevance of that point to the kind of issues under discussion here? It indicates that in the process of reorganization or restructuring, we are now in a period where certain major entities which for financial, technological, organizational or other reasons obtain an edge in the international setting are now capable of absorbing other giants and thereby extending the range of their activities. This is particularly important in areas where, on the one hand there is very fast change (for instance in micro-electronics) and on the other hand also these firms themselves are starting to shift into so called traditional sectors and biting off chunks of these sectors for themselves. I think this observation is important with regard to assessing export possibilities.

The second aspect of international market structure is the implications of this type of reorganization for the location of various kinds of production. In the textiles and clothing case, for example, I happen to have with me a manuscript which has just been completed regarding the impact of micro-electronics technology on the location of production and this manuscript indicates rather clearly the drastic changes which are likely to take place in the rest of the present decade concerning location of production for that industry. In the past, several developing countries, particularly in Asia, were able to take advantage of the decomposition of production which could be done in this industry and take up particular bits of that production through using labour-intensive processes. They were able to export very successfully at least in gross terms. This kind of option is now disappearing very fast. The industrialized countries, realizing they are in an acute crisis themselves, are now trying to find the ways to bring back some of the production which they had previously been farming out. They are trying to bring it back because they have what are for them extremely acute employment problems. I think this point needs to be kept in mind. I was only last week in Iraq discussing some of the issues currently under consideration by the Iraqi Government. One example that struck me forcibly, concerned the efforts made in the 1970s by enterprises in Iraq to move into television production. The project evaluations (an area in which, by the way, it seems to me Thailand is currently very weak) which were undertaken in that sector followed all of the classical procedures, people worked carefully to make all the calculations, they negotiated with a range of international firms and they came a collaboration agreement. Within about 12-24 months after concluding that collaboration, they suddenly found that the international firm concerned, was in practice moving to a qualitatively different kind of electronics production in which television sets were merely an

off-shoot. They were branches of a big tree which was growing in quite a different direction and the Iraqi enterprises, now both private and public are being forced to reconsider quickly the nature of those decisions. I am just trying to emphasize how even a careful decision procedure, operating under assumption that technological conditions are rather stable, can run into severe problems.

Moving to the second general area, the question of information and the co-ordination of information, I believe the major difficulty at present is that, whereas in the past perhaps private enterprises could themselves get most of the relevant information, I think, that is now open to serious question. To illustrate, I would just like to throw out a thought based on Dr. Park's lucid discussion of the Korean experience. When you talk about production by private enterprises, one thing is to talk about that production in, say, western OECD-countries, another is to discuss it in the Japanese-Korean framework, where it appears there are very close public/private linkages and where the governments themselves have created key institutions. I am thinking, particularly, of FIST in Korea. These institutions, concerned with up-to-date major decisions in scientific and industrial fields, are in fact operating closely with large private groupings. This type of structure we need to keep in mind in discussing how to come to grips with the sorts of mechanisms available to consider information problems. That leads me easily into the third and last general point which is the question: What can we learn from experience?

I have a pre-occupation regarding what we can learn from experience. To put that in a crude form which simplifies my own thinking but might provoke further discussions in the course of this seminar, my concern is that, sometimes we seem to be learning from experience only in saying: All the developing countries which have performed well have been large-scale exporters. That seems to be the only lesson which people are learning. While that lesson has its own kind of validity, I think it greatly simplifies the types of problems which Thailand is facing now and in fact which are almost elaborated in the Fifth Plan itself. We have to ask ourselves, how and under what conditions, both nationally and internationally, this kind of export expansion was achieved. We have to ask ourselves more particularly, the subsidiary but extremely important question: Is the expansion of exports itself connected with some kind of deliberate planning, deliberate orientation with regard to industrial structure? My understanding of, for example, the Korean experience (I use that because we have the benefit of Dr. Park's presence here and he can elaborate further for us) is that the emphasis on export has in fact been related to a conception or vision on the part of the major entities, public and private, in the Korean economy regarding the kinds of structure which Korea is hoping to attain. I think that is important because it implies, as Dr. Park himself emphasized, that the government has a clear grasp of what it sees as the dynamics of its own role and has a concern

with the way in which particular industrial sectors are being developed; he specifically referred to the concept of balance in this regard. I believe this component is an important one of what I would regard as the successful types of export strategies. To push the point further, I would argue that if we look at certain other countries in the region - I am thinking now, say, of a small country like Singapore - it is important to stress the point that the government involvement in that process has been a very strong one indeed. But it has been an involvement with the strong urge towards encouragement, a strong urge towards grasping the issues which are facing the private enterprises and pushing them in the directions in which they need to go. In other words, it is a drive not towards control but is a pre-occupation with understanding, encouraging and driving the firms into the world market. Consequently, we have a phenomenon even in small economies, Singapore, Hong Kong and elsewhere in the region, of actually being able to start to penetrate into certain areas of capital goods production which many people would have thought that, because of the pure size of the economies, was hardly viable. There is evidence that under these conditions of openness to world systems, given the nature of domestic organization, I stress again, between private and public entities, these economies have actually been able to move into, or are moving into, some of the most complex areas of production. I think this message also is one we should keep in mind. Let us not learn from experience only that success can be obtained through export, but let us learn also what that export has meant in terms of domestic organization to really benefit from it. Even if your net export earnings are very high that in itself is not much use to you, unless you have a clear conception of what you are going to do with them and how you are going to try to strengthen the current weaknesses of your industrial structure.

Dr. Narongchai in rounding up the lively morning session draw attention in particular to the value of the discussion about how the industrial development in various countries was being affected by the international dynamics and reacted to it. His remarks were essentially as follows.

I would really like to respond to many of the comments made by the floor and I benefited from these comments very much, but the time does not permit me to do that. Let me just pick a few reflecting what I thought to be the essence of the discussion that we have had. We have discussed, we have heard from several interventions about the international dynamics of industrial development in various countries and this, I feel, is a very important consideration. It has been pointed out by Professor de Bandt, Mr. O'Brien and several other participants that we are living in this world where things are changing very rapidly, illustrated by the fact we may have a number of new industries in the ISIC code.

This is very much what we had in mind when we were developing this, so called, industrial policy and we thought at that time that the best thing for Thailand to do would be to let the private sector decide how it would be best for them to cope with the situation. So, the process that we put into motion at that point or are trying to put into motion up to now, would be to liberalize slowly, so that the private sector could actually respond to changes. We felt that by doing so the private sector would be in a better position to respond the changes, that is, in a better position than the government. But when we did that, the problem that we had was that the private sector industries themselves found that the competition was too tough. This is the kind of dilemma that we had. If you protect too much, then they would not respond, if you liberalize too much then the competition would be too tough and they could be whiped out completely. Anyway, we feel that the best thing for us to do is really to slowly liberalize and, at the same time, try to encourage or try to get the government to be involved with the private sector in such a way that it would give them the encouragement more or less along the lines that Mr. O'Brien has mentioned, and in this sense we are not really going to the point of over-promoting. I think, Dr. Wall, does not have to worry about that this situation would be happening in Thailand. It is not going to be possible that the government would over-promote. The government does not have the money to do that. What we actually are doing is only to try to provide the private sector with more encouragement. But we are still in the process of working this out with them and I think the aspect that Dr. Chirayu has mentioned about the co-operation between the private sector and the public sector is extremely important in the institution-making process that we have. I did not say that we did not get co-operation from the private sector; it is just that in doing this now, we still do not have good communication, and we still find some difficulties in communicating with the private sector on certain aspects. I think this is very much the essence of what we have been discussing today and my final note, I would like to say, is that, when we organized this meeting, what we had in mind was to make sure that most of us who are involved in the industrial development of Thailand, understand what is meant by industrial restructuring and industrial policies in this country. As of now, I feel that we are moving in that direction, that people who have not understood restructuring completely now understand it better, even though they may not fully accept our definition but still, as Mr. Muegge said, it is a matter of having a general notion.

Another objective that we have is that we would like to check, on an annual basis, whether we are going in the right direction, policy-wise, strategy-wise and organization-wise. I think, at this point we can still not conclude that we are going in the right direction. Maybe policy-wise yes, but strategy-wise I am not too sure. Management- or organization-wise it is a big question mark whether the way we are going is really the best way of handling these things.

The Chairman, Dr. Chirayu, in concluding the morning session, summed up and assessed the discussions as follows.

I would like to thank all the people who presented the papers and as well as the excellent comments that were made from the floor. I have attended many conferences, and if this morning is something to go by, I think, we have reached fairly great heights compared to other fora similar to this. I personally have achieved a better understanding of restructuring of industries, the objectives and strategies as well as sharing the problems and achievements in various countries. This is a very important step, because if we did not have this kind of vision together we might be daunted by the problems or we might not see the objectives as being worthwhile to pursue as much as it should be. We know that it will involve a lot of work and efforts on the part of lots of people - many government agencies as well as the private sector. What we would like to strive for is a general system whereby things would be taken care of by themselves rather than needing people to take up actions all the time, or more automaticity through the general system. But, at the same time, as we have heard this morning, we realize that, that will not be adequate. There will be key sectors, and there will be changes. We have heard the comments that, in this area, I think, we have to recognize that in the Thai case, we are still fairly weak. We are now grouping for the kind of position, whereby - through the institutionalization of groups of people, people both in the government and the private sector industry - they will be able to choose winners, or phase out or prevent losers from coming to the scene, to handle changes, that have immediate impact, changes in technologies which are causing changes in international market situations, changes in technologies which might revert things in areas where we thought we have comparative advantage, back to the other side. We might have to do some real fast thinking in mid-stream, in order not to aggravate the situation. These things have been clearly brought out this morning and, I think, that the afternoon session will have to really be on its feet to reach the sort of understanding we have had this morning.

IV. THE ELECTRICAL AND ELECTRONICS INDUSTRY

Afternoon session - Saturday 22 October 1983

The afternoon session - under the chairmanship of Mr. Muegge - was divided in four parts dealing with industrial restructuring issues in the context of

- the electrical and electronics industry;
- the automotive industry;
- financial institutions; and
- export promotion.

Dr. Narongchai introduced the discussions on the first subject - industrial restructuring issues in the electrical and electronics industry.

It is my intention to discuss the electronic and electrical industry as an example of the process of industrial restructuring in Thailand and I am not going to pick out any particular products and try to discuss the viability of them. When we started this process of study the electronics and electrical industry for the purpose of industrial restructuring, we first tried to understand the industry, what it is really like. I think we have few engineers here and you would appreciate that to me as an economist an amplifier and a circuit breaker may look exactly the same. I have no idea at all of the difference between them. So, in the study we relied heavily on engineers and we have here Dr. Chatri who helped us to define the products so we could understand the industry better. We finally came up with a sort of classification, that is, we grouped products into basically two main groups, namely electronic products and electrical products. Each of these were then divided into consumer products, professional products and components. Of course, some of the products' use are both electrical and electronics, but this was basically the classification of products, in terms of technology and in terms of market orientation. We think it is a good way of doing it and we are going to try to do the same for other subsectors, which we are going to review in the future.

Now, looking at the industry this way, what do we see? Maybe the electronic and electrical industry by itself is really not that big in Thailand? In terms of proportion of value added in the whole manufacturing sector it is only about 3 per cent, so it is really

not very big. Its annual growth rates, however, have been very rapid, from 1976 to 1978 23 per cent, and up to 1980 27 per cent. It has a high growth potential. In terms of trade it is a major import item. In 1980 the value of imports of electronic and electrical products was close to 15 billion baht. That means a major foreign exchange cost to the economy for this product. As for exports, it is (if you exclude the integrated circuits) very small. It was less than a billion baht in 1980. Of course, when you include the integrated circuits it was more than 7 billion baht. Thus, if we are talking about the electronic and electrical products for export and are excluding integrated circuits, then this sector cannot contribute very much to our export earnings. We have also the employment figure which is about 50,000 and, as Mr. Kittirat pointed out this morning, that may be an underestimate. As far as the number of factories is concerned we do not know exactly how many they are, but we thought at the time when we did the survey that there was about 400-500 small- or medium-sized factories producing in the country. Another way of summarizing the status of the industry, or the basic structure of it (and this is a very good example of the kind of structural problem that we have in the industrial sector) is that (i) the industry produces largely for the domestic market; (ii) the exports of the products at the moment are less than 10 per cent of the production volume, so it is not an export-oriented industry and, (iii) the consumer products account for about 58 per cent of the total value added, professional goods about 15 per cent and components about 27 per cent. Therefore, in terms of the classification that I draw attention to earlier, we can say that this industry is very much concentrated in the very first category, the consumer products, and to some extent in the components category, while the production of professional goods is still very small. A few other aspects on the basic structure may be added: (iv) almost all the factories are concentrated in the central region, about 65 per cent in Bangkok itself and with surrounding provinces it would add up to 95 per cent of all factories; (v) finally, the industry has a very interesting dualistic structure. There is lot of small and medium firms and only about 6 firms with registered capital of over 50 million baht, and there is no relationship between them.

Now when we moved on to try to identify the causes of the, so called, structural problems, we identified seven items:

Firstly, there is the inappropriate protective structure, which gives more incentives for a certain kind of production and less for other kinds of production.

Secondly, the tariff structure discourages the production of parts and components and we have in the detailed study shown the kind of tariff rates which really do not encourage people to manufacture parts and components. In looking at the structure of protective rates (and this tells a lot of the story about electronic and electrical industry) we have made three computations before and

after. In 1981, there were extremely high effective protective rates for domestic production (this is only based on the tariff structure). However, for many of these products, when the firms import some components they have to pay relatively low tariff rates while when they use local components, the tax rates will be a bit higher. If that had not been the case then the effective rate would have been even higher. So you can see that for some of the industries which use a bit of local components or parts, the effective rate of protection would be lower than for the ones that would import most of the things. This is a protection structure that we feel does not encourage the kind of good competition, that industry should develop in. The industry actually faces two different kinds of competition, one is that it is highly protected and therefore there is a lot smuggled goods in the country, another is the high business tax rates and there is a lot of illegal products produced in the country. But, if everything can be put under control then they have high protection, which is again another different problem that we have.

Thirdly, some products were subject to very high bussiness tax rate at that time - and we had many products having to pay 30 per cent business tax rate - and that led to a number of illegal factories, as Mr. Kittirat pointed out this morning.

Fourthly, the government procurement has not been designed to systematically promote local industries, especially in the case of projects under foreign loans. Whenever we rely on foreign loans, the local firms find it very difficult to compete with the import suppliers. We have not pursued that matter consciensiously in the government. If you go through the different government agencies, no agency is really trying to use this method to promote local industry, in contrast to what it is like in many other countries, like the Republic of Korea, and Japan.

Fifthly, export promotion measures at that time were not as effective as we would like them to be. This is the situation as it was then, not now, as a lot of action has been taken to overcome all this inefficiency in the export promotion.

Sixthly, there is no systematic promotion given for non-metropolitan area location in small- and medium-scale industry, and this is true not just for electronic and electrical industry.

Seventhly and finally, there has been negligible technological promotion.

When we went about restructuring the industry we had in mind four objectives. First to promote production for exports; second to promote production of parts and components; third to create an ancillary relationship between large and small firms and, fourth to encourage rural location for some firms in connexion with export promotion schemes (such as the Eastern Seaboard).

Finally, when we did the study and had a number of hearings, we appointed a small group, including few representative from the private sector, and went through many study phases. We did a survey and we consulted with private firms and used their data and all that we knew, our own data. At the end, we came up with the proposal which was submitted to the Cabinet on 31 October 1982. There are a number of items here in this policy package: First is the rationalization of tariff rates structure and we have specific rates that we propose that the government should consider implementing over the period of three years. Second is the proposal for reduction in business tax rates, especially for consumer products that we submitted. Third is the revision of standard profit rates (for those of you who are not familiar with the system of taxation in Thailand I should just mention that we collect business tax sometimes based on the cost plus profit, a "standard profit"; especially for imports, we do that). Fourth we proposed rearrangement in business classification for tax computation purposes. Fifth we proposed negotiations to change conditions on OECF loans. We thought the OECF loans were the ones especially discriminating against the local products, but the Ministry of Finance was reluctant; the OECF loans had very low interest rates. Sixth was the improvement in procedures for government procurement. We think this would be a very important instrument to use, so we submitted specific proposals on this. Seventh was the tax rebate rates reform; that came due in September 1983 anyway, and we have to start computing new rates for the 1984. Eight was the export credit extension, given by the Bank of Thailand, to a period of over 180 days on an automatic basis. Ninth was the promotion or extension of export marketing service. Tenth the establishment export credit guarantee scheme. We also proposed, eleventh, the screening of joint venture contracts, twelfth establishment of an industrial services organ, thirteenth, the promotion of private standard testing firms, and fourteenth, the increase in the number of TISI standards (which is the government certified standard for the products).

Now, we have submitted all these things. Let me just, in my conclusion, say what has happened up to now. Out of the fourteen items, we have completed very few, I am afraid to say. For the first, we reduced the tariff rates for most of the final goods and that was well received; it got rid of some of the smuggled goods. But, there was no change in the tariff structure for imports of parts and components and that makes it difficult to promote the production down to that level. On the second and third items we reduced most of the business tax rates for items which were taxed of more than 20 per cent at that time, down to 7 per cent for local products, but we did not do that for imports. We said there should be some conditions, that is, if you import you were entitled to 7 per cent rate only if you fulfilled certain conditions. Of course, people thought it is very difficult to do according to the ifs, so, they did not do it. This year we took out the conditions. What happened is a kind of tariff structure as follows (calculated on the before and after situations):

Effective protective rates for some electrical and electronics products, 1981-1983

	1981	1982 (with conditions)	1983 (without conditions)
Refrigerator	1,698.92	452.3	159.7
Electric fan	431.02	187.8	171.4
Air conditioner	724.60	264.9	264.9
T.V. (B/W 20")	536.90	359.9	182.5
T.V. (Colour)	277.40	231.0	140.4
Car radio	50.80	196.4	118.6
Radio (A.M.)	42.02	197.4	124.1
Radio and cassette	0.01	202.4	106.9

You had in 1982 the protective rates with the conditions (and, for your information, the conditions meant that importers had to pay higher business tax rate, which increased the protective rate). What happened under that announcement of 1982 with conditions was that, in terms of tariff protection, the protective rate became much lower, but if you add the business tax rate protection, the effective rate still stayed rather high. The net effect was, for instance, for refrigerators above 450 per cent, and for television 200-300 per cent depending upon the product. After one year, the Ministry of Finance thought that the conditions were difficult to supervise, so they took out the conditions unexpectedly, on 25 September 1983 and now this is the situation after: Refrigerator producers used to have 450 per cent protection, when they took out the conditions the protective rate dropped down to 160 and that is why they complain. Television used to have 360 for black and white and 230 for colour, when they took out the conditions it dropped to just above 140-180 per cent, so they complain. This is the situation; we are now having a lot of problems with the manufacturers and they are making submissions to the government that the government should do something, like putting in import ban or supervise the importation or reduce the tariff rates for parts and components.

Apart from that, what did we do? On the item four, we did not do anything on business classification; On item five, the Ministry of Finance said no to negotiations to change loan conditions; on item six, the government is very firm on strengthening its procurement procedures and is instructing the agencies concerned to

do something about it; on seven, we will now start working on the new computation of the tax rebate rates; on eight, the Bank of Thailand said, no need to make the export credit extension automatic, if they come and ask, we will give the 180 days' extension anyway, so that is all right; on nine, the Ministry of Commerce will be providing lots of export promotion and export marketing services through the Export Services Centre; on ten the Bank of Thailand does not seem to actively be pursuing the matter of establishing the export credit guarantee scheme; on eleven, the Board of Investment is very interested and may start the process of screening joint venture contracts very soon; on twelve, we are establishing an Industrial Services Institute in the Khon Kaen area; on thirteen the Board of Investment said that they would promote private standard testing firms but I have not seen the announcement, so I am not sure; on fourteen, we have not done anything towards increasing the number of TISI standards, That is the action so far towards the restructuring of the electronics and electrical industries.

Mr. Herman Muegge, in thanking Dr. Narongchai, made following comments.

As could be expected, Dr. Narongchai's presentation of actions in this specific sector shed much light also on the restructuring problem in general. You mentioned that the electric and electronic industry has had a rapid growth but also that it was mainly domestic market-oriented and consumer product dominated and with many small factories. I think, when internationally we talk about the electronics and electric industry in this part of the world, one would expect, to have heard that large transnational corporations have settled here to export components to the industrialized markets based on the skilled and cheap labour. Thailand is an exception it seems. You mentioned that this structural situation has been caused partly by protection, lack of export promotion, little research and development and other support. What I would like that the Seminar now addresses itself to is, to what extent do you, specially the participants from industry, consider these to be the most pertinent features that we were just now listening to? What is the right assessment of the causes of the structural problems? What are the right assessments of the proposed direction in which the industry should move? That, I think, is the crucial question, that we should address ourselves to. Which direction could industry have? What are the international forces that would influence that decision?

The ensuing discussion was opened by the representative of the electrical and electronics industry Mr. Kittirat Srivisanvacha (Adviser, Thai Electrical, Electronics and Allied Industries Club, the Association of Thai Industries) who put forward following thoughts.

As for the electrical and electronics sector, I think, the macro points have already been dealt with this morning and were focused on very clearly by Mr. O'Brien, but allow me to mention a few things. As the global, fierce competition is going on with the United States, the EEC and Japan fighting over there, and some developing countries like the Republic of Korea verging into the international market, we in Thailand and some other countries have been trying to follow. But it has now come to the point that the developed countries want to take their business back in close quarter, and because they found that the degree of subsidies required is far too high, they protect their market. We in Thailand suffer particularly because we are on the brink of stepping out, trying to export, trying to verge into the international market. Another point is that international dumping is going on in this world. You could look at the Financial Times the other day, that the European Common Market had claimed that 32 countries subsidized the electronics products, dumped into the Common Market. We are very small here, we have so many brands going about. Such base for restructuring the industry in quite something that we have to fight against.

First, the high technology factors, the piece parts, the revolutionarizing piece parts, are controlled by the advanced industry, in our case, mostly in Japan. So, the price is being controlled by them. In the CKD prices we do not know to what extent they could include subsidizes. But for sure we would rather see imports be put on quota basis, as other countries are doing. In that case we could control a certain amount of the international dumping now coming into our market. Especially in Thailand, where, I am afraid, the unorganized sector always is a step ahead of us. So, we have to catch them on the one hand, and on the other hand try to negotiate a price with a big suppliers of piece parts who control the margin between the piece parts and the completely built-up unit (CBU) price. For instance, if we look at the import duty for television for the CBU and the piece parts, the margin is 30 per cent. That should be good enough (if the international dumping was not going on). But in reality, if we go through the process we see that 10 per cent import duty on piece parts is not quite that. Granted that, because of lack of know-how, we could not manufacture, for instance, the tuner so they allow tuner as a model to be imported at 10 per cent. But there are several other assembly parts, which are subjected to CBU rate import duty. So, in all, our researchers have worked out that the margin difference between the completely built-up units and piece parts is barely 20 per cent. Furthermore, in going through the process of taking this delivery, (this is in our country now, I do not know about others) there are also some discrepancies for clearing the things and that costs us a lot. In addition, the industry has to put up with heavy investment interest rates and other factors, such as the workers' minimum wages, and all that is to be taken into account. So, from the outside it may look that there is ample marginal difference between piece parts and CBU, but that is not so.

Mr. Muegge, in thanking Mr. Kittirat for his clarifications from the point of view of the industry concerned, noted that there is a fierce competition going on, not only internationally but specifically in this region.

Of course, it is in the context of this competition that dumping comes up; it being very difficult to differentiate between, what is real dumping, a fierce competition, and the implications of a fierce competition. The question that now remains open, I think, would be: Is this a difficult, so called, weak industry in Thailand or does it have a potential for growing into new product lines in which it would have international competitiveness? Should it shrink healthy or should it expand rightly?

Dr. Pornchai Tulyadhan (Director, Project Development Division, Board of Investment) continued the discussions.

As participant from the Board of Investment in these discussions I would like to come in between the private sector and the government sector. I fully agree, that our consumer electronic and electrical industry in Thailand is really highly protected and that the industry here is too busy capturing the local market and protect itself from the dumping and also, again, fighting with the government on the benefits they will get. That is why they put us in a position that our export (not including the integrated circuits products) is so small. I do not think that this industry in Thailand is really weak. I still think and am quite optimistic about it, that we can develop much more than this.

The approach in the industrial restructuring, irrespectively of whether we are going into the tax and tariff scheme too fast or not, is one of the problems I am thinking of. We should look at it afresh, because the foundation of the industry is not as solid as it should be. Actually, we emphasize the final consumer product end but we do not emphasize it from the base, the parts of electrical goods. On the parts side, we go for the export-oriented. Do we in our export drive have to go for the 100 per cent export-oriented industry? Maybe, such industries will come anyway because of the balancing of the advantages we provide, but still I think that in our export drive we have to synchronize the export-oriented industry and our local industry. In the restructuring have we considered it in terms of integrated industry? Have we made a study on when the electronics has to develop? Where should we develop? In what region should we go? Are the investors going to take up matters on basis of our labour only, or are we to try to develop the domestic-based industry? I think we have to approach it the other way around; maybe we should emphasize more the parts production.

We are going to protect our industries, if they come out competitive enough. But if they are not competitive enough, why should we protect them? That is one of the questions I put. So, if we develop in the parts, I do think that Thailand would have the edge. We should at the same time open our market for those parts, that should be imported, and we then protect the consumer.

We have to develop and promote the industry in terms of our industrial estates first, we should expand our market and adjust what industry we have producing on the consumer end. We have established a very good programme on our Eastern Seaboard, with the petrochemical industry leading. Can we use that approach in the electronics and electrical fields?

Mr. Muegge in thanking Dr. Pornchai, underlined that sometimes it is really very important to just raise the essential questions.

The answers, of course, is something that we have to work towards. I think you mentioned rightly that the approach might be to see exports not as an isolated phenomenon. That we will have to work for both the domestic market and exports. You put the question, to what extent one should not try to open the imports for parts and try to work on that basis. In fact, of course, internationally the electronics industry is very heavily import dependent, because there are few countries that are extremely good in producing cheap components. The question is, if that for the future of the Thai industry is the right approach. I think that is now requiring some response from some of the informed participants.

Ms. Suvinol Ramakomud (Director, Fiscal and Tax Policy Division, Fiscal Policy Office, Ministry of Finance) made an intervention regarding the tax aspect of this industry as follows.

As Mr. Kittirat said, for the import duty we have about 30 per cent margin for the CBU and the parts. At the time the electrical industry asked the government to reduce the business tax rates from 20-30 per cent to 7 per cent and (without the conditions) I think, it is enough to protect the industry in Thailand. There may have been some misunderstanding, due to the fact that there was a timelag of about one year between the time the industry asked for reduction of the tax and the actual reductions coming into force.

Another problem is the international dumping. In that case, as far as I know, the Customs Department can prove that, if they have information that there is an undervalue declared they have the authority to raise the price, and, so far I know, that is now about 20 per cent for some brand names of products. For the quota, that he

asked for, I think it depends on the judgement of the Ministry of Commerce, not the Ministry of Finance, whether to introduce a quota system, since we are just entering as a member of the GATT. If we can apply some quota, that will depend on shown injury to our industry. In that case we can impose the quota, but the authority to do this, is the Ministry of Commerce not the Ministry of Finance. If you think that the damage of international dumping is so high and that the value that the Customs Department have already marked up is not enough and the gap of the import duty between the CBU and the parts is not enough to protect the industry, I think the industry can make a petition to the government to reconsider these things. They already put in a petition of sorts, but there was no information to back up this petition. So, it is hard to consider, because from the government's point of view, we have to have some information not just a request to protect. In that case we cannot do it.

The discussion was continued by Dr. Chirayu who made the following observations about the background paper^{1/} and its presentation.

I think, first of all, that there has been a lot of hard work and a lot of useful analysis as well as contacts between government and the private sector in analyzing the electronics and electrical industries in Thailand. Out of the fourteen different measures, which are considered to be the elements of trying to structure the industry according to an objective, I think, Dr. Narongchai would probably agree, not all of them are of equal importance. When he mentioned, for instance, about the OECF negotiations, in order to try and liberalize and equalize the opportunities for local producers to take up the contacts for supplies for the projects that are under these loans, I think this has been going on quite strongly in the past two years. Only last week, if you remember, the Cabinet made a resolution with regard to the insulators and there were some general guidelines which were applicable to all types of local products which local government agencies' procurement will have to follow. With regard to OECF negotiations, I think the Ministry of Finance is aware and has tried its hardest to liberalize and I think they have got some liberalization with regard to OECF loans already. That shows that what you have recommended is becoming implemented and we are in the middle of the process of that kind of implementation. Things like the setting up of private standard testing, we have also been considering but the actual implementation or decision whether to do it one way or the other is not something which can be easily made. It is a combination of private standard testing, using the existing facilities as they are, and expanding facilities and standard testing equipments we have already; it is a

^{1/} "Industrial restructuring and the electrical and electronics industry", by Narongchai Akrasanee.

combination of all these. They by themselves will be sort of supplementary measures, rather than crucial measures to restructure the industry. These were some of the comments I had on the paper.

As to the ensuing discussion, I think, we have to separate a few issues. One thing is that we have found that you have done some good work and I am very glad to hear Mr. Kittirat saying that. He thinks the structure is right, as are the tariff reforms which you have suggested and the ensuing results. At least, he agrees with this kind of a structure. But then we come to the second issue, that you cannot implement this structure in a vacuum, that you have to look at the timing of this introduction. In fact, I do not think anyone is quarreling about the structure, but they are quarreling about the timing, whether, at this particular time, there is just fierce competition or there is international dumping; whether at the moment, in the light of world economic recession the international producers are not trying to dump their excess capacity on the countries where the protective mechanisms are not so speedy or there are other weaknesses. But the questions of where the dumping ends and what are the appropriate measures which will combat that dumping in timely fashion and whether this will not have the danger of anti-dumping measures to be prolonged and become part of the system, is something about which I would certainly share the concern of most of the participants.

At the same time I find, when we are trying to introduce a package of measures, such as these fourteen recommendations with regard to a sector or an industry, that many other things are not ready at the same time. For instance, Mr. Kittirat talks about the very real problem about the informal sector. All the informal sector is doing is really to take advantage of one factor and that is the factor that we are not in the process of curbing or controlling tax evasion. They are using the comparative advantage with regard to the modern sector that the modern sector cannot evade taxes, whereas the informal sector can. At this same time, starting about a year ago, starting well on the road towards implementation, the Ministry of Finance is expanding its Tax Office, its Revenue Department, into what we call Local Tax Units. Rather than being centralized in one big Department of Revenue, they are expanding these local tax units and they are setting up a computerized system whereby the information with regard to tax files and things like that can be worked out more systematically. This project has been going on for about two years now and we just got the computer set up and before long the organizational improvements with regard to these tax units and getting the information files all collected, will have come in effect. In the end we hope we will be able to alleviate the situation about evasion, which will be beneficial also for the industry. This is the problem. We introduce the proper package of recommendations, but that particular aspect about controlling evasion is not ready. We run the danger that if we do not to take

into account all these factors all at once, it is possible that, as Dr. Pornchai from the Board of Investment, has been saying, that even when we think that this industry has got lot of potential, we run the danger that we introduce this at the wrong timing and will destroy it before it ever has the chance to go in the right direction.

An intervention was thereafter made by Professor Jacques de Bandt as follows.

I just want to make some few comments on the paper and discussions that we have had so far on the electronics and electrical industry sector. To take some distance from what has been said and what has been written, I think it would be necessary to look beyond this scheme of fourteen measures and try to introduce more the longer term perspectives. The problem of taxes, for example, is to a certain extent only at the level of the ways and means and rather short-term. It would be necessary to complete this programme with a longer term view concerning the perspectives for the electronics industry. In doing this the main accent should be put on at least three elements.

The first is international competition. We have heard from several speakers that there is a problem of dumping but I think, if we look at a longer term, and more at the structural side, it is not just a problem of dumping, it is a problem of the changing structure of relative prices within the electronics industry at the international level. In a longer term perspective, it is of greatest necessity to examine the perspective in relation to the different agents in the international economy which are acting on the relative price within the electronics sub-system. To a certain extent this has appeared in many different sectors and the terms of trade of the kind of goods of which we are speaking of here are changing relative to others. So, I think, a deeper analysis of this problem of competitiveness, and more fundamentally of the supply factors within the international system, would be needed.

The second element, and this relates to the discussion of this morning, is to see that, within the industry of which we are speaking, the electronics sub-system is also undergoing some fundamental changes. For example, in the ISIC classification, some sectors, or some new forms of the application of electronics, do not appear. I think it is very important, in order to set up the programme of restructuring with a longer term perspective, to take account of those new links, which are introduced progressively between the electronics and some other activities, for example, between electronics and the rural engineering sector.

The third element is the technological aspect. Of course, I think it is misleading when we speak of an electronics sector

because within the electronics industry we have very heterogeneous sub-sectors. We have some products, or some inputs, where the real technological requirements are located, and some others where the technological requirements are not the same at all. It would be necessary for such restructuring programme to try to evaluate at the same time the future technological requirements of the electronics industry and maybe more fundamentally the technological capacities within the Thai system. When I look at what has been said about the industry in Thailand, I think, that the necessity comes out quite clearly of the building up of some kind of domestic technological capabilities, in order to respond to the requirements which will appear in five years time, ten years time, and so on. The accent should be put essentially on the ways and means to implement a technological capability in the electronic sphere.

The discussion continued with some comments of Dr. Park regarding the Korean experience.

It was noted by Dr. Narongchai, that you have in Thailand 400-500 assemblers or manufacturers. In Korea we have at present 880 and in Japan there are more than 12,000 assemblers. I think it is a proper route to take, namely to have parts and components from local manufacturers moving towards the final goods. In 1964, Korea produced parts and components of 67 per cent of total sales, while about 30 per cent went to the final household electric and electronics items including television receiving sets, and 2 per cent only to the industrial use of electronics. These figures have changed, when I see the 1981 figures. Parts and components occupy 45 per cent of total sales, while household units occupy 42 per cent and the remaining 13 per cent go to industrial use. (Just, for your information, Japan produced 32 per cent for parts and components, 34 per cent for household and 34 per cent for industrial use.)

Most of the important policy measures in Korea were taken in 1969. That year the government enacted a law called "Electronics Industry Promotion Act". According to this act, the limited funds available for the total industry were particularly concentrated to the electronics industry. When you establish any training centre or research and development centre for the development of your own electronics industry, then the government would support through this particular law.

There is still a problem, even in the recent years, I have to mention, namely that because of the extension of numbers and fields of the electronics and industrial areas, the Koreans have been somewhat lagging behind in giving attention to the development of certain new items. Of course, Korea can now produce these more sophisticated items but the market has already been captured by other countries leaving no room for Korea to get in to it. Here the problem of wage increases, once again, may be of crucial importance.

When I look into the wage level in this special area, in 1980, when (based on the 1975 = 100 wage level) Korea's wage level had increased to 382 while that of Japan was 230. That means for Korea that with an increase in wage rates during five years of four times, it was losing its competitiveness with other countries.

There is one more aspect of introducing the high technology which we discussed this morning. Industrial countries are somewhat reluctant to give us the high tech. We have to buy or we have to pay more money for introducing this sophisticated technology from other countries. In order to cope with this particular problem, the Korean government has asked the private sector to set up its own research centres in the electronics industries. This is done by force. If any plant or manufacturer sells for over \$12 million a year, then it has to have a special research and development centre attached to that particular industry. In conjunction with these private industry research and development centres the Ministry of Education has urged each University to set up another research centre with the assistance from the government budget. These University centres would deal with the basic technology, while the industry research centres would concentrate on R and D for their own products, needed for the sales and increase of the technology. We also have, so called, public research centres. They have concentrated themselves on the core of electronics and electrical development and after in-depth detailed studies have been made by such public institutes, they diffuse the results to the private centres without payment.

The government is still placing emphasis upon technological innovation, as well as importation of high technology from overseas. Among other major policy actions so far taken by the government, the following may be noted. If there is any part requested by the private sector to be import restricted, then this is announced in advance which means three years ahead of the time that the import restriction can come into force. We call it time pre-announcement system for the import-restriction.

The discussion continued with following observations by Mr. Chaktip Nitibhon (Vice-President, Research and Planning Division, Industrial Finance Corporation of Thailand, IFCT) on the export credits and the export credit guarantee scheme.

I would like, first of all, to know whether in the Narongchai study any estimates were made of the requirements in terms of export credits, and of what the required interest rate would be to make the electrical goods products in Thailand competitive internationally. Another question on a similar line is that, if long-term credit for export is given on equal terms as for the Japanese under the OECF guidelines (which today stands at 8.4 per cent fixed rate, two to

six year money) would Thailand be able to compete against foreign creditors in the international market? I understand, that with the Bank of Thailand, the export credit is not of a long duration. I do not know whether the requirements of industry is of long-term nature or just for one or two years.

Secondly, on the export credit guarantee scheme, I would like to put forward some personal thoughts. I think the private sector is already very efficient in using the various existing credit systems in effect between Thailand and foreign countries. The issue is rather that, under the present systems, the exporter or producer would be taking some risks in terms of the risk of non-payment by the foreign buyer, but I understand that in a recent Central Bank survey of businessmen belonging to the Association Thai Industries and Thai trading companies, the findings were that the major risk in exporting is mainly on the domestic side, in the sense that domestic producers cannot produce goods of the right quality and on time in the sufficient amounts. I wonder whether these conclusions would hold. I think the issue on export credit guarantees is that, if we are going to penetrate new markets then major risks are the foreign country risks. There should be data on the markets in the developing countries that we intend to penetrate. I think, the existing export credit guarantee schemes, whether they have been with France, the UK or others, have been rather beneficial. The developing countries too have been exporting quite significant amounts to other developing countries. At the same time, the cases in Latin America and with other developing countries defaulting on country risks, point at an issue that, I think, is very relevant. I wonder about the data needed in our case. Are we going to penetrate developing country markets or developed country markets? For the developed country markets I think the country risks are rather more limited.

Finally, on the issue of, whether we should set up an export credit guarantee scheme or not, we have to look closely at the benefits and costs. The costs are very often easy to estimate, but the benefits, I think, are more difficult.

Dr. Chatri Sripaipan (Assistant Professor, Faculty of Engineering, Chulalongkorn University) made following comments.

I am responding to the various comments made about the prospects of this industry. I would like to divide it into two kinds; one is the existing industry, or production, and the other one is the future one. Regarding the existing one, such as refrigerators, air-conditioners or television, or similar kinds of products, I think, if we do not see the technology changing in a few years time, that for those products which we are already producing, we are more or less at the same advantage as other countries. You can change the tariff rate a little bit, and that would change the

costs little bit, here and there, but I do not think it will make much difference in the international competition. Actually, as I have seen in the local factories, a lot of things can be improved there to reduce the costs and improve the quality. The manufacturers should look into that, in order to have better competitive position rather than trying to change the tariff rate here and there. However, we also should put more emphasis on the future products, the ones that are going to come in the future, mainly in the micro-electronic area, not electrical products. For electrical products the technologies are rather static. But the micro-electronic products' area is very dynamic and I think we should pay much more attention to that area, in the future, in training our manpower and in setting up the infrastructure so that we are ready to produce that kind of products. One area that has been mentioned by Mr. O'Brien, is the software area. This is an area that would need a lot of manpower and, I think, as and when we have trained manpower we can easily get into that.

Dr. Narongchai, thereafter, had the opportunity to comment on and reply to the various questions raised in the discussions.

I would mainly like to make two observations about the experiences we have had on the restructuring of the electronics and electrical industry. The first one is that, when we considered the changes in the tariff rates, I think we were wrong at that time to believe that it would be acceptable to just consider this on a sectoral or by-sectoral basis. What we experienced was that, when we tried to reduce the tariff rates for final goods, then we had problems with the tariff rates of the parts and components and the materials that were used in the production of those parts and components. The electronic and electrical industry is a very good example for this. If we looked at the tariff rates for much of the materials used in the local production of parts and components, we were surprised to see that many of these materials were subject to very high tariff rates. So, companies who are trying to do more local production of parts and components for their more final assembly, would be penalized by this kind of tariff structure. But, if we were going to reduce these tariff rates all the way down, then it would affect the protective rates in other sectors and we got stuck at that point. I think this is the basic problem that we have in the tariff rate structure for electronic and electrical industry. It is the reason why the manufacturers are now demanding that the tariff rates for finished parts and components, the ones that they would import, should be reduced even further. This would, however, not be to the advantage of the ones that are using parts and components that are produced locally. There are many firms in the country that are manufacturing these parts and components themselves. The conclusion is that the tariff rate, or the tariff reform as a part of the structural adjustment has to be considered on an across-the-board basis. It cannot be done sectorially, except

for certain products that have very extreme rates and we can adjust them down; a sectorial approach to tariff reform is going to create a lot of problems.

The second observation, I would like to make, is that when we took up this industry for consideration in the structural adjustment programme, we had a lot of confidence that the industry had potential. We thought that, if the government would be active in the, so called, encouragement and promotion of the industry, then industry can go a long way and all of us know that we are going to live more and more in the electronics age. We cannot avoid that. It is definitely coming and the society will have to be aware of it, will have to be capable of handling it. But in a way we overestimated the capability of the government to play that kind of encouragement and supportive role. As Dr. Pornchai has said, it was easier to reduce the tariff rate, so we did that rather quickly but for the other, so called, encouragement and promotional efforts, I think, it has taken us a lot of time. The Deputy Minister, Dr. Chirayu has said that things are in the process and many of the measures are about to be implemented. That is encouraging, but, I think, in order for the restructuring process to be successful, and the government to play the required supportive role it will have to do it in a much more vigorous manner, as Dr. Pornchai has suggested. I think this is an important point, that we have to bear in mind for the future sectoral work that we are about to undertake.

Dr. Pornchai made some further comments regarding co-operation between the Board of Investment and the Restructuring Committee, as follows.

I would like to show an example of co-operation between the Board of Investment and the Restructuring Committee on one of the 14 points mentioned, namely about promotion of private sector standard testing companies. The BOI has taken action on this; we have been inviting the private sector to set up such testing facilities and encouraged them to consider the idea as supplementary to our export promotion programme. But so far we have got no response.

The other area is that the BOI has already set up an action programme, supplementary to the efforts of the Restructuring Committee, on yearly basis, in the form of an intensive programme for promoting certain sectors. The electrical and electronics industry is one such sector. We take the recommendations of RESCOM in respect of the sectors and try to organize it them in an integrated promotional programme.

Mr. Muegge, then, concluded the discussion on the restructuring of the electrical and electronics subsector as follows.

I think we can say that we have got a number of very important proposals today for the further consideration of the issues in this particular subsector. I think, we have all come to the agreement that there are long-term perspectives for the development in the subsector. However, there is no self-propelling development to be expected, there needs to be a spark that sets it in motion. The question, also, that has been raised: is: In whose court is the ball now? I think that is clear that a large ball is in the court of industry itself. The question has also been raised: Towards which markets should the industry orient itself? Of course, that is the question for which there is no one fix answer, but that needs to be reviewed as we go along. At the moment, we can observe that there are a number of locational shifts in the world in this particular subsector:

(1) There are locational shifts within the major OECD countries, that is, mainly between Japan, USA and a few production centres in Western Europe.

(2) There are locational shifts from the centre to the periphery of the OECD region.

(3) There is a transition to new patterns of investments in the already established Asian exporting countries, such as Hong Kong, Malaysia, Republic of Korea and Singapore. That is, they are going into different types of production lines.

(4) Stemming from that, one expects there would be a shift of location from these established exporting centres to new locations for products that have become standardized, and products that these other countries have decided not to pursue anymore. The countries for these new locations are expected to include Bangladesh, the Caribbean countries, China, the Philippines, Sri Lanka and Thailand.

V. THE AUTOMOTIVE INDUSTRY

Before the discussion of the automotive industry restructuring, introductory statements were made by Dr. Siriboon Nawadhinsukh (Lecturer, Faculty of Economics, Thammasat University) and Mr. Peter O'Brien. Dr. Siriboon stressed the following.

We are remaining in the automotive industry in Thailand for a variety of reasons which I will not try to be systematic about. But let us say that we are in it at the moment. If it were not for the technological mastery or technological dissemination, at least in the metallurgical area, we might have been bailing out, but since we are looking forward to gain some practice and mastery as well as dissemination of the metallurgical technology, from the automotive industry, to apply in other fields of industrialization, we are, to be sure, going to proceed at least until the end of this decade. Because, in automotive industry we are moving into ceramic things as well as plastics and we have about 15 more years to work on this.

By now, I think it is somewhat unfashionable to say much about the small market of Thailand; too many models; the inability to save foreign exchange; the disappointment of employment creation. We have been on a rough road for more than two decades, since 1961 or so, and it has been costly to Thailand. It has been costly for a pretty long time, two decades. It is costly not to the consumer, I am not going to say that. I am going to say that it is costly to the country as whole, not to anyone in particular. It is costly because, first, we have high protection; lately the tariff differential of the CBU and CKD is 150-80 per cent on passenger cars and 44 per cent on the business tax, again 33 per cent on business tax of CKD locally assembled units. Since January 1978, we have a ban on importation of CBU, so we can say that the height of protection is infinite, because we cannot import the CBU at any price. Second, it is costly because of inefficiency in the industry.

I would like to give some idea of the loss, that we have been encountering each year, per year in passenger cars alone. We are not talking about motorcycles and we are not talking about the commercial vehicles, because they are doing quite alright. But within the passenger car sector we have some big problems. Let us say, that for each unit you are selling in a market at something like 300,000 baht per unit, you are losing 10 per cent of it in respect of the business tax when you put a ban on the CBU (because of the 44 per cent and 33 per cent differential on business tax, that means 30,000 baht per unit tax loss). You have also the loss on the tariff, which would be roughly on the average 120,000 baht per unit, that is a loss to the government. Whether this is good or not, I would not argue about.

Next you have the loss out of inefficiency of production. For the high volume passenger car you have something like 300 baht cost penalty for each per cent of local content and now we are somewhere around 45 per cent plus, that means 15,000 baht per unit for high volume passenger cars. That is the cost penalty; the cost over and above the deletion allowance that you get when not importing in the CKD pack. For the low volume passenger car, the loss per unit would be something like 30,000 baht. In total, the loss per year would be 160,000 baht per unit, and we are selling at the moment not more than 30,000 units a year. That would amount to a total price tag of 4.8 million baht a year out of this ban of importation of CBU as well as the inefficiency of local manufacturing of auto parts.

When we are talking about efficiency, I would like to remind you that there is a lot to be compared, when you say that you are competitive or you are not competitive. A piece, a part in the automobile industry can be said to be a spare part if it is sold as a spare when you need to repair, but, of course, that same piece if you put it into the assembly line, will be "original equipment". In case you do not need to order that part from abroad to assemble locally, you will get the deletion allowance, so the comparison of the cost of the local components, that you produce here will have to compare with, first, the spare parts which are doing quite well. Since the spare parts pricing in the international market is somewhere around three times the original equipment price, you are quite alright. You can say that the parts you are producing in Thailand are quite competitive when you compare that to the international prices of these spare parts. But when you compare with "original equipment", things are not so rosy at all. We do not know whether we are competitive or not because most of the time we do not know the OE price. In the price lists you would not get the price of all the parts, you get the whole bunch price, but not in detail. Then, when you do not need that part, as 45 per cent is supposed to be a locally produced, you import the 55 per cent, and you will get another price. The deletion allowance is not going to be 45 per cent but less than that; you will be paying somewhere around 70-75 per cent of the deleted CKD part. Therefore, when you compare the cost of production of local parts over the year with deletion allowance you are going to kill yourself, because the cost penalty is about three or four times. At the moment for the last percentage of local content, 45 per cent, for the high volume passenger cars, they would say that you are going to pay somewhere around 500 per cent cost penalty. For the low volume passenger car they would say that you are going to pay somewhere in the region of 1,500 per cent cost penalty, not the cost but the cost penalty at the 45 per cent local content level.

Next, when you compare the cost between local content and the deletion allowance, you have to listen pretty carefully, because when you talk to an assembler, the comparison will be the local parts plus local tax which will be compared to the deletion allowance plus 80 per cent of the import tariff. But, for the

country as a whole, for the economy of Thailand, you have to compare the local price without tax with the deletion allowance alone without tax, that is the competitiveness that we are talking about. We are talking in different languages most of the time. That is the reason why I would like to have only a general understanding of the programme that we have, rather than to go into many of the proposals. We have some but not too many. The game of deletion allowance is hurting us pretty badly, because we use the assembly approach, which means that all the parts you are producing here will constitute a bunch of garbage until you get the deleted CKD part from Japan or wherever and you have to pay whatever the price.

In considering the automotive industry development efforts in the developing countries, we come to witness at least one weird looking piece of fact, that is, in a country of origin, let us say in United States, in Germany, in France, in Italy and in Japan, you can witness only two or three giant firms producing for the demand of the country as well as for exports, but in the countries like Thailand, Philippines and Indonesia there exist two or three score of very small assembly plants to supply the local market alone. It is quite clear that the automobile is a high volume product. At least this can be said for all the bread and butter models produced for the mass, not for the high performance type, like Porsche or Ferrari. I am not talking about them. The bread and butter models which need to be produced at very high volume are the models that you have been choosing for a country like Thailand to produce locally. That might be a bad choice. Import competing efforts are, therefore, uncompetitive and at the end you have the ban on CBU. There is no competition at all; you can sell at any price, up to the point where the consumer does not have money to pay.

It is now less the question of a country deciding to allow which car and how, but it is more a question of an international automotive firm to decide to build which car, which components, in which country. That is the fact, that I think Mr. O'Brien will be able to tell you about in more detail. As a country like this, you do not have any comparative edge in applying to the design of your automotive industry here, without looking at or complying with the policy of the international firms. There are two options of those multinational corporations in setting up the location of production; first the multinational corporation would locate huge production facilities to produce one model alone in one country, to serve that country as well as to serve the region or the world market. For example, you have Opel Corsair, the German firm producing in Spain, half a million units a year. You have Toyota Corolla the new model; you have half a million produced in Japan, you have 3/10 of a million produced in the Taiwan island and you will have about 2/10 of a million produced in United States, for example. You have Ford Fiesta, produced in Spain for close to half a million units per year. That is one pattern. The other pattern is that the multinational corporations would locate the production facility for producing components in a given country. For example, you have

General Motors producing automatic transmissions for small cars in Strassburg. You have General Motors again producing the family car engine in Austria. You have Nissan producing, or casting the cylinder top in Australia. Those production plants are not supposed to satisfy only the local market, but to send to various assembly plants around the world. You can say that we are not going to build a world car but we are going to build world components, that would be a more correct term. This is an area where there are more and more of part commonization among auto makers. For example, the Renault, Peugeot, Citroen and Talbot group in France are using the same engine. All the departments of GM in United States are using the same engine at the moment; you do not have big block, small block, four cylinder or six cylinder of fifty varieties in the United States anymore, and that will be true also in other countries. I would say that in playing the game of automobile, you have to play by international brand names. You have no chance to produce what you can call MIT, or Made in Thailand, and you cannot sell that car in Thailand or on export, but you have to produce Toyota, Nissan, Ford, GM and what not. So, your homework is, how to play the same game with the multinational corporations. It is not to do the homework of how to produce automobiles in Thailand as quickly as possible, and if it is not possible to do it cheaply you produce it dearly with lots of protection, and that is a bad choice.

When such a production facility is located in a manner of high volume production of components or a single model in a country, I would be happy to say that the efficiency of the industry is well proven by itself, provided that you do not give too much of protection. Still I understand that in Spain the Spanish Government is giving quite bit of subsidy in the Corsair as well as in the Fiesta project.

I think it is loud and clear that local content is a loosing game and since it is a loosing game, I for one among many of you around here, would not want to watch a loosing game. So let us listen to some of the proposals that Mr. O'Brien will be bringing to us with his experience in Spain, in Austria and some other parts of the world.

The introduction part of the discussion was continued by Mr. Peter O'Brien (UNIDO consultant) as follows.

Dr. Siriboon is noted as a fast racing driver and I noticed he managed to put his handling of fast cars on fast circuits to tremendous use. It is difficult for me to follow him around the tracks, because he has gone at such a speed and covered such a range of issues and I think in a very precise way, that my comments will in essence be additions to most of the points which he has already raised. Before starting to make those additions, I just want to make clear that I certainly do not have any definite prescriptions

for Thailand itself. There has already been an extremely full debate on the question of the automotive industry, and to the best of my understanding that debate has gone over the main issues in a most thorough fashion. The problem seems to be, and Thailand is by no means alone in this, that having sorted out most of the issues and put some of the numbers on the table and even apparently having made certain decisions, nevertheless, nothing actually gets changed. This is, I think, the reflection of the complex interest groups and associations which have been built up in this business. It is an industry where, as it has grown in Thailand, you have linkages between groups in Thailand and external groups and inevitably once you come to try and sort out that terrible mess, you have a lot of problems in seeing which one is going to come out on top.

The first point, I would like to emphasize, is that the problems Thailand is facing in the automotive industry are certainly not unique. The problems in fact are to be found in quite a large number of developing countries, both in this region and elsewhere. This is reflected in the kinds of policy measures being put forward and attempts have been made to implement them in different parts of the Third World at present time. For example, if we look in this region alone, as most of you would know better than I, since the early summer, July or so, the Philippines Government had put forward proposals to reduce the large number of domestic producers, down from five main groups to two main groups. Having put forward this proposal and having at the same time buttressed it by some quite strong ideas and proposals regarding the prices at which some of these CKD productions and assemblies can take place, the Government in Philippines is nevertheless still very much in the early process of negotiating with the foreign producers who are in charge of the industry there or elsewhere in deciding what coalition of the existing five main groups will actually survive and under what conditions. To take another example from outside the region, within the past months the Mexican administration has put forward another decree designed to restructure the Mexican industry, and once again to reduce the number of local producers quite dramatically. In Mexico as is well known, every time there is a new administration, there is a new decree on the automotive industry, and what has happened over the last 15-20 years is that, in the end, everybody is trying to do the same thing, but nobody has managed to get very far. So we have to see what will be the fate of the new Mexican proposal. I have mentioned these examples to drive home first of all the point that the problems in Thailand are by no means unique. One of the implications is that those of you here in the industry itself, and in government and elsewhere, who are working on the auto industry certainly have no lack of contacts and of alternative information sources to which you can go if you would want to find out more about some of these ideas which are sought to be implemented. I would suggest this is one area in which quite a lot could be done in terms of collecting valuable and up-to-date information on actual policy implementation.

The second point, I would like to stress is that this industry, which was set up in this very ragged and scrambled fashion some 20 odd years ago both in Thailand and in many other places, was set up at that time with some sorts of vague notions of import substitution. Now, I think it is fair to say that, over time, in practically all developing countries, that notion has received a very severe battering. It is becoming impossible for this sector to function efficiently in that fashion and many attempts have in fact been made to try to move from import substitution policies towards some kinds of export promotion in the industry. However, one of the paradoxical results, and I am referring now not to Thai experience but to experience in Latin America and in some other countries, of these attempts to promote exports, is that they too have been quite costly in foreign exchange terms. I think, this finding is an extremely important one, because if both import substitution and export promotion policies turn out to be net losers in terms of foreign exchange, then you have to ask yourself various other questions about the nature of the industry and the nature of production. I just want to mention one of those for the moment which has already been hinted at by Dr. Siriboon. In this industry, whether you like it or not, the fact of the matter is that you are dealing with very large international corporations and these large international corporations have their own channels of organization of production, their own channels of organization of trade and, consequently, if you talk about promoting exports, whether you talk about promoting exports as they did a few years ago in terms of fully built-up vehicles from developing countries (not many people talk so much about that today) or if you talk about promoting exports in terms of components also, you are faced with the problem that most of these exports will inevitably run through intra-corporation channels. When they do so, the degree of control which the developing country itself can have over not only the production process but more particularly, let us say, over the pricing and handling of trade itself, becomes much more complex to assess. This may be one of the things which has to be kept in mind if Thailand should be considering, as I understand it may, certain new deals with foreign corporations.

The next point that I would like to stress is that the meaning of comparative advantage, the meaning of being a more or less efficient producer in the automobile game has been changing quite strongly over the years. It seems to me, that at present time we are in a situation where the large corporations are reorganizing themselves on an international basis, on a global basis and in that process of reorganization they are trying to seek out what they would see as strategic locations for production of certain types of components, in particular, and in doing this we should first of all keep in mind that the transnational firms which were involved, are of two types. Most of the time we talk of the vehicle producers as such - the Japanese firms, Toyota, Nissan, etc, and General Motors and the rest of them. But there is also a second very important group of transnational firms which are involved in automotive

industry and that is the component producers themselves. These firms of which there are many good examples, such as Robert Bosch the German company, are themselves engaged in international production and their own choices of production location have now also become very important issues. In the notes which I put on paper for this seminar^{1/} one point which I tried to suggest was that, to some extent, there is a growing reproduction of the inter-corporate linkages that we find in the main OECD countries moving into the developing countries. For example, to take the German case we know the Volkswagen and Robert Bosch, for instance, work very closely, within Germany. But that pattern of inter-company co-operation and collaboration has in fact been moved over into certain developing countries of which Brazil is a very good example. If that is so, then we have to ask ourselves what is the meaning of local content when in fact the component production itself is also in the hands of very major foreign corporations. That is the first point regarding the pattern of comparative advantage.

Another point which I think is important, and which Dr. Siriboon has also mentioned, is the question that, whereas perhaps some years ago there were people arguing that the automotive industry or parts of it could be promoted very well in developing countries because the industry could make use of labour-intensive bits of the production process and developing countries would thereby have comparative advantages. I would suggest those elements of arguments about comparative advantage are of very limited importance in the mid-1980s. The fact of the matter is that the considerations by which the large corporations decide on strategic locations of production cover a much wider range of factors, than simply the questions about what the wage rates are for certain kind of workers within the country. I would be the last to pretend I know a great deal about those considerations. In fact one of the difficulties we have nowadays is to try and discover in much more detail what are in fact the strategic elements in decision-making by the large firms; but it seems to me that at least one factor springs to the surface. The corporations, because they are reorganizing their investment and production in a period where developing countries are feeling the bite of the generalized crisis in a severe way, are managing to play off one country against another quite well in terms of the subsidies and general government support which is obtained for their production. We have situations here which cover not merely the developing countries but also many of the OECD locations as well. In other words, there is a global battle, not merely a developing country battle going on in terms of offering competitive subsidies to large corporations for the location of their production. Although many people like to talk about the creation of comparative advantage and how a country could create an edge for itself, I think we have to be careful when "creating" a

^{1/} Reproduced as Annex 8 of this report.

comparative advantage. What you are doing is dishing out sizeable subsidies to the foreign firm. Back some 20 odd years ago when Brazilian industry was being set up, detailed investigations showed that of the total investment outlays in Brazil, for every dollar spent, 86 cents were paid for by the Brazilian Government. Nowadays the figure may be less than 86 cents to the dollar, but I can assure you it remains very high. If we take the Spanish case, for example, some calculations we have been making there suggest that for the General Motors facilities, that started working some months back, the net subsidies from the Spanish Government were probably running at the order 35 cents per every dollar. Now, at the time when investment funds are supposed to be short, that does at least suggest that governments ought to consider very carefully where and how they place their investible funds and I am not sure that this represents a particularly good use of them.

The next point relates more specifically to some of the technological changes which have been taking place and in particular to their implications for the ways in which developing countries try to handle this industry. We have had over, say, the last two decades or so, a scheme for setting up an auto industry in developing countries which has been based on a series of rather important assumptions about the supposed pool that the developing country would have for the international producers and that supposed pool would come from the fact that the demand was supposed to rise very rapidly in developing countries which it has not; that cheap labour would be an important consideration in production costs and it is ceasing to be so; and the fact that the transnational firms would not be collaborating among themselves in terms of major decisions, and I think that assumption too is dubious; and, finally, that local content could be built up over time according to pre-established phases and in the context of stable technology. I think that last one is a very important assumption which, as Dr. Siriboon was saying, is going away with the wind. Consequently, the whole set of recipes which had been established for handling an automotive industry is subject to very severe questioning at present.

The automotive industry is undoubtedly one of the most international of industries at the present time. However, to say that does not give us the whole picture. Within the pattern of internationalization there is at the moment a pronounced component of regionalization in the world system. Let me illustrate that point with specific reference to Thailand and to the neighbouring countries in this region. If we look at the foreign corporations which have situated themselves in different countries, including Thailand, and if we look at the plans currently on the table, certainly the first and very striking feature is that the Japanese corporations are far and away the dominant ones. Wherever we go in the region the Japanese firms are extremely powerful. From the Japanese point of view this is easily understandable and quite consistent with the general pattern of trade and production which Japanese corporations have followed over the last couple of

decades. But it does raise real problems in terms of countries in the region looking for alternative foreign firms with which they might collaborate. It does not seem to be too easy for any country in the region to effectively entice non-Japanese corporations into the business. I am not saying that is impossible - there are examples and I believe Thailand now is discussing one such possibility with Peugeot. However, the fact of the matter is that to try to create a special alternative is by no means easy, particularly when transnationals themselves appear to establish quite well their production locations in other parts of the world and where they are already committed to massive investment expenditures, not always in changing production location but in terms of changing products, processes, design systems and organization. The current expenditures by the large firms are enormous. Most of you may know that General Motors, for example, has its own 1980-85 Development Plan and in this Development Plan we are talking about investments by GM on the international scale anywhere between \$70-80 billion - these investments are roughly on schedule. That is to say the planning of corporations, always more precise than that of governments, is doing quite well. Given the tremendous struggle for market shares on an international basis among the large firms we also find that they are collaborating more and more among themselves in joint research ventures, in the production of components, in considering various aspects of design and so on. Hence in terms of these core elements of technical capabilities, developing countries once again are very much on the fringe, and if Thailand wishes to stay in the game, somehow, then it must take careful account of that kind of development. At the moment there appears to be more than 200 major collaboration arrangements among the 20 or so transnational firms which dominate something like 97 per cent of world production.

Finally, some comments on Thailand itself. As noted at the beginning, I certainly do not have any definite recommendations. There are certain policies already being pushed in Thailand which are trying to come to the core of the problems, but nevertheless, do seem to be running up against all sorts of internal conflicts in the country itself. I would like to just make a couple of observations which, as it were, go back to square one.

First, we have to ask ourselves exactly what objectives in terms of industrial development is the automotive industry supposed to fulfil in Thailand. I must return to that basic point - when you have 20 years of failure behind you, then you are forced to go back to fundamentals. What is it that Thailand expects to get? Is it a vital boost to engineering industry? Is it some manner of keeping more or less up-to-date with certain kinds of technologies? Is it the idea that the auto industry for at least another decade or a decade and a half, say up to the year 2000, would be some sort of core for diffusing specific kinds of skills? These are only hypotheses. The question is doubly important, because I have been arguing that we are living now in the phase in which the large firms

are taking up their options. We are not dealing with a footloose industry, an industry likely to set up a plant one year and run away the next, as used to happen, say, in textiles and electronics. These are big investments by firms at periods when they are trying to integrate those investments on an international scale. Therefore, when they make choices they are making choices to stay. Whatever other problems you have with your auto industry, I think it unlikely that any new investments would be "fly-by-night" or footloose investments. Once one firm has come in, the others are likely to steer away. The kinds of arrangements made will be locked into those which that foreign firm has established as an international network and therefore it would be reluctant to re-negotiate those arrangements. If you want to get things right, you have to get them right the first time. You are not likely to get a second chance.

The last point I want to make is that, if it is agreed in Thailand that, for reasons I have suggested, or for others, you wish to keep certain types of automotive production or component production going then there will be a question of negotiating new types of arrangements with companies which inevitably possess far more knowledge than you do not only in the technical but also in the market sense. The building up of the kinds of technical, market and financial skills that would be needed in effective negotiations would be an urgent requirement in the Thai situation. Consequently, if it is the intention of the industry and the government together to proceed along that route, then a concerted effort has to be made to develop those sorts of capabilities. If that is put forward as an "agenda item" in the automotive industry, be sure that the preparatory stages of such project negotiations are handled carefully. Once you get past the initial stages it is often difficult to backtrack. In the first stages you must move carefully and make sure that the parameters are right in terms of the objectives that you have. From that point onwards you have a much better chance not only in the negotiations but also that the implementation of the project would proceed in a satisfactory fashion.

After the Chairman had thanked the two introductory speakers, the discussion was started by Dr. Pornchai (of the Board of Investment) as follows.

First of all I do think that the auto industry does contribute importantly to us maybe not in the terms of financial benefits, but in terms of technology. As an engineer, I owe something to the engine of the automobile, because therein are the basic technology lessons that we give to most of our technicians in Thailand. But for the automobile industry, I think, I do agree with the concepts that Dr. Siriboon and Mr. O'Brien have given us.

My question is only that, if we develop it that way, are we sure that we are going to get to the benefits that would be realized

from such an approach? More particularly, what would be your suggestion in the economic terms about the invoicing that most of the TNCs are doing? How are we going to cope with that? Because there is going to be lots of intra-shipments of the parts that are going between countries in the region or to other countries. It would be rather difficult for us to cope with the pricing for all those types with us at present in the automobile industry, not to speak about those of the sport cars that Dr. Siriboon is racing. What would be the suggestions for a developing country to cope with that?

In response to Dr. Pornchai's questions Dr. Siriboon put forward the following.

As far as the technological aspect is concerned, I would not deny that we have gained some of the technology but that would be the kind of technology that you get out of the process of reproduction. But it involves more than that, not only if we can do it the cheapest way or if we do it the right way. In fact, what we need is the basic metallurgical knowledge. For example, we need some mastery in casting, forging and heat-treatment, etc. We have not been able to gain those things out of the two decades that we have been running auto industry. I would agree that, in some areas we gained some, but not all that we need to be able to apply it to other kinds of industries.

The second question is about the transfer pricing. I and Mr. O'Brien dealt quite bit about the deletion allowance, which in a way is one kind of transfer pricing. If you are a Japanese firm or any other alien firm already in Thailand, you would be trying to remit profits out of Thailand. One way is to charge a high price of a component, you export to Thailand and that is exactly the case when you are ordering 55 per cent of the CKD pack. Thailand is now paying 75 per cent. That is the example of this kind of pricing, exactly. You ask, how can we change that? I would have answered that, if you are playing the game of assembly, you cannot change it, until you produce the essential parts yourself. Right now you are producing only certain parts which will become a bunch of garbage until you get the essential parts. If and when you start producing engines, gear boxes, running gears and things like that and those parts are being able to have commonization with the other models, then you can shop around for the body, and other parts. I do not think you have a good strategy in sticking with the models from one particular country, from one particular firm to produce the non-essential type parts for them, because then you have to order this deleted CKD pack at any price. On the other hand, if you are switching to producing parts for exports in the spare parts market or have some sort of arrangement for indigenous firms to set up production of components here, to export to some other country for assembling parts, then you are going to be out of this bad game.

The discussion continued with following comments by Mr. Kavee Vasuvat (President, Automotive Assembly Club, The Association of Thai Industries).

I would like to comment on the progress of the automobile industry in Thailand. We have developed automobile industry in Thailand in the past 20 years and, at this moment, I think there is many ideas and opinions on whether this industry has been promoted correctly or not, and whether it is necessary to continue promotion of this industry. Anyhow, I think, the background is that originally our government did not have a firm guideline for the promotion of the automotive industry. I would say that they started from the policy of what we like to call a Thai style, a free style. The promotion of the components or parts manufacturing meant that it was free for us to select and to develop component manufacturing by ourselves, and there was no incentives or guidelines for us to start on the main components, like Dr. Siriboon mentioned. Of course, we had to be in the industry, and all the car assemblers were trying to reduce their own costs. So, they would select the parts or the components manufactured in Thailand for which the cost penalty would be lessened as much as possible. Not like in the Philippines. In the past years the Philippines have announced the progressive car manufacturing programme, and they may stress only on the main components to be manufactured locally. If we were using the same formula and would so compare the Philippines and Thailand, I still think that Thailand is using more local content than the Philippines, and we are manufacturing many of the small items, like Dr. Siriboon mentioned. I do not know whether we are lucky or unlucky, but the situation has been created by which all the car assemblers have to select, to use those components. If we have more firm guidelines and more incentives for manufacturing the main components, we should be able to start on manufacturing those items. We started 13 years ago with rules to increase the local content and at that time there was a certain policy that they would limit the number of assemblers and also the number of models to be assembled locally, but those policies were used only for less than a year (in fact only six months) and then the policy changed. Later on we had 18 assemblers. Anyhow, by the gradual increase of local contents as at the moment, few of the assemblers have stopped operations, so we have still about 14 left. However, I think in the future, if the policy were to be set up more firmly there would be a possibility to reduce the number of models and number of car assemblers.

The next speaker was Mr. Santi Bang-or (Chief, Commerce and Services Sector, Economic Projects Division, NESDB) who made following points.

I have two points to make. Firstly, I think I am of the same school of thought as previous speakers, namely, that, more or less, we are all the same boat when we think about the automotive industry. To be fair, I think we have to admit, that we in Thailand

have made mistakes 20 years ago in our promotion of the automotive industry. But I also think, it is not too late to be reconsidering how to adjust the policy, in order to make this sector more beneficial to the country.

The second point is about the technology we get from the automotive industry. As an economist one has to be thinking how much it costs, how much we have paid to get the technology, and that we are aware that the technology is going to be changing increasingly rapidly. How much more do we have to pay for the cars, if we are not aware of these changes?

Mr. O'Brien made some comments on the preceding interventions as follows.

As Mr. Kavee has emphasized strongly, a crucial issue now is that, if Thailand wants to proceed with automotive production, the policy requirements are urgent. There are policy requirements in terms of stability and clarity, in terms of quite long-term perspectives, and in terms of real co-ordination between government, agencies and the enterprises themselves. These three conditions are to be fundamental in terms of possible actions by the industry and by the government in the near to medium-term future.

The second observation I would like to make, is that I am encouraged by the comments which speakers have made regarding their assessment of the technological spin-offs which have been obtained so far. In the beginning with this industry, I think, most developing countries definitely had the idea of technological spin-offs as an important factor. After all, you have to get into these kinds of engineering skills in one way or another and certainly the auto industry appeared as a very attractive option in this respect. What we are saying now is that, in order to continue with the building up of technological capability, we have to recognize that we are in a period where significant qualitative leaps are taking place in terms of technology and in that respect, in order to capture the spin-offs in the future, we are going to have to rethink strategy.

A final point with regard to strategy and policy. In some other countries of the region, it looks as if governments are trying to make some quite tough decisions in conjunction with the auto industry. Mention has been made of the Philippines' case. The intention of the Malaysian programme is bound up with a strategic vision on the part of the Malaysian authorities concerning directions in which the structure of industry in the country should go. I am not commenting for the moment on whether those directions are advisable or not. All I want to underline is that the decisions are being made in that type of strategic context. That message is important, given the discussions that we were having earlier today

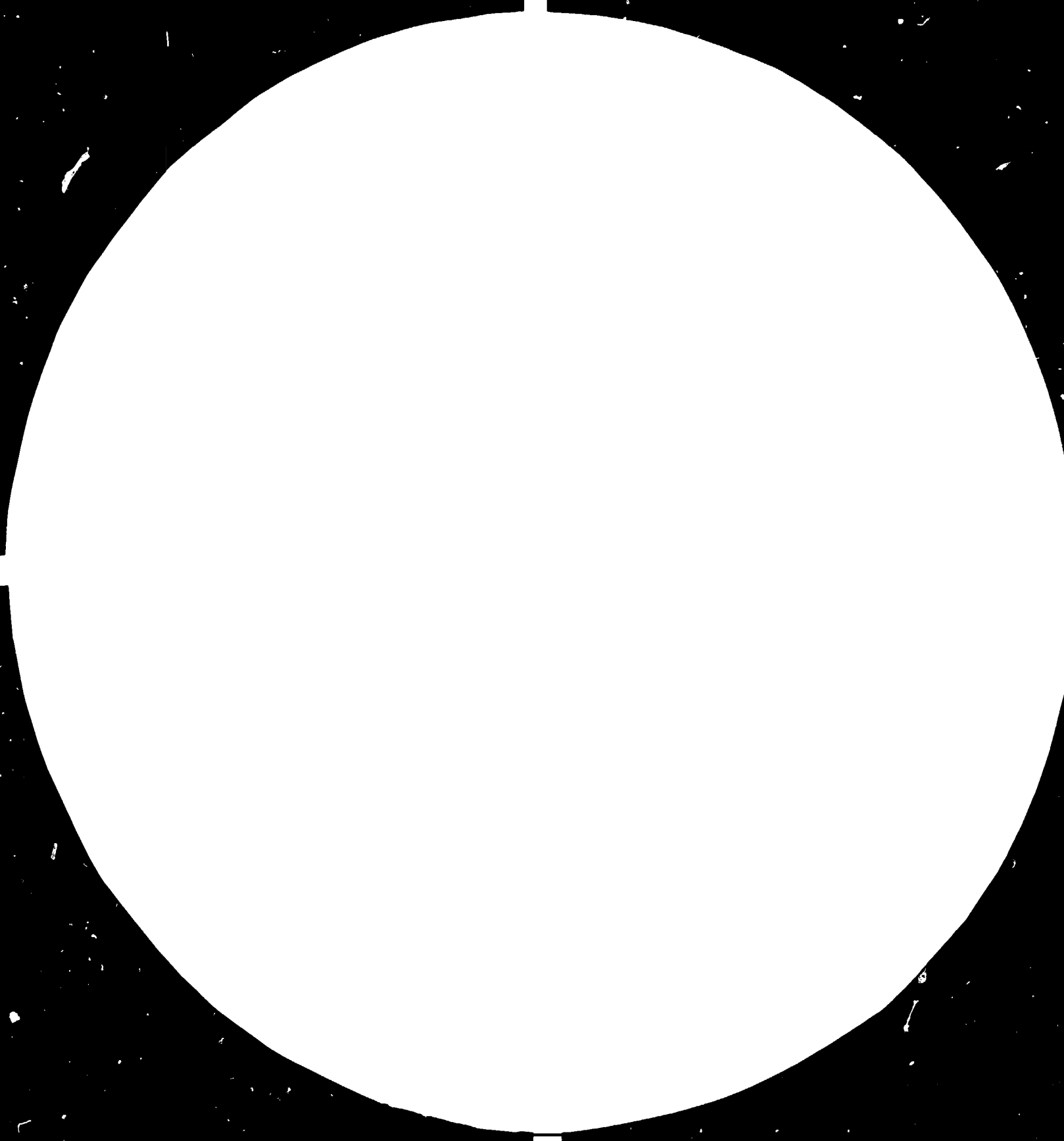
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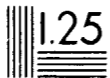


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regarding the nature of industrial policy in Thailand. The auto industry cannot be treated as some kind of policy island. It has to be treated as part of a broader policy in terms of industrial change which links it up with various other sectors in the economy, some of which are currently producing and others are sectors which might appear on the scene in the next few years.

The discussions continued with an intervention by Mr. Suchart Uthaiwat (Secretary, Auto Parts Industry Club, The Association of Thai Industries) as follows.

May I take this opportunity to say something concerning the remarks from Dr. Siriboon about costs in production. Since, we are the parts manufacturers, we feel very guilty, if we jack up the price of the car or the component. But if you take all things into consideration, you will find out, from the structure of the price calculation, that out of 100 per cent about 60 per cent is derived from the raw material, and the more import tax we have to pay, the less are the overhead expenses and labour costs involved. I have to stress, that we have to pay a "shadow business tax", be it the private business tax or the manufacturing business tax. For one component alone, we may find out that, on every process and step we have to pay a doubling up of the business tax. This is the costing of components which everybody has to buy. However, if you take into consideration the situation in a neighbourhood country, like Malaysia, you may find that for the same product and the same car, there is a price difference. In Malaysia they may cost much less than in Thailand, because of the import tax involved.

It is very important to say that in the living life of earth, transportation is really important. We cannot come back to the traditional stand; riding on a horse, on the bull or bicycle. It may not work. So, a most important thing is, how to develop the automotive industry in Thailand? I have learnt from this morning and again now, that even if we make many parts, we have to buy most of a car and sometimes we have to buy other local parts which are produced by our friends and which I would not like to have at very high cost.

About the exports, I would like to say that we are now looking for such possibilities. We are eager to do it. But which way are we going to do it? We speak about technical assistance agreements. Some of our members of the private manufacturers have already been working with technical assistance agreements from abroad. Again in our human life, we have always been thinking about the consumer preferences, we are always thinking that the quality of the products we make by ourselves, is something that cannot compare in quality or even in price with what is produced internationally, but we have to open our minds. It is very shameful to say that we have to export

some of the replacement parts to abroad, repack them and re-export them to Thailand again. That is MIT (Made in Thailand) that Dr. Siriboon has mentioned before. But, I am in agreement that, at this stage we as the part manufacturers produce and put our experience in making all the minor items, instead of the major items.

Dr. Park (of the Republic of Korea) continued the discussion with following comments.

I hear that your automobile industry began about 20 years ago which is about the same time as in the Republic of Korea. Korea is a particular country, that has more foreign cars running on the streets at the moment than its own assembled cars or manufactured cars. About the first half of 1982 the automobile industry in Korea was somewhat overextended and they had a difficult time, but starting from last year, they again started to expand and are now doing quite well. Why, then did Korea start its own assembly and why did they need it, actually? I think, firstly, because the government regarded the automobile industry as a consolidated part of the machinery industry. Secondly, and that is quite different from your own situation, the Korean automotive industry occupies one third of the defence industry.

The industry certainly has its own problems also in Korea. First is the competition amongst small-scale industry; there are too many small industries producing parts and components. Recent figures show there are 580 manufacturers of parts and components in Korea which cannot sustain themselves. Secondly, we have the problem of the level of technology throughout the car, as you mentioned a while ago, in painting, heat-treatment and castings, and production of modules. This technology is fairly low in the country, and the costs are high. This is an area that you have to look into also. Thirdly, there are highly sophisticated cars now coming out, and we may lose at the competition even though we can compare favourably in export capability. For instance, Korea has exported cars, starting from 1975, but between 1977 and 1981 the average rate of increase was more than 30 per cent, but the numbers were very small and the amount was not quite competitive. The increases in parts and components exports during last 10 years average 58 per cent. Mostly they are used for after service of Korean cars exported already in the particular area.

Dr. Chirayu made some final comments as follows.

First of all I would like to make the observation that the automobile industry is a good case study of restructuring and, as such we should take it in the light that, when a country is planning and developing its economy, and its industries, there will always be

difficult cases, whether there was good planning or bad planning. We have costly experiences or aspirations which are not fulfilled. This is what restructuring is about. If there were no such cases, then we would not need to restructure. I do not think that we should look at these cases with shame or try to see how we could have prevented things from happening in the past. I do not think that we should look at it with any kind of defensive attitude in any way. But the point is that after we once have assessed (and this what the planning processes of the economic development are all about) you should try and review the situation all the time and try to improve upon your performances or redirect your ways, according to what you have found out from experiences and from the current situation of projections about the future. Since the work on automobile industry was carried out, I think that we have made some changes already, and I can safely say about things which we have done in the past. One thing is that we have forzen the 45 per cent local content. In the past it looked as if the policy was that local content will be increased on the percentage basis on and on and this we have closed, because we found that it is going to be too expensive, and, in fact, what we are going to do is exactly what Mr. Kavee has said, that if there were parts which it would be feasible and not too costly for us to produce, then the government would make the direction on those parts rather than on the percentage basis.

The other thing is, that we have limited the models, so that we do not have too many, not only car assemblers but the number of models which each year can be produced in quantities, although very small compared to the millions or points of millions that Dr. Siriboon was talking about. Those are the sort of things which we have already implemented, and I think that we have also warned car assemblers as well as those that are associated with car assemblers, like the auto parts manufacturers, that there will be a restructuring in this industry. We recognize the hardship due to the fact that people have been investing according to our previous policies, but as that kind of policy cannot run for ever, certain time will be given for the adjustments to take place. We hope that this forewarning will be useful for them to take into their considerations about their future plans, their investment plans and their adjustments. Mr. Kavee has mentioned that a few assemblers have closed shop, others have taken actions, by which they expect to reduce their costs and have taken appropriate considerations into the future plans. With regard to the future, it is much more difficult for me to say, to give what I think the future is going to be. Coming from the Ministry of Industry, I think it would be dangerous for me to say anything, otherwise the industry might take more notice than usual. But then after all, I consider that they have accepted me anyway, they know that I am not the only one of the decision-makers. Whatever I say will probably not be all that important anyway, so all I can say is that these are the sort of thoughts which I would try to pursue. But whether it comes out as a decision in the future or not, that is another matter.

We have heard about the international situation, the projections of the international situation. I think Mr. O'Brien has given a very good start for us to assess the picture which he paints, according to the information which he has given us, about this being a crucial time whereby the international companies are going to make their decisions, that will have an affect on the whole world market for a long time. Our government as well as the privat sector here in Thailand should take this into very serious consideration. We have to think about the rationalization of our automobile industry in the light of all this.

Maybe one thing that has been absent from todays discussion, is the fact that although you have lumped all kinds of automobiles together, I think, that the sedans are more subject to the sort of brand consciousness and all the sorts of considerations which you have been talking about. With regard to the commercial vehicles, I think we have developed our own characteristics and there is more potential about that.

When we considered the automobile industry in the past, we gave a lot of consideration to the component manufacturers. This I would like to say specifically to Mr. Suchart, because we feel that it is they who have been drawn into making investments on account of the policies which have been inducing so many car assemblers in the past. It would be unfair, in fact, it would be more unfair on them than on those who made the decision, in the first place, to set up the car assembly. We are not too worried about the fast moving parts, because those at least can be used for spare parts. But we are worried about those who have invested millions of baht in the slow moving parts. This is very much in our minds. I am afraid that maybe it is bad strategy for the government to think of too many people, because it means that in trying to consider all of them we will not be able to do anything. Nevertheless, I would like to tell you, that we did think very much about those that were induced to invest and after only about maybe a year were to find that they no longer have a market, especially for the slow moving parts. So, out of all this, we will probably have what Mr. Kavee has already suggested to us, a time phase and a clear policy as to what will develop in our automobile industry.

I would like to leave you with the last words of the problem which I have - a problem which perhaps we could all help to disseminate. We can produce anything in a given country. I am sure we have the people who have the technical expertise to produce anything in the world, but at what cost? That is the only problem and, I think, that maybe it is my economic background that tells that the question now is that we have scarce resources and we have to chose the industries or sectors where we are most able, where we have the best ability to produce. So it is not an insult on our technical expertise or on our national aspirations that we cannot produce everything.

Mr. Chaudhuri (World Bank) concluded the automotive industry discussions with following observation.

After listening to this afternoon session, one general issue of the subsectoral restructuring came to my mind. It is quite clear that this process is quite painful. Hundreds of enterprises will be involved, perhaps thousands of persons will be involved. Our own long-term objective in this exercise is more efficient development of any activities we are trying to subject to restructuring. Now, this is a new objective and a long-term objective, and a transition towards what is going to be may be difficult and painful. The question I am raising is that, in addition to the restructuring policy that we are following, are there certain positive what you call support packages that we are developing for this transition in terms of technical assistance which enterprises may be needing, in terms of any financial assistance for modernization, in terms of any reorganizational assistance, in terms of mergers, etc? My feeling is that this transition does not have to be as painful and as much difficult as it sounds in the discussions, if we give a simultaneous thought to these subsectoral-oriented support packages which should go along with the restructuring.

VI. FINANCIAL INSTITUTIONS AND INDUSTRIAL RESTRUCTURING

An introductory presentation as follows was given by Dr. Pairoi Vonvipanond (Assistant Professor, Faculty of Economics, Chulalongkorn University) on the subject of financial institutions in the context of the Thai industrial restructuring. (Discussions on the subject were to take place the following morning session in the group discussion on investment incentives.)

I wish to focus on certain financial aspects of the restructuring programme. In the Fifth Plan and the Sixth Plan we have several objectives. As mentioned by various participants, Dr. Narongchai and others, we want to promote exports, particularly the manufactured exports; we want to integrate the small and medium industry (SMI); we want to decentralize the industry into rural areas. We have lots of big projects going on, on the eastern seaboard, etc. Many of these objectives have been mentioned also in the previous plans but, as you may be aware, some of them we made in words but never got implemented. But, now the pressure is coming up and we want to really do something about it. With these objectives in mind, I think you can visualize the financial aspect of the problem this way. To what extent can the financial system in our institutions cope with the restructuring objectives, that the government has in mind? Some of the question would, for instance, be: Will we be able to mobilize the domestic resources adequately to channel all the financial resources to various projects? This means both SMI and large-scale projects; it means, for instance, to overcome or to uplift some of the financial constraints for the small industrialists and small exporters. Are the financial institutions and the system itself strong enough, and if not, how could we do something about it? To answer all, or some of these problems, I think that I am not underemphasizing the importance of the financial aspects, or the problems, by saying that they are not crucially important or that we can always find the money. When we look at the past development of the Thai financial system you will find that, on the whole, it displays various defects that you may be likely to realize when channelling resources to various sectors. We have a lot of defects, but it seems to me that it has functioned fairly well on the whole. By this, I mean that we have been able to mobilize the domestic resources fairly well into the financial system. In real terms the domestic savings have grown quite well until the last 4-5 years. On the macro-economic performance, relatively speaking comparing with many countries, you find that we are not that bad either.

With this background and with the new set of problems, new orientation and new stronger emphasis on the three or four objectives that we have in mind, I think, a certain reorientation may be made. Let me pin-point some of the defects in the system. In terms of the financial institutions and the development of the financial system we find that we lack basically some long-term financial instruments. For instance, in many countries you may see that they finance industrial development through merchant banks, commercial banks, or something of this kind for long-term lending, and some countries have specific long-term financial instruments. We have a stock market, but it has not performed that well, it has not really been able to mobilize long-term resources. But despite these structural shortcomings you will find that the banking system as a whole has been able to channel funds to the industrial sector fairly adequately, I mean the industrial sector as a whole. At the same time it is true that various sectors, some target groups, for instance the small and marginal borrowers, may not get access to them. With these problems and the way we tackle and answer and try to solve the problems, our financial system mainly mobilizes and channels funds to commercial banks and financial companies which channel to the industrial sector. We have also another specialized financial institution, IFCT which looks after the long-term financing aspect, while other long-term financing sources such as provident funds play a marginal role. The way the system works or what is happening is, that in the commercial banking system they have been able to mobilize funds but they have not been capable of channelling adequate funds to the priority sectors. IFCT has been able to handle only a limited amount of small and marginal borrowing problems. With these problems in mind, during the restructuring programme, a lot of plans have been thought of. Many people think that we can set up a new institution for small and medium industries, since the present one, SIFO (Small Industries Finance Office) is practically non-existing and IFCT cares for medium- and large-scale financing in long-term. It could be a new private institution, along the lines of IFCT, to cater for the SMI. Or, since there are a lot of small borrowers that have problems with collateral and they do not get the access to the institutional credit, we could devise a scheme, like in many other countries, in the form of an industrial credit guarantee scheme, to reduce risks of the commercial banks and other financial institutions.

The financial concern of the exporters are many. According to the survey of Bank of Thailand, many other developing countries have set up an export credit guarantee department. We do not have one. Could we design one? According to the survey we find the exporters have problems and they have financial constraints in various ways. This matter may be taken up later in connexion with the export promotion issues.

VII. EXPORT PROMOTION

The afternoon session was concluded with a presentation by Dr. Juanjai Ajanant (Assistant Professor, Faculty of Economics, Chulalongkorn University) on export promotion. (The discussion also on this subject was to take place in the group meetings following morning). Dr. Juanjai put forward the following.

I have no wishful thinking that all our Thai products are exportable. My concern here is that, if some of the products can be exported, then what we can do to help them to get through the export system. That is my only concern. I am not here to tell the private sector what to do, my concern is more with government, the public sector.

I would like to firstly jump right to what I have proposed by way of revision of the export system of Thailand. It refers to my short paper^{1/} where in the chart no.(1) you will see a flow chart with boxes, starting from the top with the Board of Investment, right down to the Customs Department. Under BOI I have a small box for the Export Industry Division. Now, what I have to do here is to clarify what I expect you to be discussing tomorrow. At the Board of Investment, I expect to see the Export Industry Division to be set up so that any application for the investment will have to pass the export criterion test there. Once it has passed the test then the project should be able to claim that it will have the export capability and it will have the support of the government. Even in the case that the application fails the test, it still can go through other Divisions to pass the test on other criteria.

At the Ministry of Industry, I expect to see two things happen, the first will be that the Industrial Services Centre will play a greater role in terms of quality control and in terms of disseminating appropriate technology so that the private sector can use appropriate technology to upgrade the quality which has always been a problem in this country. The second issue that I put down in the little box under the Ministry of Industry will be the regulation of entry. This is not to say that I support a strong regulatory function for the Ministry of Industry that some are advocating right

^{1/} 'Export promotion in Thailand' by Juanjai Ajanant. Paper No.4 prepared for the Seminar on Industrial Restructuring in Thailand, October 1983.

now. But I have seen that in recent past in the case of the textile industry there has been heavy investment to the point that there is perennial excess supply to varying degrees and then the private sector itself has been complaining that the world economy and the Board of Trade have been the real culprits. From my assessment (in the complete version of the IMC/UNIDO report)^{1/} I found that excess supply in the textile industry is a real problem. In fact, when I talk about the regulation of entry, I mean that the Ministry should be able to contain the number of investments, so that the investment could perhaps have flown into some other productive sectors.

With the Bank of Thailand we do not have much problems, except that it has been giving too much to wrong exporters. A sizeable proportion of the export credit goes to the exporters of rice, tapioca, rubber and other primary commodities. What we would like to see is that there be some change, in such a way that additional support be given to manufactured exports. The second item that I have listed here is a new medium-term credit facility. Dr. Narongchai has already mentioned that there is no problem there.

The last item is the export credit insurance scheme. Our proposals went right up to the Cabinet and were shelved there, partly because we had not studied so clearly who would fund this institution. However, from what I can gather, right now the Bank of Thailand is refinancing exports in the tune of 45,000 million baht every year and eventually the size of the credit will be over the 50,000 million mark and that might be beyond the call of the duty for the Bank of Thailand. It might be appropriate then to have a separate institution. This point is worth considering again.

At the Ministry of Commerce they have done a lot. They experiment and they have money too, which is quite unique in the sense that most of the government agencies in Thailand, involving with the export system do not have that luxury. At the Ministry of Commerce the dividends and interest from the 300 million baht export fund provides a basis for the work. My main comments here would be that I would like to see the Export Development Committee to be strengthened. It should be in power of issuing directives. In other words, it should be firmly institutionalized. As for the Export Services Centre, I would, in particular, like to see that it continues to put major emphasis on training activities.

^{1/} 'Export promotion in processed foods and textile products' by Juanjai Ajanant. Report No.1 in a series of policy papers prepared by IMC consultants for the UNDP/UNIDO - NESDB project on industrial restructuring in Thailand.

VIII. GROUP DISCUSSIONS AND CONCLUDING SESSION OF THE SEMINAR

Morning session - Sunday 23 October 1983

During the first part of the morning the seminar participants held discussions in three groups as follows:

- Group I: Investment incentives. Chairman: Deputy Minister Dr. Chirayu Israngkun na Ayuthaya
- Group II: Technical assistance for engineering industries, Chairman: Mr. Manu Leopairote
- Group III: Export promotion. Chairman: Ms. Sukon Kanchanalai

The results of the group discussions were subsequently presented and discussed at the plenary, as follows.

(a) Investment incentives

The results of the group discussions on the subject of investment incentives were presented by Dr. Narongchai.

In the group discussions we decided to concentrate only on the incentives for production, in order not to overlap with the other group on export promotion which would be concentrating basically on the marketing and other aspects and not on the production.

First we talked about incentive measures and under the incentive measures we divided up the measures into tax incentives and non-tax incentives. The tax incentives were provided through the Board of Investment Act or through the existing tax structure, and the non-tax incentives could be grouped under physical and financial.

The second item we discussed was institutional issues. We talked about the work of the Board of Investment, the Ministry of Industry, the Ministry of Finance, the Bank of Thailand, IFCT, the commercial banks and the Industrial Estates Authority of Thailand. Of course, when we discussed them we discussed the measures and the institution together at the same time, but for the purpose of the presentation I decided to divide them up. The framework for our

assessment was that, when we talked about these aspects, we had in mind what sort of criteria we wanted, and when to assess the existing situations, in order to identify the needs for future activities. The framework for our assessment was (1) correspondence to the development objectives, that is, whether the measures were in correspondence or consistent with the development objectives and (2) the efficiency and expediency in the implementation of the measure. Now, this is the outcome of our discussion.

On the incentives measures we discussed, of course, many things but the following were, I thought, the major points that we seemed to share a consensus on. On the tax measures, first, on the Board of Investment incentives, we felt that at the moment BOI incentives are already given according to priority criteria and the priority is set in terms of market (domestic or export), size (big firm or small firm), location (Bangkok location or outside Bangkok location) and employment considerations. This is already being practiced by the Board of Investment which means that they are more or less consistent with the development objectives. Of course, if we had talked about this a year ago, it might not have been the same, but this year this seems to be the practice. But what the BOI needs at the moment would be the decision/rules for providing adequate incentives. There is still some concern whether we are providing adequate incentives for investors (are we providing too much incentives or not?) but at the moment we still do not have a decision/rule that the committee members or the mini-BOI can operate. The Ministry of Finance it is another agency that provides a lot of incentives; many of these incentives were not intended to be incentives but they nevertheless act as incentives, or disincentives.

We discussed the tariff rates. We heard that at the moment in the existing structure these tariff rates are favourable to raw material imports, meaning that they serve as incentives for manufacturing. But there is still need for adjustment for the intermediate goods and capital goods. The tariff structure is not yet providing adequate incentives for these two sectors.

The Ministry of Finance is providing now rebate and refund for exports, which they are doing very actively. As for the business tax, we discussed the double taxation problem which is now very well realized by most people. The development is that now there is a move to allow the Excise Department to collect tax, business tax for certain items and, also, the Ministry of Finance will provide what we call rebate facility, if there is a situation of double taxation in any manufacturing process. So, the Excise Department will very soon be authorized to collect the tax and also rebate the tax. This is an improvement in our tax incentives system.

Coming to the non-tax measures, we have several measures exercised by different government departments. As for the Ministry of Industry, at the moment they are not to provide factory permit,

if it is against the Board of Investment's policy. We discussed a bit the announcement which had been made by the Ministry of Industry on this, but heard from Dr. Chirayu that what the MOI is trying to do is only not to be doing things which is against the Board of Investment. If there is an industry which is not under the Board of Investment's policy, then they can give it permit.

Regarding the Industrial Estate Authority we have heard many times already about the difficulty in providing inexpensive sites and facilities. We have full sympathy for the Governor of IEAT here. People always complain that there is no incentive to set up their factories in the Industrial Estate Authority because they are so expensive. Therefore, what we need would be a contribution from the government and regulation on the location. These were the two things that we thought would be of help to IEAT, namely, that the government should provide some assistance for the construction of certain utilities and that the government should regulate in terms of location, so that people would not set up their factories outside, in the Estate backyard. As for the Board of Investment, the kind of incentive which is considered non-tax measure would be the strong efforts about outward-looking policy that the new Secretary General seems to be following, encouraging more and more investment.

Coming to the aspect of finance, we were informed that at the moment there is plenty of short-term financing but there is a lack of long-term facilities for industrial development in general, and, specifically, for the small- and medium-scale industries. There is a strong need for funds for those industries affected through the restructuring process. These were the incentives and non-incentives measures that we discussed.

The next group of issues we discussed were the institutional aspects. We talked about the new development at the Board of Investment, we heard that the mini-BOI (and there were two members of the mini-BOI sitting in our group) is able to increase the expediency. (We are not sure whether they have increased the efficiency but definitely the expediency.) Mr. Staporn mentioned that the group was able to give promotion privileges to a firm within three days which is a world record; no other country in the world could ever do that. We feel that there is a strong need for skills in the Project Evaluation Department of BOI. Some solution would be to shorten the project form for the mini-BOI. This is proposed to be a measure that can shorten the time of project evaluation work. Also, if the BOI were to adopt the, so called, sectoral approach to promotion, they could increase the efficiency and expediency in the work.

Regarding the Ministry of Finance there was a feeling that there is a need for continuous improvement in the rebate and refund facilities. We have been informed that this is being improved continuously and we feel that it should continue to be improving,

nevertheless. Also, there is a need for a study and decision on tariff and tax reform. The Ministry of Finance is having difficulties in putting through many of these things because of lack of personal and studies.

On the Ministry of Industry, we felt that the "one stop service" put into operation early this year, generally increased expediency for people or firms which come to apply for factory permit, but there would be a need to have facilities also outside Bangkok in order to promote rural and provincial industry.

As for the Industrial Estate Authority, there is a strong need to have a development programme with the government help. This is very important - we discussed it even before we came to the seminar - the fact that the IEAT has had very little help from the government.

On the financial situation we are not sure on whom we should put the, so called, institutional responsibility, but we feel that the Bank of Thailand should set up mechanisms for the financial reform. This issue, of course, is much bigger than the Industrial Restructuring Committee can handle. It should involve also the people from other sectors and there is a strong need to set up new institutions or mechanisms for long-term funds and long-term lending. This is extremely important for industrial development.

(b) Technical assistance for engineering industries

The discussions in the working group dealing with technical assistance for engineering industries were reported on by Mr. Manu Leopairote (Director, Industrial Economics and Planning Division, Ministry of Industry).

The engineering industry sector is a very important ingredient in the development of our national economy which is still basically an agricultural one. As farming is moving towards a more intensive cultivation, more agricultural machineries are needed and in food processing, for example, the engineering industries also play a very important role.

The engineering industry may conveniently be divided into three groups. The first group is the small traditional firms in which the firm have been operating from generation to generation. These are firms which are, sort of, receiving the technological know-how from their fathers. The second group of indigenous Thai firms is those which are more modernized, they have more knowledge and technical know-how and they invest money in the firm and try to enlarge it up to a medium-scale one. The third one is the joint ventures or foreign-owned companies which have very modernized technology and obtain technical know-how from abroad.

These are the three kinds of industry and let us now take a look at the present status of the technical assistance in that context. Firstly, in terms of manpower, at the moment, we have plenty but still we need to have more in the field of technology.

The second item is technical assistance. We have lots of technical assistance rendered by the government; the Ministry of Industry has set up an institution, the Industrial Services Institute,^{1/} taking care of the technical assistance to the small-scale industry and medium-scale industry in terms of foundry work, heat treatment, tool and dies, plastic technology and furniture technology. The Institute is under the jurisdiction of the Department of Industrial Promotion and was established about 15 years ago. We have a major problem with it, namely the problem of the move of the well-trained staff from this public sector institute to the better-paying private sector industry.

Another item is the financial assistance. The government has an institution SIFO (Small Industry Finance Office) to give loans to small-scale industry but the number of loans is very small at the moment. The operation has been affiliated with the Krung Thai Bank (government-owned) commercial bank, and although the government and the commercial banks, have the same direction in giving loans to the industry they work differently. The government (civil service) has no aim of making profit, but commercial banks try to maximize the profit as much as possible. We also have the IFCT (Industrial Finance Corporation of Thailand) and some private financing companies offering credits to industry in line with those of the government but the interest rate is rather higher than that of SIFO.

The services of standardization are quite limited at the moment. Finally, we lack really a comprehensive research and development system in the country and I think we have to do something there.

Now we come to the proposed action programme^{2/}. The first item is to strengthen and restructure the ISD (Industrial Services Division), that is, the present Industrial Services Institute, in the way that we are going to set up a section under this Division which will be called the Engineering Industry Development Section. The second item is the establishment of a Technological Development Centre. The plan suggests that we should establish the new Technological Development Centre in order to develop the engineering industry. The third item is to try to formulate the incentives package for technological development. The fourth item is to strengthen the capability of the TISI (Thai Industrial Standards Institute). The fifth item is to establish a National Measurement Standards Board (NMSB). The last item is that we have to improve the research and development system.

1/ The name is now being changed to Industrial Services Division (ISD).

2/ See Annex 11, "Summary of proposed programme for engineering industry development" presented by the RESCOM secretariat.

After we had gone through these action plan items in the group discussion, the group felt, above all, that a major constraint was the weakness in the government administration. When we want to promote something, we have a lot of red tape, we have a lot of bureaucracy and we face a lot of problems. The second constraint is lack of inputs, in particular manpower. (Actually there are lots of people but we seem always to put the wrong man in the right job or maybe put the right job with the wrong man). We need to increase the number of technical manpower who are fully experienced in specific fields. We recruit certificate technicians, diploma technicians, engineers with bachelor degree, engineers with master degree, engineers with doctorate. We need, in particular, more at the level of diploma technicians. Finally, we should strengthen co-ordination within the government sector and between the government sector and the private sector. I am glad that now we have the good example of co-operation between the private sector and the public sector in the Committee chaired by the Prime Minister. We need good co-ordination and we need a systematic approach to develop the engineering industry.

(c) Export promotion

Dr. Burenstam Linder (UNIDO consultant) made a summary presentation of the deliberations in the group dealing with export promotion, along the following lines.

In the group's discussions we stressed the importance for success in export promotion; that a country - both the business people and the administrative people - is convinced that the thing to be done can be done, and that it is not something in the stars to manage to increase the exports. It is very important to have this conviction in ones heart and in ones mind, in order to be successful. We heard in this context Dr. Park discuss how in Korea they tried to really infuse, both in business and in government, the feeling of the importance of exporting and participating in trade successfully. It is interesting to note that in Korea they evidently have very high level frequent meetings shared by the President of the Republic and with wide Cabinet representation and also leading business people presence, to exchange views and, also, to get the encouragement, the feel that it is a national priority, really, to succeed. And it was mentioned in our group that it could be useful to consider an upgrading of the political level for the export promotion work.

Trade promotion, it was said, is important, but trade promotion can never succeed if the macro-economic framework is not supportive of the basic competitiveness. It is very important not to think that investment promotion or, in this case, trade promotion can somehow do away with the necessity of pursuing sound monetary fiscal policies.

When we then considered the specifics of trade promotion, we discussed the institutional framework, against the background of suggestions made in the papers presented yesterday. It was thought to be unnecessarily difficult to go from the present framework over to something brand new. It was better to try to stay within the present institutions, but then carry out whatever modifications were thought to be required. This was from certain points of view thought to be a second best institutional solution, but as we know from the real world, the second best is often the only practicable.

When we then went into the problems of what policies should be pursued, it was argued (giving many different examples) that it is important to try, above all, to remove obstacles to exports, rather than to introduce a variety of new subsidies or what have you, to push exports. It was pointed out that there are in the system many obstacles to exports. One is the local protectionism itself, where downstream potential exporters often have a complicated situation, because they have expensive inputs to obtain before they can get their production going. It was pointed out that, perhaps, Thailand is the only country where there are actually export taxes and it was widely felt that these taxes should be done away with. Over and over again in our discussions it was pointed out that it would be useful to reduce bureaucracy, red tape, unnecessary complications. Examples were given of antiquated regulations, for instance, in the case of the food processing industry, that may hold back certain initiatives to expand export production. Mention was made, as in the incentives group, of the attractions of the one-stop-service centre and note was taken of the fact that it is not always easy to get the relevant Ministries and agencies to yield the relevant powers to this one-stop-service and sometimes, in fact, it may not be very practical to do it. It could mean fragmentation from certain other points of view, for instance, tax policies. If the Ministry of Finance does not have the supervision of tax policies and certain of them were being handled by some other agencies, that could cause complications. But the major obstacles to the one-stop-service centre may be sheer unwillingness of certain agencies to yield the relevant instruments and powers. I do not know whether it is unfair to say it here, but it is my understanding that many people felt that the Customs Office provides unnecessary complications for exporters. One kind of obstacle, that it may be not so bad to reflect on is whether one should introduce or expand instruments in the area of quality control. The major responsibility for quality control must necessarily remain with the firms. In order to get anything going in the longer run they have to maintain quality. There may be a certain unawareness of the quality standards on foreign markets and a quality control could be useful for such exporters. Also, it might be useful in order to avoid that certain not so honest firms damage markets for others. However, it was pointed out that quality standards differ between markets, some less developed markets may have other quality requirements than more sophisticated high-income level countries and quality control standards would have to somehow reflect this, so that one does not introduce a rigidity in the system that is not really called for.

I have tried to give some examples of where one should concentrate attention to remove obstacles. There is, of course, also to be considered whether one should perhaps try to promote by providing additional subsidies and there are such situations. But when expanding such programmes, one should all the time bear in mind that they do have certain, not always foreseen, negative consequences. One is simply that they cost tax money and if the government is running a deficit, that may be a problem. High tax rates were mentioned in our discussions as an example of providing difficulties for exporters and, if expensive new subsidy programmes would be going, they maybe in the end would require tax increases that could be harmful.

It was pointed out that in export promotion, one must not forget farm products and the rural areas. It is not so easy to reach out to the small firms and into the regions with subsidy programmes simply because the small size firms, particularly those far away from Bangkok may not all have the administrative capacity to get even to know that such facilities exist. So, often such arrangements discriminate against small business and rural efforts.

Reference was also made to the fact that sometimes Thai exporters have difficulties in competing with, say, the Japanese companies offering extensive credit facilities. To compete under present 15-17 per cent rate of interest when the promotional export credits are in the range of the 3, 4, 5 per cent, is not easy. It was felt that one should consider whether one should expand the programme.

Export promotion activities would have to focus on the removal of obstacles rather than on new programmes, against the background of the scarcity of resources both on the administrative level and on the level of financial resources. It was pointed out that the private sector itself must try hard, must meet the opportunities. Government can help with some market research, market information but private industry would have to bear the burden of trying to remain in contact with the international requirements to be successful.

Finally, one thing we did not have time to really discuss, but I think that one should mention, is in the commercial policy field. Namely, the possibilities of improving the negotiating position for the country. Thailand encounters here and there protectionism, for instance, and, well, one can lean back and say that not much can be done about it. But one can also try to actively negotiate, to put up some pressure on those who try to be protectionistic. I think, that within GATT that you have newly entered, you have an opportunity, when you make certain tariff reforms, to exact the price from the others because when you open up more, then you can have them to open up more. There may also be some very valuable opportunities to get together within ASEAN and build up some strength against protectionism.

(d) Comments on group discussion presentations

After the three presentations, the floor was opened for discussion. Mr. David Wall (UNIDO consultant) started out with some further comments on the group discussions on export promotion as follows.

I feel that Dr. Linder's presentation covered very fully the discussions in the group. Only a few minor points, I think, were left out. One is that Dr. Pornchai of BOI said that he thought there was scope for restructuring in the BOI to make it more relevant to the needs of business, and made the, what I thought: quite provocative, statement that performance targets should be set for officers in the Board of Investment.

The second point is that there was general agreement that the information system on marketing could be improved. The best ways of improving was to involve the private sector more in the collection and dissemination of the information. There was agreement that the present system of trade commissioners used by Thailand along the lines of many other countries, is not a cost-effective way of generating information. We listened with interest to the description of Dr. Park telling us about the Trade Corporation of Korea which carries out this activity but also acts as a trading organization itself. Another point (that Dr. Linder also mentioned) was that there was general agreement that removal of obstacles rather than creation of new incentives would probably be the most effective next step.

Mr. Herman Muegge made a few further points concerning, the discussions, in the group dealing with assistance to the engineering industry.

I would like to use this opportunity to supplement what Mr. Manu said in his presentation by listing a few points that I think emerged in the discussion on the engineering industry. (1) I think the group felt that one should give in the Thai society and in the Thai industry proper status and priority to the engineering industry as the backbone of the country's industry. (2) It was agreed that there is need to analyse prospective domestic demand which has been, I think, neglected. There has been a bias to look out and say there must be a demand outside, but there is also important internal growth dynamics in the Thai industry and in the Thai agriculture, as well as in the public sector. (3) In order to use the public sector demand, more systematic procurement policy would need to be instituted. (4) It was seen as quite essential to unpackage foreign projects which tend to import a complete package of engineering products, specially in the case of bilateral projects and imported technical packages through foreign investment. One should try to utilize the experience of other countries in negotiating local inputs. (5) While

one is thus building up the demand side, one should attend simultaneously to the supply side. Here, there was a long discussion on the technical assistance requirements of the engineering industry. I think, it is fair to mention that there was a discussion also on the consulting engineering capacities, the need to establish this extremely important part of the engineering industry. That is, you have to have consulting engineering capacities which can take the products of the engineering industries to the clients and explain to them and have a feed back to the producer and also assist the producing companies to upgrade the production as required in the domestic and foreign markets.

The discussion continued with an intervention by Mr. Amaret Sila-On (Vice President - Finance, Siam Cement Company Limited) as follows.

I would like to mention a point regarding export promotion. From what I noticed it was more or less assumed in the group discussion that we already know the location and the nature of our markets. But, on the other hand, I have a feeling that Thailand has a notorious ignorance about its markets. We have been exporting rice for the last 100 years or so. I doubt if we really understand the requirements of the markets that we have been exporting to. I doubt that we realize the changing nature of all export markets for almost every product. We have to mention that income from labour which we export abroad may soon overtake rice exports as the number one foreign exchange earner. Do we know about this export market? Do we know what kind of labour is required in various Middle East countries; what kind of skills are required? Are we doing something to supply those skills, are we giving proper training to the people who had gone abroad and are we giving something, some recognition to these people who send back home millions of US dollars a year? Are they treated with respect when they come home? All these, I think are points which should be elaborated upon. Further investigation should be made particularly on the nature of our future markets. Because, our successes in the past in tapioca and other things may not remain with us very long. We need to think about the future.

One point, that I would like to make is that everybody is talking about comparative advantages. We can see that the Japanese have done extremely well on the automotive exports, and household appliances exports; they have devastated the American and European markets with their comparative advantages and like-wise we have done the same with our tapioca export. I suggest, that we have not done that with many other of our export products. Can we do something to encourage studies on these comparative advantages of our future export products and how to capitalize on these comparative advantages?

Mr. Staporn, the chairman of the morning session, continued the discussion with following comment.

As has been earlier mentioned the government has set aside 300 million baht for what we call the Export Development Fund. Funds have been allocated for projects or activities which the private sector and government will launch together. On the private side they have to put up a matching fund. Perhaps Ms. Sukon can touch upon the future allocation, for instance, for studies. Mr. Amaret has kindly pointed out that the exhibitions and trade fairs are one thing, but in order to know where to go and how to attack, the strategic planning or the research type of activity should be invested in more. I think Ms. Sukon may like to add something on this.

In response to the chairman's suggestion, Ms. Sukon Kanchanalai (Director-General, Department of Commercial Relations, Ministry of Commerce) elaborated on the Export Development Fund as follows.

Out of the 300 million baht Export Development Fund (created through the collection during one year of 0.5 per cent cess on import items) we are allowed to utilize only the yield or interest of the Fund. That means that about 30 million baht yield or interest of the Fund will be annually allocated to promotional activities that has been described in the regulations of this funding. We would like very much to be able to spend the whole Fund of 300 million baht but owing to some pressure, mainly at that time from the private sector, that if we continue to collect 0.5 per cent cess on import items, excluding on dairy products as well as on oil products, this would place a heavy burden on their costs of the raw materials and some parts and equipment. Accordingly, the Cabinet approved to collect cess only for one year, and we had to abolish it within one year after we had collected 300 million baht. If the private sector is feeling strongly that further funding for promotion projects is necessary, we would be looking for contributions and support from private sector.

Besides that, the fund money are not enough, and the way we work on the export promotion development is that we work on basis of co-financing. The first project, that some of the participants here might be well aware of, is about the Bangkok gems. This has introduced Thailand as a gem centre as far as diamonds and other precious stones are concerned. Another project with the co-financing half and half with private sector is in the field of textiles. We are looking towards the non-traditional, non-quota markets or, even in the quota countries, we are looking for high class boutique items in the field of garments, etc. The third project is in the food processing industry. We try, for instance, to improve our capability to deal with the regulations of the Food and Drug Administration (FDA) in the United States and we are looking for possibilities to expand in the traditional market as well as in new markets.

In a concluding intervention Mr. Muegge summarized from the UNIDO side the results and findings of the seminar.

I will try to, first of all, make some points about how we see the seminar, thereafter give some comments, maybe, on how I personally have observed the restructuring programme, and then I would basically leave open the detailed follow-up work that is to be done by just indicating the rough framework.

First of all, the seminar as we have seen it. I think, we may consider this to be an extremely important event. Maybe, it is an event, that should have had even a greater impact, if the representation from industry could have been somewhat wider. Also, in the case of some of the authorities concerned, due to circumstances beyond control, highest level representation was not possible. The involvement of these people on the high level and broad basis in the restructuring programme is seen as most essential. About the organization of the meeting, I think that, basically, it was extremely well arranged. We thank the co-organizers from the Thai side; they have done it excellently. We feel that this may not be an event that should be just checked off as having taken place and now we can forget about. Rather, the seminar is to have been indicating the way in which we should proceed. Therefore, an evaluation of the seminar and the outcome should be undertaken and include the consideration that one needs to have on a continuous basis, maybe annually, a similar encounter. That is, one could bring specialized experts, maybe on a recurrent basis, and meet with the industry and the government authorities concerned.

On the question of the approach of the restructuring programme of the government, I think, it can be observed that there is a very systematic commitment by the government to pursue this, and that in itself is probably the most important element. Industry and foreign partners, they have to know that the government is going in for this very systematically and with a continuous effort to support industry to move in one particular direction. Another thing that outsiders, like us, have been observing, is the high professional competence that exists both in government and in industry. The approach that we can see has been used, is to have a series of subsector studies and from that branch off to make suggestions for policies, institutional reforms and consultancy. That concept is, I think basically acceptable and essential. When I now read up a list of what I would describe as weak links, I think, there are some of the points that have been raised on the discussion and some of the other points may not be relevant, but nevertheless I will, with your permission, just read them up very quickly.

(1) There is, I think, a lack of a macro-framework for the entire approach. (2) There is lacking linkages between the subsectors which have been discussed. (3) There seem to be little concept for building up internal capabilities. (4) There is need for a strategic decision of the future position of subsectors in the economy. (5) At the micro-level the corporate structure should have been receiving more attention. (6) There is also, in our view, a bit too little attention given to the monitoring and interpretation of

international development that affects various subsectors. (7) There is a certain neglect of the tremendous potential of domestic demand. (8) There is also a need to give more attention to building up not only hardware production but also industrial services that go hand in hand with such a restructuring process. (9) The investment project evaluation does not seem to have received systematic attention. In other words, there is a need to systematically evaluate not only new projects but also expansion projects and restructuring projects. (10) Maybe, there is a tendency to check off the items of the restructuring programme, instead of having a flow concept of continuous work at all levels. (11) There is a lack of establishing functional relationships between the various subsector actions. There are a number of parallel activities running in a number of subsectors which one should try to establish the linkage for. (12) As for production growth rates, export growth, and the concept of dumping, I think it was recognized in the discussion that these do not reflect the full dimensions of dynamic growth. One needs to highlight the underlying effects. (13) I think it is also established in the discussions here that one should avoid to "flee forward". In other words one should avoid to try to go into new projects as a remedy for the existing ones, but rather be very careful and look at the existing problems that one has in industry.

Maybe it has also penetrated from the discussions, that the key issues for the Thai industry restructuring are not fully appreciated by all government entities. I think, it was mentioned by somebody, that one has to continue to inform the government authorities concerned - as well as the industry - about the full implications of this project.

Mr. Staporn (Assistant Secretary-General, NESDB) closed the meeting with the following thoughts.

I have been asked how I could describe the restructuring process on industry in the context of the National Development Plan. The "restructuring process" constitutes a new terminology or new words in the Plan that not only covers the industry; in fact we talk about the restructuring on transport and communication, we talk of restructuring of our agriculture and finance sector and some others. My remarks are that in the kind of planning we had been experiencing in Thailand for years and with our economy basically relying on what we call the private enterprise, the government can do two things; the first is to think and articulate on how she would like to see the future and the second is what she is willing to do, essentially in the basic role which is on the infrastructure side. Now, the Thai economy has grown during the last two decades to a great extent and the economics base is really quite large. One has to build on the knowledge of the private sector; one has to understand the private sector - the players - and how they are going to play. The government is still performing a kind of referee function rather than

being a player herself. We merely check the economic performance during the last two years against the Plan. I would like to say that on the direction as a whole, we think we have moved in the right direction, but the targeting is another matter.

When I was saying that the direction in which we are going was on the right track, I was looking at our export policy as a whole. The government is trying her best to reduce the burden which, in fact, is on the farmer to much greater extent than on the industry. This process is not as simple as may be thought. It is really going into the area of political decisions and the government is in need of all support to go on with that.

On the general export problems which the government are trying to solve, it may be said that solving the hinderance, the problem of bureaucracy may be easily said, but to do it, that is really difficult, in reality. I think, however, that the government has taken important steps trying to remedy it. On that point, I would say that we have moved forward in the right direction.

Citing the example of automobiles or electrical appliances or some others at the subsector or micro-level, I think, that, just by starting to try out the ideas together with the private sector, we have achieved something. If you had come here 10 years earlier, I think you would not have had a feeling that government and private sector can sit together and start discuss about what we may be going to do. But, naturally, restructuring is a painful process, even as a kind of stick and carrot process. One may ask whether the government really would use the stick without the carrot, whether such kind of process can work? The answer is, naturally, no, because the private sector can hardly bear the burden without any proper assistance, as we have heard here for two days.

To come back to the general point again, I wish to say that restructuring is a continuing process. We do not aim to achieve a certain target in a certain period of time. We are trying to push in the right direction with coherence of the government agencies and private sector, and we are trying to conceive the same thinking on how to manage and how to move ahead as a whole country. I believe that at the second stage of restructuring, we will go faster than what we now expect. At this point, we try only to keep pushing and let the momentum of our pushing carry the whole vehicle towards the end. Business would not need to say that the government would be lacking in willingness to support.

In Thailand the future of the automobile industry is not an economic or employment consideration only, it has also a social aspect in that the one who has a car is considered rich and this is reflected in the tax policy. Whenever the government wants to have money, they put tariffs and tax on items, such as automobiles and electrical appliances. That is why the business tax is extremely high, in the electrical field it goes up to 30 per cent and for the

car it goes to 40. This is not a pure economic consideration it is a combination of socio-economic considerations, or if you may add a political socio-economic consideration to carry out certain restructuring programmes. I, myself, accept that the process will need time and need certain extension to give more informative education to the public. When it was recommended that we should let the car be imported, if you had been going out in the street and asked the layman how they were going to react, you would certainly have got an answer different from that of the economists or whoever shape the policy. This is something that a government has to keep in their minds; how to implement.

I will say that, overall, our restructuring programme in certain sectors has been carried out, although some aspects may go slower than we expected. One thing that I can say that we did achieve, is the common knowledge of the stage about the Thai economy and what kind of economy that we want to put ahead. The private sector now, in spite of what Dr. Narongchai has said, has certain communication problems, but in an overall context of the private-public collaboration, I will say that we are doing fine.

With this kind of remarks and feelings I hope that the support from the UNIDO side, and from other external resources will continue to aid this process and we on our part in the NESDB and other related agencies will try to co-ordinate and put all the things into work. As you kindly mentioned, there are many problems which we are now facing in the process. This will be regarded as planning by doing, this is the approach which I believe that will eventually bring the success rather than to plan and give only the stick without the carrot to both the private sector and some other implementing agencies of the government.

IX. FOLLOW UP DISCUSSIONS AT BANGKOK

On 25 October 1983 a meeting was held in Bangkok to discuss on basis of the Pattaya seminar deliberations, follow up activities connected with the industrial restructuring work with participation of the RESCOM Secretariat, selected government officials, UNIDO staff and international experts.

The immediate purpose of the meeting was to provide for informative discussions and a dialogue between the RESCOM Secretariat and officials from various ministries and agencies which are involved in work related to the industrial restructuring programme. Besides a brief introduction by Mr. Muegge "Industrial restructuring - an overview", primarily intended for the participants at the meeting who had not been at the seminar in Pattaya, the future implementation work in three areas, namely export promotion, investment incentives and technical assistance for engineering industries, was discussed.

The introductory presentation by Mr. Muegge was along following lines.

I would like to start of by giving a few glimpses how we - the UNIDO group - see your tasks here. I think that in the Pattaya seminar it came out quite clearly, that the type of job people have to do in the restructuring programme in Thailand, is extremely complex and it is always easier for outside people to come in and be making wise comments on how it should not be and how it should be. Given this very complex situation, we were quite impressed about the commitment of the government to have launched this programme and to go on very systematically, in spite of very many difficulties. One difficulty, of course, is that there are many clients involved. The work of the restructuring necessarily has to go into other economic sectors, it has to go into various institutions, not only those of the Ministry of Industry. As you know very well, there are many other authorities that are directly involved and have a direct interest and, maybe, give a different slant to the problem. Also, the supporters, I would say, if we can call it so, people like us who are coming from United Nations or from the World Bank, these people come and go. You are the only ones that remain. Of course, it is extremely difficult for you to try to find a common denominator and the common course of action. Furthermore, what we realize is that there is a lot of pressure being exerted on the work, time-wise, and substance-wise. All sorts of people request you to fulfil commitments which are extremely difficult to undertake with the resources that you have.

As I was saying at the seminar in Pattaya, we would be very glad to be your "sparring partner". We will not be able to take upon ourselves a major part of the job, but we can come and try to tailor our work to yours. Maybe, I should therefore just briefly outline what type of job we are doing in UNIDO, and why it is that we are here. Well, a couple of years ago we started in UNIDO with looking at the industrial restructuring process in major OECD countries, and that is when we got together a group of people, including Professor Jacques de Bandt and Mr. Peter O'Brien who are present here. These people were all concerned with the fact the industrialized countries were making all sorts of ad hoc decisions on their industrial policies and trade policies and that these policies had a tremendous impact on the Third World. At the same time, these OECD countries had very little consideration for publicizing any long-term strategies or giving any notion to the Third World, what would be the rules of the game that they would follow and how could the developing countries adjust to that type of policies. We have, since the end of 1976, tried to propagate: "You developed countries, you have to make sure that you have a notion of the type of the preferred industrial structure that you would like to have". That notion was refuted by some, although not all, of the OECD countries. They refuted any of these anticipatory adjustment notions as an expression of detailed central planning, saying that, in the case of the market forces, of course, we cannot predict anything. We will leave it to the market forces to adjust, and we will just follow. We then tried to have studies made in, among others, the Federal Republic of Germany, Sweden, France, and Belgium, with the purpose to see where these countries were heading, what type of policies were being pursued, what type of adjustment pressures were forthcoming, how companies were going about to adjust, and what type of structure was emerging even if it was not a structure that had been explicitly defined by governments. We were trying to anticipate what is going to happen roughly about 1990. What type of structure is emerging, and what, in turn, would be the implications for the developing countries. For instance, just to give an example, in Sweden there were always long debates about some of the weak industries, textile, leather and shoes, shipbuilding and so on. In the textile sector we were able to clearly show that the, so called, threat from the Third World on the competitiveness in Swedish textile industry was not really the problem. The problem was the imports from the industrialized Finland, because these happened to be the type of product lines that the Swedes particularly pursued all of a sudden; all the rest - the very low cost textiles - had been, in any case, steadily imported during a long period of time. So, while in the public debate in Sweden, they sort of blamed the cheap imports from Asia as being the major cause of the crisis in the textile industry, it was not so at all. So, I think firstly we had an educational purpose of work. Secondly, for instance, in the leather and shoe industry we were trying to say to the government that it is better that you declare how far you will go to scale down your capacities, so that the Third World and trading partners know what are the rules of the game, what are the set targets for you. I do not think it was due to our job, but it finally went like this: The government did decide, we will scale down capacities in leather and shoe-making to a certain level and the rest will be imports.

That is the type of work we are trying to continue. We are trying to get the industrialized countries to get a notion of where they are intending to go and we would like to interpret this and see where the chances are for the developing countries to come in. I think that, basically, our work has been successful in the sense that we have contributed to an international debate in this field; we have contributed to getting this accepted. The Federal Republic of Germany has institutionalized a structural reporting system where the major economic research institutes continue to report to the government what is happening in the structural changes in the industry in Germany. They have not come so far as to make explicit forecasts, but implicitly they are doing it already. So, in other words, we believe that there has been an educational process and the OECD-countries are now more ready to look at their future, just like the companies are doing. Our job is to interpret this and help to define, for a country like Thailand, where its role is if it wants to continue exporting to the OECD-countries - the European countries, Japan, USA. What is happening in these markets? We will have to try to interpret the technological changes there, the demand changes, the trade policy changes, and the resistance, also, for introducing adjustment. It is important, for example, for the Latin American countries to know exactly to what extent the US administration is ready to support continued imports or to increase the imports of certain labour-intensive products from Latin America and to what extent there is going to be a certain limit of resistance. All these sort of things were our starting points for our work with the Third World. Our job is to have clients in the Third World to which we can give our views, although we will try also to have some antennas out to see what is happening in the OECD-countries. In Thailand we have found that there is tremendous response to this type of thinking, and we are therefore very glad that we could have this sort of exchange of views. We have also some other countries in the Third World that are directly involved with our work and would like us to participate in restructuring programmes. These are, for instance, Mexico, Peru and some countries in Africa, like Zimbabwe.

Now, the type of discussions we had in Pattaya, I think, indicates the nature of our relations. It should be a very loose dialogue. It is clear that you, yourselves, have a much clearer concept of the country, its potentials, problems etc. than we would ever have and, therefore, I think the type of co-operation that would be most useful to strive for is also a loose one. We would be ready to continue with our own economists, and with our outside network of economic researchers to give you information of what is happening in the outside world, to give you information about the industrial sectors and about the adjustment policies in the OECD countries. We are prepared to be used as 'sounding board' for some of the ideas that you have.

Dr. Narongchai thereafter opened the specific discussion on the activities that the Restructuring Committee would like to see implemented

for the next 12 months. He noted that the participants at the meeting had come from different agencies but they would be involved in the restructuring activities one way or another. He felt it would be important to have discussions with them as to whether it would be likely that some of these activities could be implemented and within what kind of time-frame that would be possible. Of course, in the process of discussing the various ideas he would also very much welcome comments and feed back from the participants from UNIDO and see the kind of activities that can be worked on together. It was not just among themselves on the Thai side that they would like to work on the restructuring matters, they would like also to see more possibilities of co-operating with UNIDO and others on these activities.

The discussion was initiated on the subject related to export promotion by Mr. Noravat Suwarn (Director, Export Services Center, Ministry of Commerce) as follows.

During the Pattaya Seminar discussions, we came to certain conclusions. However, it is felt that the various matters would have to be discussed again for future action. There are two areas that were discussed in Pattaya that I would like to deal with. The first one concerns the organizational reform and whether it is necessary at this stage. According to the discussions it was strongly felt that if we were to drive our export up to the target set in the Fifth Plan, the organizational or structural reform would be badly needed. But if we are taking the present circumstances into account, the practicability of putting through this kind of reform immediately may be doubtful. We also talked about the one-stop export service unit and whether that kind of organ is needed for the industrial restructuring. Again there are also many other factors that have to be considered, and we have a feeling that the one-stop export service unit at this present stage is still not possible.

However, there are several other things that we can do during the next 12 months. According to my feeling as an operations man, high priority should be given to the removal of obstacles, even if piecemeal. This has to be done immediately in order to speed up the industrial exports. There are several things that the Ministry of Commerce, under the guidance of the Export Development Committee, has done so far to remove various export obstacles, but we still have some problems in connexion with the co-operation with other government agencies. That is, I feel, the main problem due to which our decisions cannot be implemented successfully. What I would like to focus the export promotion work on for the next 12 months or the main area that we have to concentrate on, is to get rid of obstacles that

hinders the private sector; all those things which are the barriers for the exporters. That would go a long way to help to speed up the export promotion.

Dr. Narongchai added a few thoughts on the matter as follows.

I think when Mr. Noravat was discussing the export promotion activities he emphasized the work of the Ministry of Commerce. Of course, he is from the Ministry of Commerce and therefore he is more concerned about what he is involved with at that agency. I believe there are also two other important issues that we should bring up at this meeting. The first is on the setting of the tax rebate rate. We have in operation at the moment, a tax rebate rate which is to last until September 1984. It came into operation in September 1981, and we at that time thought that by September 1984 we may want to revise the rate. So, this one thing we would like to discuss, namely, the kind of works involved in the computation of the new rates. In connexion with that, we also have, at the moment, a scheme on tax refund and we may get some information about what the Customs Department is doing regarding these tax refund activities.

Another issue that I would like to bring up, is the credit assistance scheme for exports. We talked earlier about the possibility of introducing the export credit guarantee scheme. We are not too sure whether that is going to be implemented. We have our colleagues from the Bank of Thailand here, so perhaps we should also have some discussion about the desirability and viability of the export credit guarantee scheme. In connexion with the credit assistance we also, at one time, talked about expanding the credit line for exports - short-term export credit financing - and we would also like to know what should be done in order to make this kind of credit line available or more accessible to, so called, non-traditional exports, namely manufactured exports.

I think we have three items on the agenda. One is the removal of obstacles, the second is tax rebate rate and tax refund practices and the third would be credit facilities.

Some further comments were made by Mr. Muegge as follows.

I would like to add to that some thoughts which may be put forward in the form of questions to Mr. Noravat. We have seen in the proposal for reform of export policies a number of very good and concrete recommendations. The question I have is, where is the resistance? I think one should examine to what extent there is a resistance on the financial aspect, that is, do you affect the government's finance by introducing new export schemes? I think one should have to see who the people or institutions are, that may wish to resist the introduction of these new schemes. In other words, one has to see whether there are vested interests. I think one would have to combat this and, rather than trying to find new mechanisms that at

the first sight seem to be very streamlined and very good, one should see who are going to oppose such proposals and then to try find the arguments that can overcome that opposition.

The second thing is that one would have to have a look at the operation of the schemes. Where are the bottlenecks for that operation? We know that in many countries they have a draw back scheme, but the people never get back the money. It takes about three years. This is for a businessman the crucial issue; not whether there is an export draw back scheme, but whether he gets his money and when.

Thirdly, I wondered, when we have talked about export credits, are we talking about financing the export trade of manufactures or do we include there also the finance of production for exports? In many cases that latter issue is very crucial, that of building up sufficient component stock and getting the production for exports going.

Some further comments were made by Mr. Ramm-Ericson (UNIDO) as follows.

I would like to mention one further issue which was not stressed here by Mr. Noravat but which came out in the group discussions in Pattaya. This is the question of assistance or support to the industry, to the export production, and the extent of such support. (We might look at this aspect also when discussing the assistance to the engineering industries.) You have the possibilities of introducing a quality certification scheme and strengthening the existing quality control and testing situation. You have the possibilities of streamlining or dovetailing the research and development work at TISTR so that it can be useful for industry, in connexion with developing various exportable products based on local raw materials. You have technical services, design capabilities or services in the packaging areas. This has been, of course, something where the Ministry of Industry has been more or less actively involved.

It could, perhaps, be thought that the provision of such services might also be done through private consultants. This would bring with it the creation of a stronger core of consultants in the country who would be available to industry in connexion, in particular, with the problems the industry may have in producing, adapting or developing exportable products. Also, attention should be given to the question of co-ordination in this connexion between the Ministry of Commerce and Ministry of Industry (the Development of Industrial Promotion, the Textile Division and others) who would be expected to work very closely with, or have links with, the private sector consultants. This approach might be something quite useful as part of the scheme of support to export industry, but, perhaps, we might tackle this complex of problems in connexion with assistance to the engineering industries.

Ms. Amphorn Lekuthai (Fiscal and the Policy Division, Ministry of Finance) made specific comments on the tax rebate system where they followed the input/output tables of NESDB. Dr. Narongchai continued.

For the information of some of us here, when we computed the rebate rate for exports we used the input/output table of 1975 and the tax structure at the time. Now we are in the process, as you have been informed of revising these rates, based on the new input/output table of 1980 and the new tax structure. When we did this the last time, we had a lot of complaints from the producers, accusing, or saying, that the amount of tax computed based on the I/O table was too low. I am sure some of you must have heard about these complaints; that they did not want to use the new rates, they wanted to go back to the old rates and tried to provide other calculations of the amount of taxes, and so on, and were therefore creating delays in the process. I wonder whether the Ministry of Finance is doing something to prevent this kind of problem that may again occur after we have introduced the new rate.

Ms. Amphorn replied that the Ministry was aware of this problem.

Ms. Somsawat Chansawas (Chief, Tariff Policy Sub-division, Customs Department, Ministry of Finance) explained further.

As for the Ministry of Finance (the Department of Customs) who is responsible for rebate and refund, the problem is, as I think all of you know, that we are very slow to rebate or refund the tax. I would like to tell you that after introducing the rebate the Ministry of Finance has tried to improve the process of rebate and refund. We have just begun to use the computer for the rebate and I hope that this will make the rebate and refund work move faster.

Ms. Nopoom Ruangskul (Deputy Director, Department of Bank Supervision and Examination, Bank of Thailand) made following comments.

I will first talk about the Bank of Thailand credit facilities. The point on credit expansion, as I have said in various places, will depend on the monetary policy itself, as to how far we could give more money into the system. We have taken that into serious consideration when we have been allocating credit to various commercial banks and finance companies and giving them a credit line. That is the overall amount of money that can be given to the system. The point that has been addressed in the paper^{1/} is that it is said that there seems to be a bias in terms of credit allocation. I think, what has been in peoples mind really is that they want to see more action from the Bank of Thailand to allocate export credit to small exporters vis-a-vis large exporters which later group seems to enjoy most of the facilities at the Bank of Thailand. Still, in the last few years, we

1/ "Finance in industrial restructuring's context" by Pairoj Vongvipanond. Paper No.5 prepared for the Seminar on Industrial Restructuring in Thailand.

have done something in the direction of allocating more money for manufacturing goods by reducing the amount that exporters can rediscount the notes on goods that has been stored in the warehouses which are mainly agricultural goods. Also agricultural credit has been granted in up-country areas instead, during the crop season which should help the small traders or small entrepreneurs; it can be traders, it can be manufacturers, it can be growers' stocks.

Another thing that we have not done, which the paper suggested and I also want to hear whether the people in this room are still in favour of, is that there is a recommendation for the Bank of Thailand to increase the rate of rediscount to be comparable to the market rate and I have always been in favour of that kind of thing. But it seems to be a lot of people who think that we should subsidize exporters still, especially, when we think that our exporters face other obstacles.

Dr. Pairoj Vongvimonond, contributed to the discussion as follows.

I would like to go back to something Mr. Muegge said which was very important, namely, the distinction between the export financing and the financial facilities for production for export. It seems to me that the basic issue may be centered around the question which I think is rather important, that, as far as a financing package is concerned, there must be financing available for production for export. In this regard I think the IFCT facilities for credit for long-term purpose may serve such a purpose but, in the past as far as can be asserted from the available statistics, it seems to me that the IFCT has not rendered great financial assistance to exporters directly in this area. It seems to me that the Restructuring Committee may take this into consideration in forming future policy. At Pattaya, we discussed in-depth some issues on financing. According to the Bank of Thailand survey^{1/} results, the exporters complained about inadequate financing facilities and stressed the need for some kind export insurance guarantee.

The discussion was continued by Mr. Noravat Suwarn (Director, Export Services Center, Ministry of Commerce).

The export credit guarantee scheme was first taken up a few years ago in the Export Development Committee. The Export Development Committee set up an ad hoc sub-committee to work on this project. The sub-committee found out that for the small and medium exporter, this kind of export credit guarantee was badly needed. A proposal especially regarding construction firms was submitted to the Committee

^{1/} Survey on the need and willingness of exporters to use the credit insurance scheme.

and processed on to the Ministry of Finance, where it was shelved with the reason that the commercial credit facilities, at that time, were more than enough to provide for the credits to be given to the small and medium exporters/construction firms.

Dr. Narongchai suggested that the matter should be followed up.

Mr. Herman Muegge put forward following thoughts.

Since you mentioned of construction industry, may I ask if any work has been done on the need for various sub-branches of industry as to export support? Has one investigated to what extent, let us say, automobile component exports would need specific rates of export credits versus textile exports, for instance? It may give the concept of export credits some more concrete support, if you get data on that.

Mr. Noravat replied on this as follows.

I do not think we have that kind of survey so far. However, a request recently came from the Thai Association of Industries concerning such a case, namely for textile producers. They have strongly submitted that low interest rates for that industry are badly needed for the competitive position in the world market. That is the only thing the Association as a group of manufacturers has requested to the Export Development Committee.

Mr. Faruqi (World Bank) observed that there was three different arrangements to support the financial requirements in the context of manufactured export promotion, namely (i) the export guarantee scheme; (ii) the export (trade) financing scheme and (iii) arrangements for export production financing. These were three entirely different arrangements. He understood that the UNDP/ITC assistance recently approved, included expertise for the carrying out of the basic work with the Bank of Thailand regarding the first-mentioned two schemes. The third item - financial support for production for export - was an area which remained to be looked into.

Dr. Narongchai, in summing up, noted that the discussions had covered the various various aspects for and obstacles against manufactured exports. They were basically under the responsibility of the Export

Development Committee who is trying very hard to get other departments to help them remove whatever obstacles there are for exports.

Mr. O'Brien (UNIDO Consultant) made some further comments as follows.

Dr. Faruqi emphasized a point which Mr. Muegge made at the beginning, namely, that at the moment we are very concerned with trade measures, that is, measures to support trade as such in export commodities. We listened in Pattaya to Dr. Park's observations on the Korean experiences - and we have noted this from the work about some other countries in the region too - about the Koreans being very active in promoting their exports with the help of the organizations of some of the large trading corporations or trading houses. Thought might be given to considerations whether, in the circumstances of Thailand, this kind of organization could also be of some help. It may be that some kind of organization of that type could be relevant and if I am not wrong, I understand that also in this region Malaysia has recently given quite a lot of attention to such an approach to encourage export.

Ms. Nopporn (Bank of Thailand)

The trading house concept was introduced a couple of years ago in Thailand. They get special incentives. They also get a higher amount of rediscount facilities at the Bank of Thailand, and we also allow them to relend part of the money to subcontractors so that they can acquire goods from other companies to export. However, I think that it is still quite early to judge their performance, because at the beginning, there were a lot of people who set out to finance such trading companies mainly to get the tax advantages. Later they found that they could not fulfil the requirements set because they were exporting only certain types of goods. In our system, it is required that all trading houses have to act almost the same way, they have to export certain amount of goods in three different categories or types of products, so you cannot have one specialized firm doing just only one major commodity or product line. You have to export all three types of commodities at the same time. Some companies will be good at one type, one classification of products, but they cannot meet the requirement on the others. So, they run into problems when trying to find other products that were not their line of specialization. However, they have tried and I think at this early point, there are some of them that are doing quite well in trying to expand into other markets. Still, I believe they have to be pushed further to find new markets and to find new products to export.

Dr. Pornchai (Board of Investment) made following comments.

I agree with the representative from the Bank of Thailand that it is rather early to evaluate the trading firm development. We got now only two or three firms at the starting point of developing into genuine trading firms.

May I go over to another subject? We have been discussing the financing and I am, as a BOI officer doing work as the promoter which involves also the financing scheme by the Bank of Thailand at the other end of the assisting, of the financing. We talked about the small firms, about the financing assistance to some of the small firms. The thing is that the financing for the starting up of export production is the most important. If we cannot give an adequate loan support for this then we should not take any money out of the Export Fund for buying of the raw material.

Mr. Narongchai continued the session by moving to the subject of investment incentives, which includes not only the works of the Board of Investment but also the existing system and mechanisms at various agencies which more or less form part of the structure of the investment incentives in Thailand. He invited Dr. Pornchai to initiate the discussion by way of suggesting to us the kind of activities that are needed in order to really restructure the investment incentives to be consistent with the industrial restructuring programme.

Regarding the tax incentives, we can divide them, as we have said in the discussions at Pattaya, in the tax and non-tax incentives. However, most of the incentives are actually what the investors would like to obtain on the financial side. For the non-tax or non-financial incentives, the investors consider them more as extras which the government just offer to them. What we should do is that we have to tailor-make the incentives on the financial side to the needs and see that they are suitable for the promotion of the industry. For the non-tax incentives, it is just like completing an overall picture of the structure, that would generate the desired whole sector development.

Two notes have been distributed, one about the guidelines to consider the investment promotion, the other a summary of the tax incentives in this regard. At the Board of Investment, since last October, we tried to simplify the process that we need in order to carry out the promotion and the incentives. What I observed during the past years is that we still have the development, the investment going free wheel. Since we are in the restructuring we have to look

into the expansion of new industry as well as the existing industry. What should we do in order to have the incentives in such a way that the industry will move in the direction of a the master plan or how would the government like to see it develop? We should not leave this as a simplified system just like it is.

The most important tax incentives are the exemption of the import duty for machinery and the income tax itself. But the incentives proposed for the exports, and those proposed for the infrastructure, if you look into the statistics, they seem to be of little use at all. They are only extras that they can grab but would not create the determination to invest. So, if we have a plan of decentralizing, how are we going to create those most needed incentives, in order to direct the industries to the place or to the level that we need in our modernization of our industry and the exports? This I would leave to the Restructuring Committee to study, maybe it has to be determined sector by sector. In the agro-industries, in the engineering or in the chemical sectors, it is all different. They do not need the same old package of incentives. Do we have a study of what would be the appropriate amount of incentives that we can propose to each industry? We can propose it as a package, by the sector of industry. We should not generalize it, only do it for some selected sectors. For the other sectors we can largely let the free wheel go, although in some part of our measures the notion of the place for these industries should be borne in mind from the beginning.

The other measure that I would like to propose in connexion with the utilization of the incentives is, how we should actually carry out the sectoral development programme. Suppose, in the electronic industry when we are studying its restructuring, we may be trying to reorganize the market. However, in our electronics industry we are still in the early stage of the development and from this stage we can go on. Why do we not in the restructuring programme in the electronics industry stress that it is not the penetration of the local market, but the best market (the competitive international market) that can support the industry to survive? Our potential, our prospect is in the exports. We may not be going to restructure the sector as a whole, but only tailor-make our incentives to suit this production for exports.

Dr. Narongchai opened up the discussion regarding investment incentives as follows.

I think that the major point that Dr. Pornchai has mentioned is that he would like to see that the incentives are given according to priority and the priority can be in terms of sector, in terms of market where the products are sold, in terms of location, and in terms of whatever development objectives that the government may have. In order to do this, in order to set incentives according to priority, a series of studies would need to be made. For example, in terms of sectors, what sort of sectoral work, what sort of sectors do

we need to give a specialized kind of incentives? Having identified that, what kind of incentives, to what extent should incentives be given so that it will be adequate for the sector to develop further? We may want to talk a bit about the need for studies on sectors, where we should locate the study work and who should be involved in the process. For your information, the work that we are doing with UNIDO for the next 12 months is going to be concentrated in three sectors, the first is on plastics and chemical products; the second is on textiles and related textile products and the third one is on the machinery.

Mr. Muegge commented on this.

UNIDO has two distinct departments one is the operations department and the other one is the studies and research department and the latter is in my area. However, since I am speaking here on behalf of all of UNIDO, I should just like to say that the process of signing the operational project document has advanced to such a stage that I think everything is alright, this sector work will now start and, I understand, the expert in chemicals is coming next week. At the same time, whatever number of experts you get they will, of course, not be able to cover all the items, and, I think, you have here in the NESDB several technical experts doing subsectoral studies. To take up your point, there would be need to have a sort of a back-up expertise to look into, for instance, the incentives packages, to see the future textile industry, from your angle, while it is being studied with assistance of a technical expert looking at the domestic market and so on. I think, there might be some further international experience-based support for the type of project assessment, the type of incentives package that would be most attractive in that subsector. I think you made this very point at some stage. We would try to see to what extent our research department or anybody else in UNIDO could come in at some point and support these endeavours, to sort of supplement the more operational activities.

Dr. Pornchai continued with following plea.

I would like to see to be included in the scope of project studies for the various sectors of industry, guidelines of what is really needed as government assistance; what is needed in terms of incentives and in terms of facilities that government should provide. Because, whenever you may indicate in the study that there is a potential, there seems always to be lacking a programme of how the government may facilitate this. The study will be of no use, from my experience, if it is left on the table without proposals for action. It should contain solid recommendations regarding incentives and what else has to be done to facilitate the development of the industry, where it should be done, and what the government action should be. This should then be taken up at a discussion with the parties involved.

Dr. Narongchai commented.

I think the points are well taken here. First, the terms of reference for sector studies from now on are to include aspects on incentives and various government actions that could promote the sector. Second, in the dissemination of sectoral works we should have a kind of a general seminar, including a number of government and private sector people involved.

Dr. Jacques de Bandt made following comments.

Well, my comments will go in the same direction as those of Dr. Pornchai. I think, from all I have heard about the investment incentives, there is a double need. One is for more studies on some aspects I will try to point out, and the other is for close integration of the investment incentives schemes with the studies which are made on the sectors. When I hear here the discussion on the investment incentives, I think there are five types of questions which are raised in this domain of incentives. The first one, which has been raised by Dr. Pornchai, is in which activities, in which sectors? Which are the kinds of activities? Dr. Pornchai has rightly been pointing out that the accent has been that more emphasis should be placed on the supply aspects both internal and at the international level, so that the relative competitiveness and potentials compared with other countries should be, of course, paid more attention to.

The second kind of question would be concerned with the kind of investment. Dr. Pornchai has been pointing out that one of the most important incentives is the exemption of import duty on machinery. This leaves open now two questions. One is the problem of appropriate technology; to what extent, for example in the case of textiles, should we develop investment incentives schemes? Do we have to build in some criteria for the choice of appropriate technology? The second aspect is that some kind of procedure should be put forward in order to establish a link between the investment incentives schemes and the development of domestic capital goods production. A last point, concerned with the question of what kind of investment, that is also being pressed, is that it is not enough just to have investment incentives, and that more attention should be placed on other aspects, such as the quality, the design of products and so on, in other words the non-material aspects of investment.

The third question would be in which type of firms should there be incentives for investment? I am not coming back to the debate of large and small business; this has already been discussed. But

another question, which seem to me very important, is the problem of the financial structure among the sectors, among the firms. As has been stressed in the Pattaya Seminar, the debt equity ratio may be very large, at least in the large firms, and it seems to me that there is quite a danger here of inconsistency between the restructuring programme on the one hand and the behaviour of commercial banks on the other hand. I think, attention should be given to the financial structure of the different sectors and on the financing behaviour of the commercial banks which may be inconsistent with the programme. At the same time, and related to this, it seems to me, that in the investment incentives programme, account should be taken, not only of large and small firms, but of the concentration of ownership within the system. If you want to have effective incentives, you have to know, of course, what kind of ownership, what kind of financial means, the concerned firms have on their own. I think, more study of the financial structure and of the structure of ownership should be made in order to improve the investment incentives scheme.

The fourth question is where to apply those incentives? This is the problem of centralization versus decentralization. I think the studies which have been made in several countries show that it is very difficult to obtain decentralization just by investment incentives. Some other means have to be developed in order to obtain this decentralization. I do not think all this can be obtained just by investment incentives. One danger, of course, of investment incentives is that, in order to obtain decentralization, you may consolidate the distinction between the centre and the periphery within the country by just moving out from the centre those activities which are more labour-intensive with low wages.

Finally, the fifth kind of question is to know how to stimulate investments. Dr. Pornchai has been pointing at the tax incentives. I think the incentives at the financial level should probably be improved. The financial incentives schemes can be more nuanced than the tax exemptions. It seems to me that more study work should be done, not on the institutional aspect of it but on the ways to stimulate investment, and essentially at the financial level.

Dr. Pornchai commented as follows.

I just want to make one comment on the fourth question that Professor de Bandt took up, namely, the decentralization through the incentives. I do agree with what you have proposed, but it has to be borne in mind that for decentralization the incentives themselves are only one factor. Much more important is the development of the area where we would like to have the industries located, like our Eastern Seaboard area. Everybody is aware of that development and we can promote industries there because of development of other facilities. One of the approaches that we have at BOI in our programmes is to determine the growth centres for the industry within each region, in

order to succeed in our decentralization programming, aiming at developing our rural areas.

Mr. Santi Bang-or (NESDB) made further comments expressing his views as follows.

I would like to take up a point about the incentives, just mentioned by Dr. Pornchai, namely, that many projects that have been approved and have been given a lot of incentives, cannot be operated efficiently after the initial infant stage. We have to give them more incentives every year. I think, it is the very crucial point that, at the beginning, we should try to be restrictive in allowing them. The second point is that not much has been said about the existing industry, I think, on the sectoral approach. I quite agree that we should start thinking now on what kind of industry we want. We are now giving so many industries protection. How long, do we have to give them more? Five years, ten years? Or should we give them eternally, otherwise they could not exist? I think this is a real question. I feel very upset when an industry asks for further protection five years continuously and "if you do not give me more protection I cannot survive". I think we have to decide on this type of industry, for how long we should specially protect them. Say, after 10 years, if they cannot improve themselves, if they cannot operate efficiently, we have to say, "sorry, we have to let you phase out from the industry".

One last point I would like to mention. I think, it may be easier to study what kind of industry Thailand should not try to promote. The negative is more easy to pinpoint than the positive. We have to be sure that there is no potential for Thailand to export. Then, do not promote them at any cost at all! I think it might be easier to come up with a yearly appendix of industries that Thailand should not be promoting. I think that would be easier for the decision-makers than to say what kind of industry we should promote.

Dr. Narongchai commented on this last point as follows.

We have now another approach which may be called the negative list! When we listened to Dr. Pornchai's suggestion to pursue the, so called, sectoral approach, the meaning was a positive list in which we identified in the sector the production where Thailand should have potential for development. Now, Mr. Santi is proposing another approach, a negative list. That is, in our study we should only try to identify the kind of production that we should not promote.

Mr. Peter O'Brien made following further comments.

One of the things which struck me very much is that the comments, made by Dr. Pornchai and some other people, indicate to me that in major institutions in Thailand there are people (such as those around this table) who are going into very critical issues with remarkable depth. I think, and Mr. Muegge would perhaps support this, that, in some of UNIDO's work in other developing countries, to try to get across the idea of restructuring and what it means in a positive sense, it is very slow process. I am seeing around this table a most positive sign that people in Thailand in very important institutions are trying to work in great depth already on various issues of restructuring and I am hearing now proposals for approaches, for studies, and for a kind of fine-tuning of government policies towards restructuring which I think is very encouraging. It is in the light of that situation that I want to make a couple of observations on points which have just been raised.

The first of them is the fact that it seems to me that the emphasis which has been rightly placed on sectoral questions and sectoral priorities. With the idea as was just put forward of a negative list as well as a positive list, it seems to me that these thoughts are converging very much towards what Mr. Muegge and Professor de Bandt referred to earlier as 'preferred industrial structure'. I already see many signs of this type of thinking now being turned slowly into reality, into action. I think, that is a very important thing, because in the next few years Thailand will not merely be concerned with trying to increase its participation in international trade and so on, but also to make sure that such participation yields of the best positive results in terms of the development objectives. I think that is very important.

The next point which goes on from that, relates more specifically to Dr. Pornchai's observations regarding the possible action of BOI. He has placed a lot of emphasis - and I think this is a very good approach - on the question of greater aggressivity by the BOI; the BOI taking initiatives rather than simply receiving various requests and trying to expedite them in the maximum way. I think that it is important that the BOI would start to become much more aggressive in this respect and, of course, to be aggressive requires the setting of the priorities that you have just been talking about. However, it also seems to me that, once you talk about being more aggressive, then immediately the question of the nature of project evaluation, the nature of the things that BOI is actually looking for in an investment operation, becomes extremely important. One thing is to set out criteria or objectives in broad terms. Another thing is to actually try to implement that in a process of seeking out, in collaboration with possible investors, and ensuring that the structure of the project - in all of the senses which Professor de Bandt mentioned and in some others - does correspond to, and is likely to give, the results that you are requiring. For example, to take the simplest possible case: We heard this morning from various speakers that, in fact, the import content of many of the export activities is very high in Thailand. That means that, if a major purpose of a particular

project is to generate export, then we have to look very hard at the evolution over time of the net export earnings, rather than simply allowing our project evaluation to be seduced by figures which relate to growth rate. This is a very simple example but, I think, this kind of idea has to run right through and that leads to the last and very obvious point which follows on from this. It is the capacity in the system - not perhaps just in BOI but I am thinking also of other institutions as well - for actually monitoring performance. This is very important because one of the things, it seemed to me that everyone at the Pattaya seminar was agreeing on, is that the idea of supporting projects and encouraging products is a very good idea, but no firm should be receiving open-ended guarantees which will go on for ever. I think it was general agreement about that. Therefore you must have built into the system a type of monitoring capability which actually says, look, we are prepared to give you guarantees, we are prepared to give you support and encouragement for certain periods of time. We will give you that support and encouragement, we will try to cut down red tape and all rest of it, but you must deliver the goods. If you do not deliver the goods then the monitoring system must provide the indicators for that, and make it possible to withdraw special privileges at the appropriate time. I think that this is a question of institutional psychology which is very important. My experience suggests that, when one is trying to encourage investment a great deal and trying to push exports a great deal, often one is very worried to be a bit tough on individual projects because, immediately you ask yourself the obvious question: What will be the psychological effect, if the government after, say, five years on a particular project removes the incentives on the ground that project performance has not been adequate? I realize that this is a very difficult question, but I do think it is important that the government institutions be ready to be firm on those issues. I do not think that, in practice, the reactions that come from investors will be that difficult to handle and, above all, I do think it is important that, if Thailand is pushing ahead with the plans in this way, it must be ready to say: Look, here is the evidence. We can show we have given you everything that we can. We supported you and if you fail well, then you must expect the consequences. Only some people will fail, the rest will succeed and, I think, the monitoring system must weed out the good from the bad over time.

Dr. Narongchai, in thanking for the intervention, mentioned that the BOI is actually now undergoing a series of what may be called reforms and one aspect that is being contemplated very seriously, is a monitoring system along these lines.

Dr. Pornchai (BOI) continued.

I would like to comment on some points that Mr. O'Brien has just made. On the evaluation, on the net export earnings, I think, that, as

Thailand is in the very early stages of manufacturing export development in contrast to some other developing countries in this area, to some extent, perhaps, we have to accept a high import content in order to start. Once the market is there, the investment will come. So, in the early stage maybe we are not able to bargain more. Let these initial efforts help in developing and expand the market. We should have some system watching it. On the monitoring system, I think that, in the context of the Thai bureaucratic system, we in BOI have exercised our monitoring quite much and are already rather more monitoring-oriented than service-oriented. What the BOI is trying to do now is to be service-oriented with a careful monitoring system.

Mr. Muegge continued with the following brief comment.

I just want to come back to what Mr. Santi was saying, about this ever-lasting support. We have the same phenomenon in the OECD countries. For instance, the Swedish government initially, when the shoe industry go into crisis, provided large subsidies to the industries hoping that they would restructure. After five years all the money had gone and nothing had happened. The industries were worse off than ever before. What is now coming into the mind of the government, through the banking system, is that they tell the industries, alright, we will give you subsidy, but you give us a programme how you will adjust and we will check that, but you work it out. In other words, the industries that are affected, have a grace period of some five years under which they get all sorts of subsidies, direct funds and credit facilities, export support, rationalization of the machinery and so on. But, they have to build up a programme in which a restructuring is systematically outlined. You force them, in other words, to conceive their own restructuring.

Dr. Narongchai concluded the discussion on investment incentives as follows.

On the discussions on tax incentives, I think that we would like to say the following at this time. For our future work on sectors which are being directed by the Industrial Restructuring Committee, we would very much like to include this aspect of the kind of incentives to be given in order to promote the sector. The idea about positive list and negative list can be easily accommodated, because in a particular sector there are several, so called, side industries. Many of the industries in a sector should be phased out or should not be promoted at all. Such industries should be clearly identified. But, at the same time, there are number of other industries that perhaps with government help can develop much faster than would otherwise be possible. We could do that too. So, it is really no conflict between the, so called, positive list approach and negative list approach.

We have also heard that, in the future, when the Board of Investment is in the position to offer incentives, there should be a

package of incentives to be given (package meaning that it could come from various government agencies). The Board of Investment has already a mechanism that could co-ordinate the works among several agencies.

There are two other aspects about incentives, namely, the tax structure and the financial aspects. On the tax structure we have, as a programme of work which has been approved but has not yet been implemented, a study on the whole structure of the tariff rate with the idea that we should have the kind of tariff reform that would lead to the promotion of the manufacturing of intermediate products and some of the capital goods. At the moment the structure of tariff rates is more in favour of the final products than intermediate and capital goods. This is understandable in view of the nature of the industrial sector that we have. But now, when we are moving towards intermediate products, we also need to look at those. This study project has been pending for some time. We hope the Structural Adjustment Loan Committee will soon approve of the project. Then we can implement it on an urgent basis.

Dr. Chatri Sripaipan (Chulalongkorn University) introduced the matter of technical assistance for engineering industries.

At the Pattaya Seminar we considered the technical assistance for engineering industry^{1/}. We looked at the combination of three proposals, one from the Department of Industrial Promotion, MOI (Dr. Damri), one from the World Bank and one from IMC (Dr. Narongchai). Actually, we see no conflict between these three. The proposal by DIP is concentrating on what DIP is doing while, of course, the IMC one covers more than that. The World Bank one, as Dr. Faruqi has said, is a sub-proposal of the IMC proposal and the World Bank would try to see what it can do to help on that area.

When we came to the proposal by IMC, we looked at the action plan proposed, namely, the restructuring of the Industrial Service Division (presently the Industrial Services Institute), the establishment of the Technological Development Centre, the incentives package for technological development, the strengthening of the capability of the Thai Industrial Standards Institute, the establishment of the National Measurement Standards Board and the improvement of the R and D system. We received a lot of comments on this action plan which helped in giving a broad view what we should consider as regards the matter of technical assistance. One of the specific conditions that came from the discussion was that we still need the study or review of each subsector of engineering industry. The Industrial Services Institute has done a subsector study on casting or foundry work some years ago and they have just completed one on tool and die making. They plan to do something on machinery this year. I would suggest that, since they are doing it, any other organization that can assist them should do that.

^{1/} See Annex 11, "Summary of proposed programme for engineering industry development".

Another comment would be that we should also try not only to be looking for exports but also try to mobilize our domestic market through the BOI promotion scheme and through the government procurement procedure. Our domestic market is not all that small, indeed it is quite large. Here, I would like to add one example, that is the telecommunications industry (mainly electronics). In the ten years plan of the Ministry of Communications, they plan to spend 100,000 million baht. I do not know whether we have that money but that is in the plan. (The private sector looked at it and said that it will not be sufficient to provide the services required.) The amount of what our present industry can produce of this telecommunications equipment at the moment is only in the order of 100 million baht. If we could only capture some 10 per cent of our market that would already create a lot of industry. Of course, there are other areas but this is one area that I know.

The private sector people say that they do need technical assistance, although the assistance provided by the government at the moment does not have great impact, because the small industry seems to be reluctant to seek assistance. I do not know whether they do not know where to go to, or they do not have confidence on the ISI. It can be both ways.

We also received comments saying that, actually, the engineering industry feel that it is a bit low in the priorities of the government. Lots of people still do not realise its importance. We need a lot of internal selling job to put the engineering industry on the map in Thailand.

Another thing was that we need to establish the linkages between the small industries which are locally-owned and traditional with the large ones which are foreign-own. These two sectors at the moment do not have any linkages. There should be ways of trying to establish such linkages, so that these industries would benefit from each other.

Another comment was on the unpackaging of the big foreign turn-key projects. We should try to break up the projects into smaller ones, so that local suppliers would have a chance to go for the smaller ones. Another comment was that we should not allow foreign consulting firms to operate in Thailand, unless they establish a close connection with local firms. I believe these were the main points of what was said at Pattaya.

What I think will be happening in the next 12 months is that the first project, the one that DIP has proposed is probably going to go on with the assistance from various donors. I think we should leave it to Dr. Damri to push it.

What more would I like to see happening in the next 12 months? We need some more subsector studies which, I think, we can take care of, provided some support is given in terms of funds. Regarding the institutional reform, there are several institutes that were mentioned, but I think in the short term of 12 months, probably one cannot see great things happening. Perhaps the reformation of ISI can spark this.

I see another thing that we can do very quickly and get effects from, namely the project on the incentives package for technological development. These are tax laws, actually. If we get these tax laws introduced, we can see that something can change. If we give the incentives to the industry where they try to develop their technological capability that would help.

I would like to add a couple of comments here. In our Restructuring Committee, we have included the private sector. They came, however, from the Association of Thai Industries in which the traders and manufacturers are lumped together. I think, it would be good if we could break them up into three categories, one is the traders, the second is the assemblers and the third one is the manufacturers of parts. I think, we can then get a more balanced view from the private sector. The traders, of course, want to import the whole thing, the assemblers want to import parts and the part manufacturers do not want them to import parts. I think, we should have this balance of views. That would sort of have a control function for the import of technology as well.

Dr. Narongchai continued with comments as follows.

In connexion with the tariff reform, I mentioned earlier that we certainly feel that, at this time, the industrial sector is ready to move into production of more sophisticated goods and that we would need to have a look at the kind of tariff structure which would be promoting that kind of activity. The Director-General of the Fiscal Policy Office has indicated to us that, if the Industrial Restructuring Committee could propose to the Ministry of Finance the kind of tax structure that would be suitable for industrial development in Thailand, then they would find that very helpful in their work on tax policy.

Now, let me just identify the issues that have been mentioned by Dr. Chatri and invite some comments on them. We may look at these things in two groups. One would be the kind of decisions to be made, and another would be the studies that need to be implemented.

On the decisions to be made, I believe, it is very important to have a decision rather quickly about the role of the government and the role of other agencies in the promotion of engineering industries. There is still some disagreement as to what the government should do and, I think, we would like to submit some suggestions to the Industrial Restructuring Committee in order to get some decision on this. Because, unless we have a decision on this matter, it would be very difficult for us to, for example, have a view on what DIP should be like in the future. We need to know its role first, before we can say how to reform it. So, for the reform of institutions, we need first to have decisions on the respective roles of the government and other agencies. This would be one thing that we need to submit proposals on very quickly.

I am also somewhat surprised, that you have not mentioned anything at all about TISTR, the Thailand Institute of Scientific and Technological Research. I am now on their Board of Directors and we are actively looking at the possibilities to directly connect their work with the engineering restructuring programme. The Minister of Science and Technology has given us full support for this.

Dr. Chatri mentioned about the need for subsectoral studies and the incentives package for technological development. I think, here we may want to have some discussion on inclusion, for example, of studies on sub-sectors in our work programme. A study on the incentives package, I feel, could definitely be incorporated in our work programme. Before that I would like to invite participants to say something about what Dr. Chatri has presented.

Mr. Siriboon Nawadhinsukh (Thammasat University) made following comments.

I would just like to mention that in our discussions at Pattaya about the technical assistance on engineering industry, the point was made that the demand on technical capability depends much on the market, because the production capability is a sort of derived demand on the final product. But we have trouble with the small traditional firms who are, most of the time, reluctant to accept or even look for the technical development, just because of the limitation of the market. This means that most of the time the traditional firms would be meeting only a local, low quality kind of demand. The government or any other institution should put in much more efforts on making the world market as well as the local market for intermediate goods transparent, because there are many possibilities for the small firms to supply to the large firms in the local market of intermediate goods, as well as the exports. If we are to go by way of exports, making the world market transparent would be one of the ways to guide to the kind of demand that would have to be recognized by small firms.

Next on the supply side, we came to a conclusion that it is not totally true that we do not have a capability in basic process engineering. In fact we have, but they are at some special places - although perhaps right places - in the University, for example. But when you are talking about production in the engineering industry, and in particular, in the small firms, you do not have those capabilities utilized by our firms. Therefore, the problem that we are facing is not so much whether to procure and import the technological capability from outside, or to substitute for the purchase of turn-key arrangements which we are compelled to do in some joint ventures or as result of consultations with the international firms.

Dr. Faruqi (World Bank) made following comments.

The engineering industry sector programme that has been pursued here I find very comprehensive. It has, to my mind, a large number of items. I am not sure, however, to what extent these items interlink and to what extent they are practical. Also, I am not sure about the degree of the commitment of the government concerning this programme. I am talking about the ideas of the papers, of the reports produced, I am talking about the operationalizing of these arrangements in whatever small ways and with whatever institute or institutions in Thailand. We are starting, shall I say, from bottom up rather than coming from the conceptual framework, trying to see what can be done here. We have been grappling with it for the last three years and for the last ten months, we have intensified our efforts and we have concentrated on three institutions.

We are trying to see what TISTR can do by way of providing technical assistance to new industries, what DIP can do and, possibly, what the Ministry of Labour can do. Underlying all these three programmes, there is the proposition to try to provide technical assistance in the very complicated area of the engineering industry to the private sector from government institutions. The assumption is, that, somehow, these institutions would know better what to do in the private sector than the private sector itself. I am not sure, that assumption is a correct one. If, indeed, this programme has to be effective, our feeling is, then the technical capability of the institutes has to be upgraded substantially from where it is. This leads us to the next problem from the bottom. If you want to upgrade the capability at the institutes, the problem - as you very well know - is that the government sector is simply not capable of doing so, given limitations on its resources. It cannot retain the qualified people in either of these institutions on public sector salaries to provide that assistance. Then, what do you do? Can you get around this somehow? This is very difficult, you are still struggling with it. We do not know exactly whether we would be able to have the kind of the technical personal in these three institutions to really provide an effective assistance to the engineering industry in Thailand, particularly outside Bangkok.

Well, again starting from bottom up, basically we have considered the draft projects over the last ten months and I think we are ready at least to put before these three institutions and in front of the government, a very specific programme, specifically to upgrade the capability in two ways. Firstly, by providing them the kind of equipment and the various other things that is needed and, secondly, by way of technical personnel, either domestic or foreign, either through short-term consulting or on permanent staff basis. The last one, I find very difficult to get. I do not think that it is possible within the existing framework of the government.

The next stage for us, would be to prepare a bill of goods and prepare a summary listing for the government to decide on. The bill of goods is basically what it would cost and, at this stage, what would be the commitment of the Ministry of Finance. They have told us over and over again that from their budget sources it would be very difficult to pursue the proposals on a vigorous basis, so we have to find some external sources.

The difficulty here is that the engineering industry programme may then be a one-shot operation. It goes on for two or three years and then it dies out. Then, what do you do? If it is to be on a permanent basis, then it has to be done through an institution. The proposal is here in various ways, namely, the creation of two or three new institutions on a different basis than what hitherto has been possible in Thailand. They have to be on some sort of a quasi public sector basis to carry on the programme. Similarly, the sources of funding to these institutions have to be ascertained, somehow, before a programme could be considered permanent on this basis. Otherwise, our feeling is, that it will remain basically an ad hoc programme.

We have done it just like this in the Republic of Korea. The difference from Thailand is that in Korea, there was a very definite commitment from the government and they lined up not only government agencies but the national institutions behind it also. We have done a similar exercise in the Philippines and we are about to finalize a major programme of the Philippine Government on assisting the engineering industry. We keep asking ourselves why is it so difficult in Thailand? The answer is simply that there are institutional problems behind which have to be resolved before we could get anywhere on this.

Mr. Muegge continued with following suggestion.

I think Dr. Chatri has very well described what was taken up in the working group in Pattaya on the engineering industries, and after having listened to the discussion here on the engineering industries, one gets the feeling that we are all convinced that there is a tremendous potential, and tremendous obstacles in this very complex area. It involves the supply side, the market side, government procurement, government commitment. It involves consultancy services, it involves looking at the foreign technical assistance and foreign direct investment. In order to come down to one particular common denominator is extremely difficult. Maybe I should make the suggestion that in one year's time, on this day in 1984, Thailand should have a day of the engineering industry. You may have an exhibition of what Thailand can produce in the large- and in the small-scale sector and you should have attached to that a high level seminar and working groups, so that you can go through these various matters concerning the engineering industry, bring it up to the status that it requires and go about it more systematically. One has the feeling that, if that is not done, let us say, in a very prominent status way, all these issues will disintegrate and never meet.

Dr. Narongchai expressed enthusiastic support for Mr. Muegge's suggestion and indicated he would try to find a sponsor for it.

Dr. Pornchai made following further comments.

I would like to make two comments on what Dr. Chatri has presented on our very ambitious planned telecommunication development. I think there should be the opportunity for the restructuring programme to make a study for the ten years period and then try to identify some things for possible local production. The question of our government procurement has nothing to do with World Bank (the lender) restrictions or requirements, but there are difficulties within our own system.

The other thing is the incentives for technology development. I think it is an important matter that we have to synchronize the technology development to our economic development. What has been brought out in the sectoral study is that we should look into the incentives not in terms of promotion but rather in terms of modernization, relocation of other industries and expansion.

The third point is regarding the local consultants. I think, for almost all government projects, one should be concerned about participation of local consultants. What efforts should we make to encourage the government organizations, the public (utilities) enterprises, and the private companies to be aware of our local consultancy availability and capability, in order to develop expansion programmes, such as that in the telecommunications field? I think, this is a most promising area for the local consultants, and more interesting as local input than just the delivering of specific goods to the government projects. Every project investment is preceded by detailed study work through which technology capability should be obtained and developed. I think the government should help the private consultants in this.

Dr. Narongchai concluded the meeting by thanking all the participants for their very active contributions and suggestions for the future work on Thailand's industrial restructuring. He also informed that the secretariat of the Industrial Restructuring Committee will be submitting a report to the Committee about the meetings that had been held and also the kind of work programme and issues that the Committee may wish to consider and make decisions upon.

Annex 1

Seminar on Industrial Restructuring in Thailand
22-23 October 1983
Siam Bayshore Hotel, Pattaya, Thailand

PROGRAMME

Friday 21 October 1983

Evening Arrival at Pattaya

Saturday 22 October 1983

8.30 - 9.00 Registration

9.00 - 9.154 Opening address by H.E. Wongse Pohnikorn, Deputy
Minister, Ministry of Industry.

9.15 - 12.00 Morning session. Chairman: H.E. Chirayu Israngkun na
Ayuthaya, Deputy Minister, Ministry of
Industry.

Overview on industrial restructuring

Introductions:

- Industrial restructuring in global
context, by Mr. Herman Muegge
- Industrial restructuring in
Thailand, by Dr. Narongchai Akrasanee
- Industrial restructuring in the
Republic of Korea, by Dr. Pil-Soo
Park

14.00 - 17.30 Afternoon session. Chairman: Mr. Muegge, UNIDO

14.00 - 15.30 Electrical and electronics industry
Introduction by Dr. Narongchai
Akrasanee

15.30 - 16.30 Automotive industry
Introductions by Dr. Siriboon
Nawadhinsukh and Mr. Peter O'Brien

16.30 - 17.00 Financial institutions
Introduction by Dr. Pairoj
Vonvipanond

17.00 - 17.30 Export promotion
Introductions by Dr. Juanjai Ajanant
and Mr. David Wall

Sunday 23 October 1983

9.00 - 11.00 Group discussions:

Group I: Investment incentives. Chairman:
H.E. Chirayu Israngkun na Ayuthaya

Group II: Technical assistance for engineering
industries. Chairman: Mr. Manu
Leopairote

Group III: Export promotion. Chairman: Ms.
Sukon Kanchanalai

11.00 - 13.00 Concluding plenary session. Chairman: Mr. Staporn
Kavitanon, Assistant Secretary-General, NESDB

Reports by the rapporteurs of the group discussions.

Summary, conclusions and future programme.

Seminar on Industrial Restructuring in Thailand
22-23 October 1983
Siam Bayshore Hotel, Pattaya, Thailand

LIST OF PARTICIPANTS

1. THAI PARTICIPANTS

- H.E. Wongse Polnikorn, Deputy Minister, Ministry of Industry
- H.E. Chirayu Israngkum na Ayuthaya, Deputy Minister, Ministry of Industry
- Mr. Sukri Kaocharoen, President, Industrial Finance Corporation of Thailand
- Mr. Wanchak Voradilok, Governor, Industrial Estate Authority of Thailand
- Mr. Staporn Kavitanon, Assistant Secretary-General, National Economic and Social Development Board
- Ms. Sukon Kanchanalai, Director-General, Department of Commercial Relations, Ministry of Commerce
- Mr. Chamong Phanuschutabull, Deputy Director-General, Department of Industrial Works, Ministry of Industry
- Mr. Noravat Suwarn, Director, Export Services Center, Ministry of Commerce
- Ms. Suvimol Ramakomud, Director, Fiscal and Tax Policy Division, Fiscal Policy Office, Ministry of Finance
- Dr. Pornchai Tulyadhan, Director, Project Development Division, Board of Investment
- Mr. Chaktip Nitibhon, Vice-President, Research and Planning Division, Industrial Finance Corporation of Thailand
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Annex 3

Discussion on Follow-up Activities between
UNIDO Staff, International Experts,
RESCOM Secretariat and Selected Government Officials

25 October 1983
Imperial Hotel, Bangkok, Thailand.

PROGRAMME

Tuesday 25 October 1983

- 9.00 - 9.30 Industrial restructuring - an overview, by Mr. Muegge
- 9.30 - 10.20 Export promotion. Introduction by Mr. Noravat Suwan
- 10.20 - 11.10 Investment incentives. Introduction by Dr. Pornchai Tulyadhan
- 11.10 - 12.30 Technical assistance for engineering industries. Introduction by Dr. Chatri Sripaipan.

Discussions on Follow-up Activities between
UNIDO staff, international experts,
RESCOM Secretariat and selected Government officials

25 October 1983
Imperial Hotel, Bangkok, Thailand

LIST OF PARTICIPANTS

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Seminar on Industrial Restructuring in Thailand

22-23 October 1983

Siam Bayshore Hotel, Pattaya, Thailand

SEMINAR DOCUMENTATION

A. Documents distributed to the participants

(a) Papers prepared by the RESCOM Secretariat:

- 1 Industrial development and industrial restructuring, by Narongchai Akrasanee. Paper No.1 prepared for the Seminar on Industrial Restructuring in Thailand, October 1983.
2. Industrial restructuring and the electrical and electronics industry, by Narongchai Akrasanee. Paper No.2 prepared for the Seminar on Industrial Restructuring in Thailand October 1983.
3. Industrial restructuring in the automotive industry, by Siriboon Nawadhinsukh. Paper No.3 prepared for the Seminar on Industrial Restructuring in Thailand, October 1983.
4. Export promotion in Thailand, by Juanjai Ajanant. Paper No.4 prepared for the Seminar on Industrial Restructuring in Thailand, October 1983.
5. Finance in industrial restructuring's context, by Pairoj Vongvipanond. Paper No.5 prepared for the Seminar on Industrial Restructuring in Thailand, October 1983.
6. Technical assistance for engineering industries, by Chatri Sripaipan, Yongyuth Yuthavong, Krissanapong Kirtikara, Rachin Chintayarangsan. Paper No.6 prepared for the Seminar on Industrial Restructuring in Thailand, October 1983.

(b) Brief notes prepared by the UNIDO consultants for the Seminar:

7. - Peter O'Brien: Short report on the automotive industry in Thailand: Is a strategy possible?^{1/}
8. - Jacques de Bandt: Industrial restructuring in Thailand.^{2/}
9. - David Wall: Industrial restructuring in Thailand. Background note.^{3/}
10. - Pil-Soo Park: Experiences of industrial restructuring in the Republic of Korea. Summary note.^{4/}

^{1/} Included as Annex 8 to this report.

^{2/} Included as Annex 6 to this report.

^{3/} Included as Annex 7 to this report.

^{4/} Included as Annex 9 to this report.

Annex 5(2)

(c) Reports in a series of policy papers on industrial restructuring in Thailand, Prepared by the Regional and Country Studies Branch, Division for Industrial Studies, UNIDO:

11. - UNIDO/IS/R.5/Rev.1. Industrial restructuring in Thailand - Some observations by a UNIDO mission 28 October - 4 November 1982
12. - UNIDO/IS/R.6. Industrial restructuring in Thailand - Some observations on policy issues concerning the automotive industry. (Report prepared by Peter O'Brien)
13. - UNIDO/IS/R.7. Industrial restructuring in Thailand - Some observations on export policy instruments and institutions. (Report prepared by David Wall)

B. Background documents available at the meeting

14. - Industrial restructuring in Thailand: The case of electronics and electrical industry by Narongchai Akrasanee and Associates, The Industrial Management Co. Ltd., June 1982. Report prepared for the World Bank.
15. - Export promotion in processed foods and textile products, by Juanjai Ajanant. Report No. 1 in a series of policy papers on industrial restructuring in Thailand, prepared by IMC consultants under the NESDB/UNDP-UNIDO Industrial Restructuring Project, June 1983.
16. - Technical assistance for engineering industries, by Chatri Sripaipan, Yongyuth Yuthavong, Krissanapong Kirtikara, Rachain Chintayangsan. Report No. 2 in a series of policy papers on industrial restructuring in Thailand, prepared by IMC consultants under the NESDB/UNDP-UNIDO Industrial Restructuring Project, June 1983.
17. - Development of financial institutions for industrial restructuring in Thailand, by Pairoj Vongvipanond. Report No.3 in a series of policy papers on industrial restructuring in Thailand, prepared by IMC consultants under the NESDB/UNDP-UNIDO Industrial Restructuring Project, June 1983.
18. - Policy proposals for the restructuring of the automobile industry in Thailand (preliminary). Report prepared by the Industrial Restructuring Project on basis of the work of William Hock, UNIDO consultant, 30 August 1983.

INDUSTRIAL RESTRUCTURING IN THAILAND^{1/}

This short note is essentially concerned with some technological aspects of the restructuring process to be implemented and organized within the Thai industrial system. The paper aims at contributing one of the building blocks of a comprehensive restructuring programme or at least at suggesting the requisite for such a block, to be build within the programme. The main object is: technology.

The elements which have to be taken into account are on the one hand the data available^{2/} as concerns actual performance levels, which are, to a non-negligible degree, the result of strong import-substitution measures, and on the other hand of the prospective growth path as seems likely or desirable for the Thai industrial system.

The following suggestions are trying to elaborate on these two aspects: actual performance and future industrialization patterns.

Notwithstanding relative high growth performances (of the order to 10 per cent per annum during the seventies) the Thai industrial system and its recent evolution seem to be characterized by the following elements:

- relative low degree of industrialization (the share of total labour force within the industrial sector is still very low on a comparative basis);
- the labour-intensive processing of agricultural products do represent the largest proportion of manufacturing, even while the engineering sector has been growing somewhat faster than the average;

^{1/} Prepared by Prof. Jacques De Bandt, Directeur de recherches, Institute de Recherche en Economie de la Production, Nanterre, France, and presented at the Seminar in Pattaya.

^{2/} It has correctly been stressed that more systematic data should be needed and that, for decision purposes a system of evaluation of actual, comparative, efficiency and performance level should be made available within the Thai administration.

- The main focus has been on import-substitution. While no consistent figures seem to be available as concerns the implications of the import-substitution process in terms of industrial performances (efficiency-productivity), plenty of informations do seem to indicate that these performance levels are still low;
- while exports of manufacturing products have been increasing (faster than industrial output and faster than imports), they remain at low levels;
- some interesting developments have taken place within the engineering sector.

The move from past experience and performances to an export-oriented scenario has to be organized taking account of the changes occurring within the international environment. Some of these changes have to be stressed:

- relatively low growth prospects at the international level, with the corresponding reduction of the intensity of the driving force of exports:
 - low growth prospects in the North which means stronger competition and protection,
 - within the South, debt problems and stronger competition due to simultaneous export-oriented moves.
- important technological changes:
 - micro-electronics affecting larger and larger fields of production goods, which are beginning to change the structure of comparative advantages.
 - the rapid development of new (and) composite materials
 - the development of energy technology
 - the prospects for major changes, through the development of bio-technologies, within the food processing area, and more generally with the whole agro-chemical system,
 - the major changes occurring in the field of seed selection.

Besides these two sets of elements - actual performances and international environment - one has to take account of another set of elements which concern the dynamics of industrialization in a country like Thailand.

Three aspects of it are stressed here:

- While the industrial base of Thailand is still relatively weak, and is composed for the largest part of traditional labour intensive sectors, Thailand does occupy, within the South, a somewhat "intermediate" position between the very low income countries (like India, Pakistan, Nepal, Sri Lanka, Burma ...) and the higher income developing countries (say the NIC's). This means that Thailand is undergoing (within the traditional sectors) three different kinds of competitive pressures: besides the pressures from the North (new products, marketing products, high quality), pressures stemming from lower wage countries and pressures stemming from countries which have already succeeded in developing a larger industrial base. There are some obvious implications as concerns the competitiveness requirements both for the near future (the necessity to find specific combinations of relative low wages and productivity levels) and more so for the longer term (the necessity to build in a systematic approach for increasing productivity).
- The other main point to be stressed is the more and more obvious fact that the (export-led) industrialization process, as it has been taking place in the NIC's, is running against a major difficulty, resulting from the "barriers to entry" within the capital goods sector, and the corresponding dependence as concerns the production methods and equipments. The development of the capital goods sectors in line with the (export-led) development of the capital goods users sectors appears to be one major requirement for the pursuit of the industrialization process. Of course, beyond this general observation, distinctions have clearly to be introduced within the capital goods sector, the problems raised being of course different for the various categories of capital goods concerned.
- Due to the high growth rates and to the rapid structural changes within the Thai society, leading to a rapid increase of the share of the contribution of industry to GNP^{1/} the Thai industrial sector has not really grown up to a consistent industrial system. The same can be said of the financial and administrative infrastructure. This means that the complex set of relations and interrelations within the industrial sector and within the administration and between the firms and the administration appears to a large extent unco-ordinated and even to a certain extent anarchic. New functions, new relations have been developed, more often beside the existing administrative system than within an evolving integrated system.

The analysis of the industrialization process in various relative success countries, show how important the role of the state has become. The ways and means the state bodies and more particularly their relations with the firms are organized appear to be conditioning, in a fundamental way, the

^{1/} Leaving aside some other factors, whose logic lie outside the functioning of the industrial sector.

overall performances of the industrial system. Investment in co-ordination and consistency is likely to have a high level of profitability.

On the basis of these various elements, the restructuring plan and process to be developed should include a systematic approach for the building up of domestic technological and industrial capabilities along specific lines and with specific targets. Within the whole range of measures to be taken, within the restructuring plan, in order to enhance the performance levels of the firms and of the industrial system as a whole, priority should be given to the technological aspects of the problem.

It is crucial, from the standpoint of future industrialization prospects, that the necessary immaterial investments be made, at both the national and the micro-economic levels. Too much emphasis - as is often the case - on material investments, at the expense of immaterial investments in the scientific and technical system would have important negative effects as concerns the growth prospects. But beside the problem of resources and investments, the organizational aspects, including the management of the links to be established between the scientific and technical system and the industrial activities have to receive due attention.

The building up of the technological and industrial capabilities has of course complementary dimensions:

- research
- training
- investment and choice of techniques
- maintenance
- spare parts
- science and technology policy
- transfer of technology and know-how
- foreign investments
- technological and industrial co-operation

Only very short comments are included below as concerns each of these dimensions. The objective here is to insist (i) on the complementarity of those various dimensions and accordingly on the necessity to develop a consistent approach of the problem, taking into account those various dimensions, and (ii) on the necessity to select some specific industrial targets.

First some short comments.

- Research: scientific and technological research has clearly to be developed, part of which (the share has to be decided upon) must be finalized by expected industrial applications. Taking account of the possibility to take its bearing on the international scientific system and to benefit from the advantages of international scientific co-operation schemes, some priority fields for technological research have to be defined. It does seem important to choose those priority areas on the basis of domestic industrial strategy criteria, rather than on the basis of some imitation process imposed by the relations with the North.

The AIT is a well-known research structure. Thailand must take advantage of this. But, beside this obvious possibility, from the standpoint of Thailand, the technological research has to be enlarged and finalized as a function of specific industrial targets.

- Training: Beside the training requirements in order to develop the human resources needed by the development of research activities, the necessity to develop the professional training and thus the human resources needed by the industrial system are obvious.

Part of the productivity increases will result from higher general and professional training. As concerns professional training, two points should be stressed:

on the one hand, technical training must take account of the rapid changes which are likely to occur, in the two decades ahead, in the production methods: the problem is not only one of increasing the overall level of technical capabilities, but one of adaptation to new types of technical capabilities;

on the other hand professional training should concern as much organizational as technical capabilities.

- Investment and choice of techniques: Taking account of the "intermediate" position of Thailand, the choices of techniques are important, both in order to minimize costs on the basis of an appropriate combination of wage and productivity levels, and in order to organize a technological learning process, which will

allow for the progressive up grading or sophistication of production methods and consequently of productivity levels. Beside the possibility to take account of some other criteria (e.g. energy consumption), due attention should be paid to the comparative technological level of production techniques through time.

- Maintenance: This topic is of course closely related to the previous one. Maintenance activities are an essential component of the learning process. But they are also vital in order to reduce, as much as possible, the capital consumption levels, the more so when more sophisticated equipments are being used.
- Spare parts: The same must be said of the supply of spare parts within the industrial system. The necessity to organize systematically the supply of spare parts, in relation with the maintenance activities, is obvious for several reasons: reduction of import dependence, shortening of delays, learning process, intensification of the industrial network. Of course, the supply of spare parts must be finalized, and concentrated on particular items, corresponding to more important needs and to potential technical capabilities.
- Science and technology policy: It always does seem necessary to insist on the necessity to set up both a set of procedures in order to make choices and to take decisions, in the field of science and technology, and a consistent framework for the actions of the various agents (i.e. of the various research organizations and production units) involved.

The links between the various elements discussed here should be clear: one main objective of the science and technology policy is to build on those links in order to enhance the domestic capabilities in a systematic way, this means by integrating all agents and factors concerned.

- Transfer of technology: To the extent that Thailand will remain for the period to come dependent on foreign technologies, transfers of the needed technologies will have to be organized, both in order to build-up production capacities and to contribute to the development of domestic technological capabilities.

Because of the prices to be paid, attention should be paid to the appropriation of the technologies transferred (with reference to the industrial strategy as chosen) and to the effectiveness of the transfers. The external technological relations have to be managed, not for their own sake but in function of the industrial targets as defined.

- Foreign investment: Beside some other aspects discussed elsewhere, the rules governing foreign investments must be decided upon on the basis of criteria relating to the whole question of the building up of domestic technological and industrial capabilities. The development of production capacities and employment, and consequently of export potentials as such should not be considered to be sufficient to justify foreign investments. They should be expected to contribute directly - or at least indirectly through the appropriated gains - to the accumulation of technological and industrial capabilities.

- Technological and industrial co-operation: According to the industrial targets chosen for the medium to long-term perspectives, the Thai industrial system should be looking out for the building up of technological and industrial co-operation schemes with partners (both research, training and production units) within the developed countries. Such schemes, with build-in procedures of transfers of technological and industrial capabilities, should be closely integrated within the industrialization paths chosen for specific sectors within given time horizons.

As indicated earlier, those elements are really to be seen as complementary and should be organized as such. For that purpose, two other things remain to be discussed:

- The first does concern the institutional framework within which those various elements can be made consistent with each other. It must be said, on the basis of experience, that

these elements are seldom consistent just by chance; the logic of the agents and organizations concerned (research structures and enterprises, administration and enterprise, domestic and foreign agents ...) are too different for such consistency to be worked out by some (quasi) market mechanisms;

the power relations within this complex set of relations are very unequal, such that the dynamics of exploitation may appear to be stronger than the dynamics of transfer and learning;

the consistent organization of this set of complementary elements appears to be a difficult task which needs not only expertise in forecasting and planning but also organizational and management capabilities.

Taking account of these observations, the institutional framework needs to respond to a series of requirements: extended decision powers, inter-administrative organization, study and planning body, operational capacities, external negotiation competence, etc.

- The second problem does concern the specific targets to be chosen. These targets have to be decided upon on the basis of systematic study and concentration.

These targets have to take account of the following:

- (i) Possibility to consolidate existing activities. The main activities being textile and food-processing and, to a lesser extent, the automotive industry, questions are thus raised as concerns the possibility to maintain, and more so from the standpoint of the implementation of an export-led strategy, to strengthen their relative position, compared to their main actual and potential competitors.

Without going into the details, it must be said that each of these sectors is likely to undergo, within different time horizons, major changes as concerns production techniques and/or products.

Textiles are undergoing rapid changes of production techniques with the introduction of micro-electronics. Thailand must adapt to these changes. In the case of food processing, the adaptation means also getting involved progressively in the biotechnological revolution.

(ii) Possibility to develop systematically new activities:

The main sectors here are petroleum refineries, chemicals and engineering. The engineering sector has been developing partly as a result of the integration of domestic parts in the automobile assembly. Taking account of what has been said above, special attention should be paid to the capital goods sectors, and mainly in line with the needs of the transformation sectors to be developed (textile, food-processing, agriculture, engineering itself);

other sectors to be considered are those concerned with the processing of natural resources, both agricultural (wood, rubber, cork) and mineral (non-metallic and metallic ones).

Regarding new sectors to be developed the following indications should be taken into account:

- the development of autonomous technological and industrial capacities in the energy sector should be given some kind of priority;
- the development of a capital goods sector will necessarily involve, in the medium-term, domestic technological and industrial capabilities in the field of micro-electronics;
- taking account of the metallic production base (which should be developed) the possibility to get involved in the composite materials sectors should be explored.

All these possibilities and potentials should of course be analyzed and evaluated more systematically.

INDUSTRIAL RESTRUCTURING IN THAILAND^{1/}

INTRODUCTION

The Thai economy has been undergoing a continuous process of restructuring for over a hundred years. The Bowring Treaty of 1855 opened up the country to the forces of comparative advantage and commenced the process of adjustments which brought the benefits of international specialization. Thailand was transformed from a subsistence type agricultural economy to one specialized in export oriented production of rice, rubber, teak and tin - products in which the country had a comparative cost advantage. The earlier industrial base, involving protected production of cotton textiles and refined sugar was more or less eliminated by competition from imports.

The second major impetus to economic restructuring came with the shift from an absolute to a constitutional monarchy, following a military coup in 1932. Economic nationalism became the basis of government policy: the Chinese were suppressed, selected foreign firms were nationalized, and a variety of state-owned firms were established. By the early 1950s the Government was involved in several - protected - industries: rice milling; sugar refining; textiles; ore smelting; rubber products; paper; cement; and tobacco.

A third major phase of restructuring can be said to have commenced in 1957-58, following the recommendation of a World Bank mission that the public sector should concentrate on the development of infrastructure and encourage private enterprise to develop industry. In common with many other developing countries in this period, Thailand underwent a more pronounced rate of economic change than had previously been experienced.

^{1/} Prepared by Mr. David Wall, University of Sussex, England and presented at the Seminar in Pattaya.

The two decades from 1960 saw the Thai economy undergoing major structural changes. Although agriculture continued to be the most important source of income for most Thais, the contribution of this sector to total GDP fell from 40.5 per cent to 24.9 per cent. The fall in the share of agriculture is mostly attributable to the fact that the manufacturing sector grew at an average growth rate of 10.5 per cent throughout this period, increasing the share of the sector in GDP from 11.8 per cent to 20.7 per cent.

The manufacturing sector itself underwent a process of structural change from 1960 to 1980, as can be seen from the following table.

Table 1. Sectoral source of GDP

	1960 (%)	1980 (%)
Food processing	34.6	14.2
Beverage and tobacco	23.6	9.7
Textiles and wearing apparel	13.2	23.8
Chemical and chemical products	6.8	8.3
Transport equipment	5.4	7.9
Wood and cork products	6.8	1.4
Petroleum refining	0.0	5.1
Rubber and rubber products	0.6	2.7
Non-metallic mineral products	2.9	5.6
Basic metal industries, metal products, and machinery	1.4	4.0
Electrical machinery and supplies	0.6	2.0

The impressive shift towards the industrial sector in terms of income generation has not been matched by a concomitant shift in employment. Total employment in the manufacturing sector only rose from 470,000 to 1,475,000 in 1978, representing an increase in labour absorption by the sector from 3.4 per cent to 6.8 per cent. The drift of

population to the Central Province, especially Bangkok, was however pronounced as most of the industrial units and their servicing activities were established there; of the 26,468 factories registered in 1980, 18,698 were located in the Central Province, and 11,496 of those were in Bangkok itself.

The structural change in the Thai economy is reflected in the composition of its exports. This is indicated in Table 2.

Table 2. Composition of exports, 1960 and 1980

	1960 (%)	1980 (%)
Food	45.4	44.6
Beverages and tobacco	0.3	1.0
Crude materials	50.0	14.3
Manufactured goods	1.1	22.1
Machinery	—	5.7
Misc. manufactured goods	0.2	6.4
Others	3.0	12.3

The major categories of manufactured exports (in 1979) were: processed foodstuffs 24.9 per cent, rubber and plastic goods 18.5 per cent, textiles and clothing 16.8 per cent, basic metals 14.2 per cent, and electrical machinery and appliances (mainly integrated circuits) 4.7 per cent.

Another indication of the way in which the structural transformation of the Thai economy has been trade-related is provided by two studies by Dr. Narongchai Akrasanee (1975 and 1980). These studies analyse the trends in manufacturing output in terms of three sources of growth: increases in domestic demand; an import-substitution effect; and an export-demand effect. The studies show that over the period 1960-66,

88.9 per cent of the growth in the output of manufactures can be attributed to growth in domestic demand and 24.7 per cent to the growth of exports, while import-substitution developments had a negative impact of -13.6 per cent. In the period 1966-72 the contribution of import substituting industries increased and they accounted for 29.4 per cent of the growth, with the contribution of exports falling to 6.6 per cent and the growth in domestic demand to 64.1 per cent. By the period 1972-78 the contribution of import-substitution industries had declined again, to -6.3 per cent, and those of the growth in domestic demand and exports to 87.2 and 19.1 per cent respectively.

This long process of continual and accelerating structural change in the Thai economy needs to be borne in mind when considering the present calls for industrial restructuring in the context of the Fifth National Economic and Social Development Plan (1982-1986) and the Structural Adjustment Loan Programme of the World Bank. Structural change is nothing new in Thailand. What is new - for the first time in over a hundred years - is the strong emphasis on a more open orientation of the economy in order to take better advantage of the benefits of international specialization and to move away from the inefficiencies of excessive import-substitution.

PLANS AND POLICIES

The basic goal of the Fifth Development Plan (FDP) has been described^{1/} as:

"To increase the proportion of manufacturing value added contributed by manufactured exports from 15 per cent to 25 per cent in five years (by 1986). Production for exports is expected to grow by 20 per cent per year and production for domestic sales by about 6 per cent per year".

^{1/} "Aide-Memoire for the Seminar on Industrial Restructuring in Thailand" . UNIDO, Vienna, 23 September 1983.

The means by which this goal is to be achieved are limited by the constraints imposed by two other objectives, namely, those specifying the need

to increase the proportion of manufacturing value added in areas outside Bangkok Metropolis and the four nearby provinces; and

to increase the proportion of value added by small-scale industries.

The attainment of these goals calls for the introduction of policy reforms designed to bring about the rationalization of the structure of protection for domestic production and of the pattern of investment incentives. Policy measures also need to be introduced in order to improve and strengthen the incentives provided to exporters of manufactured goods. Further measures are required to ensure that small-scale firms, and firms outside the central region expand relatively rapidly.

The novel quality of the goals of the current restructuring programmes can be better appreciated when they are compared to those of the preceding Development Plans. The First Plan (1961-66) reflected the tenor of the World Bank mission mentioned above. It called for the introduction of policy measures designed to stimulate private investment into developing import-substitution industries behind raised tariff barriers and controls restricting the development of new competitors. The role of the Government was seen as ensuring the introduction of the necessary policy measures, and the provision of the necessary transport facilities and other infrastructure. By the time the Second Plan was introduced, some of the problems associated with import-substitution policies were becoming obvious. The Plan reflected this by calling on the Government to devise policy measures to encourage more labour-intensive industries, and also industries based on the exploitation of domestic raw materials. At the same time the Second Plan called for the encouragement of inward-looking foreign investment, preferably through joint ventures, and recommended increased support for small and cottage industries.

The Second Plan was outrun by events. The late 1960s saw Thailand moving into balance-of-payments deficits after many years of surplus. A policy response was already under way by the time the Third Plan was introduced. The import substitution programme had led to extensive imports of machinery and raw materials at the same time as receipts for the US military presence and from foreign investment had begun to decline. The export promotion policy introduced in the late 1960s was consolidated and strengthened in the Third Plan (1972-76). This Plan emphasized the need to encourage the establishment of export oriented manufacturing industries. It also introduced the constraint of ensuring that industry be developed in rural areas. The Fourth Plan simply reiterated the objectives of the Third Plan, although giving them a different quantitative specification to reflect changing circumstances.

The significance of the Fifth Plan's call for increased flows of manufactured exports lies in the increased emphasis it places on this objective. This is indicated by the ambitious quantitative targets it sets and by its call for the restructuring of existing industry in addition to the usual call for export oriented incentives for new industry.

POLICY CONSTRAINTS

Objectives set in national development plans are always in some extent simply a matter of wishful thinking; many factors constrain a government's ability to achieve those objectives. Changes in the external environment and unexpected resource limitations are obvious constraints - indeed their frequency leads to their often being used as scape goats for other more binding but less obvious (and/or less excusable) constraints. Two frequently binding constraints (not always obvious to the outsider) on a government's ability to make the sort of major policy reform required by, for example, Thailand's Fifth Development Plan, are what can be called the "vested interest" constraint and the "institutional" constraint. The latter contains within it some elements of the former and they frequently operate concurrently, reinforcing each other.

The introduction of any policy creates groups which have a vested interest in maintaining the policy in force. In the present context the establishment of the import-substitution policies (as outlined by Dr. Juanjai Ajanant^{1/}) has for example created a group of industrialists whose profits, and frequently survival, depend on the maintainance of those policies in force. Often the profits and survival of entrepreneurs engaged in import-substitution depend on the continual strengthening of protectionist measures as competition from foreign competitors develops or increases. Such firms can be expected to use what influence they have on politicians, senior officials and the media in order to build up a lobby against the introduction of policies which would threaten their interests. This influence is frequently considerable, given their profits and access to scarce resources which they can "share" with those they seek to influence. Their pleas can be seductive as the employment, income and apparent foreign exchange savings they generate appear to have substance as compared to the abstract promises of those advocating reforms.

The pleas for maintained or enhanced protection do not always need to be sweetened by a share of the benefits from such protection in order to ensure that they do not fall on deaf ears. Politicians and senior government officials with interests in protected industries are not unknown. Moreover, the staff of the institutions required to implement protectionist policies can themselves constitute a significant impediment to reform - this is the basis of the institutional constraint on policy mentioned above. Leaving aside the issue of "dash", it is not always easy for leopards to change their spots: the skills and mentality required of officials responsible for implementing a successful export drive are quite different from those required by people whose experience has been in maintaining domestic market oriented protection policies. Officials wishing to prevent the introduction of new policies or to frustrate the effectiveness of their perceptions of their interests, are in a good position to form alliances (formal or informal) with influential

^{1/} "Export Promotion in Processed Foods and Textile Products" by Juanjai Ajanant, Ph.D., Report Number 1 in a series of policy papers on industrial restructuring in Thailand, prepared by IMC consultants for NSDB/UNDP-UNIDO. Bangkok, June 1983.

businessmen whose interests are also actually or potentially compromised. And if they fail to prevent the introduction of policies they regard as inimical to their interests they have a whole battery of bureaucratic devices which can be used to impede the effective implementation of those policies.

The two papers on export promotion aspects of the current industrial restructuring programme of Thailand (those by Dr. Juanjai Ajanant and the presentg author^{1/}) both identify areas of potential conflict of interests of the sorts which have just been mentioned. Both papers indicate the sorts of policy reform which will be necessary to move the Thai economy from a basically inward t a basically outward orientation. Both papers also identify some of the actual and potential constraints which are currently slowing down, or which can be expected to slow down, the process of liberalization. Indeed, some of the recent liberalization moves are illusory as they have concentrated on redundant tariffs while leaving the controls which provide the effective protection untouched.

One export development strategy which has been advocated is that based on the enhancement of value added in exports of domestic raw materials which are currently exported in unprocessed or only simple processed forms. Such a strategy appears to offer a way of reducing the vested interest constraint as it holds out to those currently engaged in the production of the unprocessed or semi-processed commodities the prospect of enhanced profits from higher value added production. This strategy also appears to offer a solution to the "market research problem" in that awarness of the trade pattern in an intermediate goods offers a good basis for identifying markets, and the agents operating in those markets, for the more highly processed verisons of those goods. While recent research (for example by UNIDO^{2/} and the present author^{3/}) has shown that the location of production of an intermediate good

^{1/} "Industrial Restructuring in Thailand - Some Observations on Export Policy Instruments and Institutions", by David Wall, UNIDO/IS/R.7, Vienna, 31 March 1983.

^{2/} "Industrial Processing of Natural Resources", United Nations, Sales Document No. E.81.II.B.1, New York 1981.

^{3/} "Industrial Processing of Natural Resources", by David Wall, World Bank Commodity Working Paper No. 4, Washington, D.C., June 1979.

is not always the economically most efficient location for downstream production, the strategy does provide a good basis for analysis of the prospects of increasing net foreign exchange availability via export growth. The Fifth Development Plan recognizes possibilities in the earlier processing stages:

"The export industry is to expand by at least 15 per cent per annum and efforts should be made to increase this to 25 per cent by promoting primary processing industries, such as those for processed foods, jewelry, ornamental items, furniture, leather and rubber products, and wood products."

The Plan also states that

"The Government will promote and encourage the utilization of local minerals by creating related industries which will increase the value added of mineral outputs and economic benefits instead of exporting them in the form of metals."

although the same logic could be applied to non-metallic minerals.

MINERAL PROCESSING AND ASEAN/AUSTRALIAN ECONOMIC CO-OPERATION

Thailand is the co-chairman country of the Study on International Trade in Minerals, Energy, and Mineral Products (TMEMP) being conducted under the auspices of the Joint ASEAN/Australian Economic Co-operation Research Project. Dr. Praipol Koomsup of Thammasat University is Director of this sub-project and author of the country study on Thailand^{1/}.

The TMEMP has three phases. The first, now nearing completion, has consisted of a fact-finding stage involving the compilation of data on the production and reserves of minerals and energy in the six ASEAN

^{1/} "Minerals and Energy in Thailand: Production, Consumption and Trade, 1970-1980", by Praipol Koomsup, A draft report for the ASEAN/Australia Joint Research Project on Trade in Minerals, Energy, and Processed Mineral Products, Bangkok, February 1983.

countries and Australia. Data was also assembled on the state of processing of the various minerals in these countries and on plans for future developments. The second stage of the project is commencing now and involves an account and analysis of the factors which influence the development of the processing industries: natural factors such as transport requirements; availability of energy in different locations and ore quality; policy factors such as treatment of foreign investors, all forms of commercial policy, and fiscal policy; and "stage of development" factors such as the availability and nature of physical and institutional infrastructure, and the availability of and access to embodied and disembodied technology. The third phase will, against the background of the first two phases, examine the prospects for mutually beneficial co-operation among the ASEAN countries and between them and Australia in the minerals, mineral processing and energy sectors.

There is clearly scope for RESCOM to benefit from the activities of the ASEAN/Australian TMEMP Joint Research Project. The papers prepared for this seminar give an indication of the potential complementarities. The papers on the chemical and automotive industries are concerned - to different degrees - with the foreign exchange earning or saving prospects of downstream processing activities, as is that on food processing and textiles although in this case indirectly via canning and petrochemical based man-made fibres. The paper on technical assistance in the engineering industry highlights the difficulties which an expansion of processing activities, which are almost engineering dependent, would face given the present availability of skilled workers and support systems; this paper provides a well thought out plan for the restructuring of the institutional framework for training engineers and for the provision of supporting technical and standards services which would be required to support such studies also stress the need for Thailand to think in terms of the international context, which is precisely what the Thai participants in the Joint Project are doing.

The potential for cross-fertilization between the UNDP/UNIDO - NESDB and TMEMP projects already exists, as both Dr. Narongchai Akrasanee and

the present author are currently advisors to both projects. Hopefully these arrangements will continue so that the results of the TEMP project can be fed into the work of RESCOM and a viable plan drawn up for the export oriented restructuring and development of the mineral processing sector.

SHORT REPORT ON THE AUTOMOTIVE INDUSTRY IN THAILAND:
IS A STRATEGY POSSIBLE?^{1/}

I. Industrial Pathology

In those developing countries (DC) where an automotive industry (AI) has been established, its evolution can be charted with the clinical precision of a disease. With no local technology, private domestic capital unwilling to enter heavy industry and internal markets severely constricted by the very conditions of underdevelopment, the first phase witnessed the arrival of numerous transnational corporations (TNC) who set up assembly plants behind tariffs which imposed much heavier duties on the import of completely built-up vehicles (CBU) than of semi or completely knocked down ones (SKD or CKD). The fact that AI is characterized by oligopolistic competition on the global scale was enough to ensure that several TNC (rather than just one) would go to each DC and that their rivalry would take the form of multiple-model production: these two conditions in the framework of limited domestic demand guaranteed small-scale, high cost (compared to CBU) output. They were reinforced by an additional feature of TNC behaviour - the desire to secure market presence at minimal cost and risk. Thus the 'capital' contribution was almost invariably through second-hand equipment shifted from plants in the TNC home country and valued by the firm itself. This equipment was generally best suited to assembly of models already outdated in the country of origin. Its presence as 'equity capital' created an ambiguous situation regarding total payments to the TNC - it could claim both for its provision of hardware (the machinery) and software (management) as well as risk capital (the machinery again).

The first phase objectives of DC had, without exception, been creation of a 'core sector' which could diffuse industrial technology to other sectors, the promotion of industrial employment, and a reduction in foreign exchange outlays; without exception, those objectives were not realised. The subsequent history of the sector has revolved around successive attempts to achieve, albeit partially, the aims fixed at the outset. The favoured

^{1/} Prepared by Mr. Peter O'Brien, Vienna, and presented at the Seminar in Pattaya.

instruments of policy have been: local content (LC) rules, designed to transform the local industry from assembly to production (in the sense that key parts are made domestically) and thereby generate greater upstream linkages in the economy; export subsidies, to encourage large-scale domestic production of vehicles and reduce the foreign exchange drain (it was quickly discovered that the cost of SKD packages was not much below that of CBU vehicles while the former also incurred foreign exchange payment noted above); balanced trade rules, requiring each TNC to compensate for its imports by earning equivalent foreign exchange through export; domestic market quotas, tying local sales (market share) to net foreign exchange earnings of each firm, thereby seeking simultaneously to improve the foreign balance and reduce the number of local suppliers; direct restrictions on the number of local firms; and diverse measures to entice TNC to use DC as bases for component production, the output being destined for the home base or other links of the corporate chain.

The policies have been elaborated in most DC in the order just given. Over time, therefore, the preoccupation has moved more and more towards stanching the outflow of foreign exchange connected with AI. Except for Brazil and the Republic of Korea, the schedules proposed for constant rises in LC have had to be frozen or abandoned altogether - and even in these two countries the dependency of domestic production on foreign design persists while recent developments indicate that governments are prepared to relax LC to some extent if the TNC concerned will increase exports. At no stage has policy formulation been the exclusive preserve of the governments: on the contrary, both the substance and actual practice of the policies has conformed quite closely to the strategic requirements of the TNC and the driving forces of oligopolistic struggle among them.

In the early phase those firms were content to 'register' as the sources of auto production, if and when local demand became appreciable. The rise in LC was satisfied by purchasing or producing fairly simple parts, none of which required substantial capital investment and whose deletion from the KD kits was in any case not matched by a corresponding

reduction in their price. The preoccupation of DC with the trade balance in AI likewise had its positive aspects for TNC: on the one hand, it coincided with their experimentation with DC as cheap production sites for models which were still sold in OECD locations (the VW Beetle is the classic example) and on the other was not a risky activity due to the substantial subsidies (explicit and implicit) granted to exporters. Most recently the accent has been on cutting back the number of producers and models manufactured within each DC and on offshore sourcing (OS) of key components. This phase too is hardly out of step with changes in TNC strategies and the state of oligopolistic competition: at the moment, all leading TNC (GM and Ford from US, Toyota and Nissan from Japan, VW, Peugeot/Citroen/Talbot and Renault from Europe) are deeply enmeshed in strategic positioning on the global scale i.e. choosing product mixes, collaboration partners and production locations for particular components and vehicles. This rationalization of operations carries with it a willingness to withdraw from some markets and reinforce presence in others. At the same time the 'second set' of TNC (chiefly the Japanese firms Toyo Kogyo, Mitsubishi and Honda, but also to a lesser extent Fiat) must internationalize yet their more limited resources oblige them to do so via careful selection of regions and countries which (save for Honda's ventures in US and UK) means DC.

The policies elaborated in DC have been based on certain implicit assumptions:

- (i) that IC can be increased in steps which, whatever their effect on domestic production costs may be, correspond to established technical stages which are stable over time
- (ii) that the markets of DC represent a powerful pull for TNC producers and consequently they will struggle to get in and stay in
- (iii) that the far lower wage rates prevailing in DC were a strong force attracting TNC to localise their production of many components in DC and use the countries as export platforms
- (iv) that TNC would be unwilling to collaborate with each other in DC markets

- (v) that it was sufficient to deal with vehicle producing TNC without devoting much attention either to TNC component firms or to the interconnections between the two kinds of TNC
- (vi) that, in sum, it was the countries which held the important assets in the context of a stable oligopoly.

Events of recent years have placed major interrogation signs behind each and every one of these statements. The reason is the global crisis, its impacts on DC and the particular forms of crisis management adopted by the TNC in this sector. For the sake of brevity the dominant features of recent and actual trends can be summarized as follows:

- (i) The severe external debt problems affecting a large growing number of DC have led to the imposition of economic policies which cut back economic growth in general but bite especially hard on the industrial sector; both demand for and production of autos has fallen sharply in most DC in the past two or three years.
- (ii) Among the OECD countries new norms concerning products, production processes and corporate organization are rapidly being put into place. The essence of them on the product side is to reduce the number of models sold in the region, strongly upgrade the quality and price, and introduce a notably higher content of electronic and of non-steel materials. Regarding production processes, the decisive change has been the massive reduction in employment of unskilled and semi-skilled labour accompanied by a move towards flexible manufacturing systems which permit the simultaneous achievement of low cost output with a high degree of adaptability of the product mix. Corporate organization has been marked by a mushrooming of collaborative arrangements (including some equity sales) among almost all TNC and the rationalization of production networks on the international scale. The future competitive position of each firm will depend on its ability to compete in these three dimensions.
- (iii) Far greater selectivity is now being applied by TNC to their choice of DC in which to operate, what and how to produce in each selected country, how to organize investment in the country (joint ventures with public enterprises becoming more popular), the financial and other conditions to be obtained from the government, and the nature of linkages with local industry.
- (iv) Overall the strategic options facing DC are becoming starker at the same time as their bargaining strength vis-a-vis TNC weakens. The main directions (only some of which are available to most DC, and which are not necessarily mutually

exclusive) comprise full local production of a few models, partial LC with continued import of major parts, concentration on production for export (via intra-firm trade) of major parts, production for export of simpler original parts, production for export of replacement parts, and the abandonment of the sector to imports.

- (v) The attempts at casting some strategic in terms of regional co-operation are faring very badly. It is the affiliates of TNC which co-ordinate if they wish, not countries.

II. The situation in Thailand

In several senses AI represents a test case for Thailand, and for RESCOM in particular. It poses fundamental questions regarding whether a sector subject to substantial incorporation of new technology in the leading countries can be focus of technological learning and diffusion and a foreign exchange earner in the second half of the 1980s. It forces the government to develop strategies for bargaining with TNC at a period not only when the country's negotiating assets are not particularly powerful but also when the TNC themselves are mostly too preoccupied elsewhere to pay much attention to fresh initiatives. It obliges the government to reexamine the public/private income transfers which, overtly and covertly, are the consequence of the existing structure of the industry. It compels a serious assessment of the meaning of ASEAN industrial co-operation.

The present state of AI in Thailand shows the following characteristics:

- it is still more assembly than production; although LC is allegedly around the 45 per cent mark no major parts are produced within the country;
- more than 100 models are made locally with output per model at derisory levels;
- for at least the past 18 months there has been debate over whether the existing CBU ban should be maintained and the future timetable for LC;
- even existing LC is of dubious value: the import content of production costs in parts manufactured locally is high (around 60 per cent) and there is little sign that the government is contemplating investments in other sectors which would permit that import content to be reduced;

- most parts producers make many other items which are not sold to AI: the economic pressures of the past couple of years have already driven these firms to diversify output and markets, particularly through export sales;
- domestic market is dominated by Japanese firms (accounting for roughly 80 per cent of all sales); the product split is approximately 70 per cent commercial vehicles with the rest passenger cars;
- the sector is languishing in a state where it is not contributing to any substantial technological advance (though on the job learning may still be increasing somewhat) or to much diffusion, where other types of internal industrial integration are severely limited, where employment is falling gradually (the drop has been cushioned mainly by the diversification noted above), and where foreign exchange outlays are substantial;
- in short, it presents a major strategic challenge.

Till now, Thailand has not had any well-defined industrial strategy. Relatively few basic industries have been established; the participation of public enterprises in industry is extremely low compared to most other DC of the region (whatever their economic orientation); the administration seems to have only limited involvement with the elaboration and implementation of import control and monitoring systems affecting industrial structure and performance; little experience seems to exist regarding the collection of information on and assessment of TNC corporate strategies, corporate behaviour, technological development affecting industry in Thailand, or investigation of international markets; and the promotion of industry has had more to do with fixing the terms which would ensure private profitability rather than building an industrial fabric based on careful selection of activities to be undertaken at home and those for which foreign inputs would be required. These circumstances affect the whole of industry yet apply with particular force AI due to the nature of global changes in that sector. To develop a strategy for AI will thus require the government to depart drastically from its past practices.

Events are moving rapidly in Asia regarding AI. The Japanese TNC, which dominate sales throughout the region, are taking up strategic positions in response to various pressures including: competition among them both in the Japanese market and elsewhere; restrictions on export

sales in major OECD locations, encouraging a search for surrogate export bases; opportunities to establish in potentially big markets hitherto closed; the need to confirm Japanese command over Asia just as the US TNC maintain their grip in Latin America; and the constant necessity to secure raw material supplies - since the Japanese firms are part of giant conglomerates which straddle numerous sectors (by no means confined to manufacturing industry), there are chances to conclude deals in which auto production is a quid pro quo for long term raw material contracts. In these strategic choices, however, there are two factors which the Japanese firms do not seem to regard as advantageous viz. cheaper labour abroad and the possibility of local parts production. To consider these elements in isolation abstracts from the system productivity of the Japanese producers: for competitive reasons it is essential that foreign output approximate as closely as possible the quality and cost standards set in Japan, and this means either that major-parts should be supplied from home base or that Japanese component firms be encouraged to set up in other Asian countries (in which case LC may be met on paper but in practice will not imply much local participation).

In the past three years the strategic positioning has been:

- Republic of Korea: Mitsubishi has taken a 10 per cent stake in the publicly owned Hyundai, concluding also a technical assistance contract in the context of a doubling of capacity aimed at launching exports of the second generation Pony Model.
- Taiwan: Toyota has concluded a joint venture involving public and private domestic capital aimed at production of 300,000 units of Toyota model by the end of the decade, with one-half scheduled for export to OECD.
- India: Suzuki (in which GM has a 34 per cent equity stake) has signed a joint venture with publicly owned Maruti for production of 100,000 vehicles per annum by the end of the decade. The extent of domestic parts production is as yet unclear, but the 26 per cent equity stake held by Suzuki gives it, under Indian company law, the veto power over choice of component suppliers. Various other arrangements between Japanese and Indian enterprises are under discussion covering other parts of the vehicle market.

- Malaysia: in early 1983 Mitsubishi took a 30 per cent equity stake in a new joint venture with the publicly owned Hicom aimed at building a so-called 'national car'. IC is not in fact scheduled to rise that much and there is talk that parts produced elsewhere in ASEAN would qualify as IC. However, the key aspect of the venture is the construction of body building plant with an initial annual capacity of 80,000 units and due to come onstream in the next two to three years. Tariff increases to support this project are envisioned.
- Philippines: the government has recently (August 1983) announced measures to reduce the number of participants in the Progressive Car Manufacturing Programme (PCMP) from 5 to 2. In response the local affiliates of Toyota and GM seem likely to link up, while the other combination may come from the affiliates of Ford, Mitsubishi and Nissan.
- Singapore: the government is concentrating entirely on parts production, with Japanese, US and European component producers all involved in negotiations.

These comments, intended only to be illustrative of recent moves, serve to demonstrate that within ASEAN itself as well as elsewhere in Asia major choices have already been made. The standard format is the joint venture with a publicly owned firm (often in the steel business) where Japanese have minority equity participation but firm grip on technical procedures and management: in several, but not all, cases a significant proportion of output is destined for export. Mitsubishi has been particularly active in strengthening its position while Toyota may be in the first phase of expanding its activities (these are two TNC in the forefront of production within Thailand). Of the other Japanese TNC the interesting absentees are Honda (whose foreign strategy seems to be directed at the OECD) and the third largest Japanese producer, Toyo Kogyo (in which Ford holds a 25 per cent equity share) - it has so far apparently not made any major moves to strengthen its production bases nor has Ford done so. Among the European TNC the only one with real preteansions at the moment is VW, and its activities seem to be focused on China and Japan itself (the arrangement with Nissan for production of the Santana model).

Hence is relation to its own past limited experience in development and implementation of an industrial strategy, to the major alterations occurring in the global AI, and to developments in other Asian countries,

Thailand is in a particularly weak position in the auto sector. Future actions cannot be reduced to marginal juggling of policy instruments but must focus on and role of AI, in an overall industrial strategy in the next few years. Realistic assessments of what can be done and how require an examination of developments not only within Thailand but also in other countries of the region, with heavy emphasis on the likely behaviour of major TNC (both vehicle and component producers). The path to be followed cannot be simplified to a choice between export-oriented or import-substituting production (it is too often forgotten that an export-oriented policy does not necessarily yield positive net export earnings): rather, it is a question of selecting certain kinds of external contacts to achieve specified objectives of domestic production. If RESCOM is to help in that decision-making process, it will need an aggressive approach which actively seek information on external developments and tries to utilize it in line with Thailand's own resources.

SUMMARY NOTE

EXPERIENCES OF INDUSTRIAL RESTRUCTURING IN THE REPUBLIC OF KOREA^{1/}

1. Introduction

By the end of the Korean war, what industrial resources that had previously existed in the Republic of Korea had been devastated and Koreans were faced with the task of rebuilding their country and economy from practically nothing. At that time the government chose to base its reconstruction efforts on an import substitution development strategy, but for the most part the economy survived because of grants-in-aid assistance from overseas, largely from the US and the United Nations, until the end of the 1950s. Exports during the period contributed little to GNP or to foreign exchange earnings, as chronic inflation caused by large budget deficits and the severe overvaluation of the Korean currency greatly weakened Korea's ability to export even agricultural and light industrial goods.

The turnaround in Korea's economic performance came in the early 1960s with the rise to power of President Park Chung Hee and the switch to export-oriented development. The First Five-Year Economic Development Plan, launched in 1962, placed heavy emphasis on economic growth through export promotion. While growth in 1962 was relatively low, 1963 saw the beginning of a growth explosion which was to continue unabated for almost twenty years and which would transform Korea from a largely agricultural economy into a newly-emerging industrial power.

That Korea's export-led development strategy is an appropriate one is fairly easy to see. Korea is resource-poor, yet has a well-educated and highly skilled labour force, and the decision to focus upon export production and promotion allowed Korea to reap the benefits of its comparative advantage in the production of labour-intensive goods.

^{1/} Prepared by Professor Pil-Soo Park, Dean, Graduate School of International Trade, University of Hankuk, Seoul, Republic of Korea, and presented at the Seminar in Pattaya.

The success of the strategy is shown clearly in Table 1; a strong export performance helped Korea to finance increasing imports of vital raw materials and industrial goods while at the same time sparking high economic growth and increasing industrialization. The share of total investment financed by domestic savings rose from less than 17 per cent in 1962 to 83 per cent in 1982. The investment-GNP ratio in current prices rose from 13 per cent in 1962 to 26 per cent in 1982. Growth in real GNP for the 20-year period was more than 4.8-fold, reflecting an average annual growth rate of 8.6 per cent. On a per capita basis, real growth for the whole period was no less than 3.3-fold.

As the economy grew rapidly, important structural changes took place. The mining and manufacturing sector increased its share of GNP from 16 per cent in 1962 to 29 per cent in 1982, while the share of the agriculture, forestry and fisheries sector decreased from 37 per cent to 16 per cent.

The development of the manufacturing sector in recent years was led by the rapid growth of the heavy and chemical industries, which increased their share within the sector from 29 per cent in 1962 to 58 per cent in 1982. Reflecting these structural changes, employment in the agriculture, forestry and fisheries sector declined from 63 per cent to 32 per cent of the total, while the persons employed in the mining and manufacturing sector increased from 9 per cent to 22 per cent.

Once again, there is little question that Korea's rapid economic growth and structural change stemmed from the surge in foreign trade. Commodity exports, which amounted to only about \$55 million in 1962, grew at an annual average of 36.5 per cent to a total of \$21.6 billion in 1982 on a customs clearance basis. Commodity imports have also expanded markedly, rising from \$422 million to \$24.3 billion, an annual increase of 22.5 per cent.

Table 1. Exports and imports of Korea

Year	GNP Growth	Exports (fob)		Imports (cif)		balance
		Amount	Percentage change	Amount	Percentage change	
1962	2.2	54,813	34.1	421,782	33.4	-366,969
1963	9.1	86,802	58.4	560,273	32.8	-473,471
1964	9.6	119,058	37.2	404,351	-27.8	-285,293
1965	5.8	175,082	47.1	463,442	14.6	-288,360
1966	12.7	250,334	43.0	716,441	54.6	-466,106
1967	6.6	320,229	27.9	996,246	32.1	-676,017
1968	11.3	455,400	42.2	1,462,873	46.8	-1,007,473
1969	13.8	622,516	36.7	1,823,611	24.7	-1,201,095
1970	7.6	835,185	34.2	1,983,973	8.8	-1,148,788
1971	9.4	1,067,607	27.8	2,522,002	20.7	-1,326,713
1972	5.8	1,624,088	52.1	2,522,002	5.3	-897,914
1973	11.9	3,225,025	98.6	4,240,277	68.1	-1,015,252
1974	8.0	4,460,370	38.3	6,851,848	61.6	-2,391,478
1975	7.1	5,081,016	13.2	7,274,434	6.2	-2,193,418
1976	15.1	7,715,343	51.9	8,773,632	20.6	-1,058,289
1977	10.3	10,046,457	30.2	10,810,538	23.2	764,081
1978	11.6	12,711,063	26.5	14,971,930	38.5	-2,261,288
1979	6.4	15,055,453	18.4	20,338,611	35.8	-5,283,158
1980	-6.2	17,504,862	16.3	22,291,663	9.6	-4,786,801
1981	6.5	20,992,645	19.9	26,132,016	17.2	-5,139,367
1982	5.3	21,616,138	3.8	24,250,840	-7.2	-2,634,702

Notes: 1. Figures are based on customs clearance.

This remarkable growth in trade was accompanied by a significant change in its composition. The share of primary products exported declined from 73 per cent of the total in 1962 to only 6.3 per cent in 1982, while that of industrial products increased from 27 per cent to 93.7 per cent. In imports, the share of capital goods was 25.7 per cent of total imports in 1982. The shares of materials for domestic use and for export production were 27.8 per cent and 21.4 per cent respectively. Petroleum imports amounted to 25.1 per cent of the total.

Korea also achieved remarkable success in terms of income distribution. Effective land reform was carried out as early as 1949 when as much as 80 per cent of the population was engaged in agriculture. The Korean war also functioned as a leveler making all Koreans equally poor; but the most important factor for the relatively favourable income distribution in Korea has been the outward-looking growth strategy itself. The expansion of labour-intensive manufactured exports increased employment opportunities, which directly benefited those at the lower end of the income scale.

In the course of rapid growth, Korea also had to deal with the problem of disparity in income distribution between the urban and rural sectors. The problem was two-fold. Productivity increases in the agricultural sector lagged behind those in the industrial sector. In addition, the agricultural sector faced unfavourable terms of trade, particularly with respect to its principal crops, rice and barley. In order to deal with this problem, the government adopted a price support programme for the major grains and helped the farmers remodel their houses, subsidized fertilizer and other farm inputs, and provided free agricultural productivity improved significantly and the average rural household income began to overtake the average urban working household income in 1974.

During the 1970's, high growth and the accompanying structural changes, however, were not achieved without cost. Both direct government intervention and rapid growth itself produced structural imbalances in the economy. Comprehensive import restriction and government price

controls to cope with the after-effects of the oil shocks resulted in distortion of the domestic price structure, and widened the productivity gap between protected and unprotected sectors. In addition, overinvestment in the heavy and chemical industries also gave rise to several adverse side effects on the economy, including insufficient investment in light industries, distortions in the capital market, and excessive real wage increases.

2. Current reforms in the development strategy

In spite of these problems and 20 years of rapid growth, there is still substantial growth potential in the economy that remains untapped. It has become clear, however, that in order for the nation to make use of this potential, it must adopt a new strategy better geared to the new economic environment.

The Korean economy today is simply much too large and complex to be efficiently managed by a handful of policy makers in government no matter how skillful they have shown themselves to be in the past. It is also clear that the nation must increasingly rely on the market mechanism for efficiency in resource allocation and equity in income distribution. To this end, the nation is liberalizing the economy both internally and externally.

The process of liberalizing the economy internally is well underway. Even before the inauguration of the present government in 1980, prices on most commodities were decontrolled. Furthermore in 1981 the government implemented the Fair Trade and Anti-Monopoly Act, the purpose of which is to minimize direct government control and promote competition throughout the economy.

In order to increase the share of investible funds allocated through the market mechanism, the nation is engaged in carrying out an extensive reform in the banking sector. For this purpose the government began to

relinquish its equity shares in the nation's five major commercial banks, and had sold off its final shares by 1982.

The current liberalization policy on imports will result in raising the import liberalization ratio to the level currently prevailing in the advanced countries by 1986. The policy of expanding imports in areas where the nation lacks comparative advantage will enable the nation to allocate resources more efficiently and increase the welfare of consumers. In addition, by exposing domestic producers to foreign competition, the quality of Korean products will be enhanced.

Korea's policy on the inflow of foreign technology is already very liberal. Even under the present policy there are virtually no significant barriers worth mentioning. In order to enable Korean business to have more direct access to advanced foreign technology, the government is encouraging Korean enterprises to enter joint ventures with foreign firms specializing in engineering and technological services.

In the past Korea relied heavily on foreign borrowing to meet her foreign capital requirement and was conservative regarding joint participation requirements in direct foreign investment. However, the new policy which was adopted in September 1980 allows a maximum foreign equity share of up to 100 per cent in virtually all industrial fields while retaining existing tax incentives offered to foreign investors.

The Fifth Five-Year Plan clearly shows that the government is committed to liberalizing all sectors of the economy with a view to promoting both stability and efficiency.

3. Conclusion

One of the most important aspects we can draw from the Korean experience and the structural transformations that have evolved over the past two decades in the reaffirmation of the importance of an outward-looking development strategy. The Korean success during the past 20

years is mainly a result of judicious exploitation of her comparative advantage in the world market.

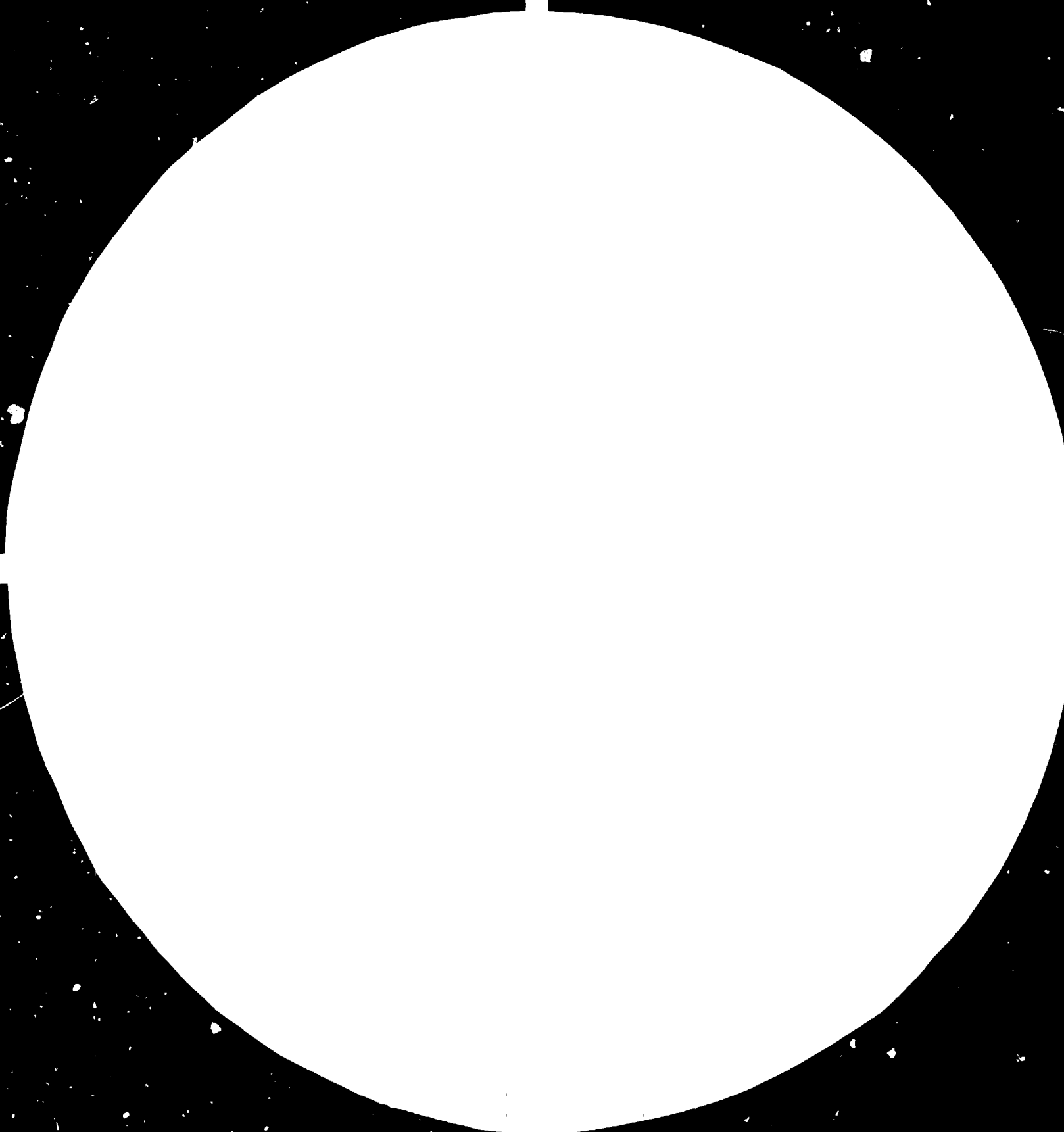
Critics often argue that Korea's heavy dependence on trade has made her economy highly vulnerable to outside influences, as has been demonstrated through her painful experience of adjustment to two rounds of oil shocks and the current wave of protectionism. Even though the outward-looking strategy is vulnerable to external shocks it is still a better option than an inward-oriented ones in times of rapid changes in the international economic climate, for the simple reason that outward-looking countries are in a better position to exploit international economic opportunities.

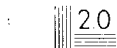
The second point is the importance of the role of the market. Both in the 1960's and 1970's, the most successful adjustments came when the incentive structure was based on market principles and the initiatives of private entrepreneurs. Of course, at the initial stage of development, the role of government is important in maintaining broad development perspectives for the people, providing proper business climate for the private sector, mobilizing domestic and foreign resources for investment, and in developing the infrastructure. As the economy grows, however, excessive intervention by the government is not a good substitute for a market mechanism, which is the best means of achieving efficient allocation of resources.

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Table 2. GNP and growth rates

	GNP	Per capita GNP	Growth rate (%)			
	Current prices (US \$ million)	current prices (US \$)	GNP	Agriculture, forestry and fishery	Mining and manufacturing	SOC and others
1962	2,315	87	2.2	-6.0	13.4	8.6
1964	2,876	103	9.6	15.6	10.5	3.5
1966	3,671	125	12.7	11.6	15.3	13.0
1968	5,226	169	7.6	1.3	23.4	15.3
1970	7,834	243	7.6	-1.4	19.6	9.5
1972	10,254	306	5.8	2.0	12.9	5.0
1973	13,152	386	14.9	6.3	28.6	13.6
1974	18,127	523	8.0	6.7	15.2	5.0
1975	20,233	573	7.1	5.3	12.6	5.1
1976	27,423	765	15.1	10.7	21.5	13.7
1977	35,168	966	10.1	2.1	14.3	11.9
1978	49,155	1,330	11.6	-4.0	20.0	13.5
1979	58,029	1,546	6.4	6.7	9.4	4.1
1980	56,460	1,481	-6.2	-22.0	-1.1	-3.4
1981	62,232	1,607	6.4	22.0	7.2	0.6
1982	65,722	1,671	5.3	3.8	3.7	7.3
1983 ^{a/}	73,300	-	7.5	4.0	7.9	8.7

a/ Forecast by Economic Planning Board.

Source: The Bank of Korea.

Table 3. Percentage of GNP by sector

	GNP	Agriculture, forestry and fishery	Mining and manu- facturing	SOC and others	Manu- facturing	Light industry	Heavy and chemical
1962	100.0	36.6	16.3	47.1	14.3	10.2	4.1
1964	100.0	46.5	17.2	36.3	15.5	10.8	4.7
1966	100.0	34.4	20.2	45.4	18.4	12.1	6.3
1968	100.0	28.3	21.3	50.4	19.8	12.3	7.5
1970	100.0	26.8	22.3	50.9	20.9	13.0	7.9
1972	100.0	26.4	23.4	50.2	22.2	14.2	8.1
1973	100.0	25.0	26.0	49.0	24.8	14.8	10.1
1974	100.0	24.8	27.3	47.9	26.1	13.0	13.1
1975	100.0	24.9	28.0	47.1	26.5	14.2	12.3
1976	100.0	23.8	29.8	47.4	27.6	14.7	12.9
1977	100.0	23.0	28.4	48.6	27.0	13.9	13.1
1978	100.0	21.9	28.4	49.7	27.0	13.8	13.2
1979	100.0	20.5	28.0	51.5	26.9	13.1	13.3
1980	100.0	16.3	30.2	53.5	28.8	13.7	15.1
1981	100.0	17.9	30.0	51.1	29.6	13.9	15.7
1982	100.0	15.9	29.2	54.9	28.8	12.2	16.6
1983 ^{a/}	100.0	16.3	29.7	54.0	28.3	-	-

a/ Forecast by Economic Planning Board.

Source: The Bank of Korea.

Table 4. Composition of gross national expenditure
(in per cent)

	GNP	Consumption	Gross invest- ment	Exports	Imports (less)	Net factor income from abroad	Statistical discrepancy
1962	100.0	96.7	12.8	5.0	16.6	0.9	1.1
1964	100.0	91.3	14.0	5.9	13.5	0.7	1.6
1966	100.0	88.2	21.6	10.3	20.1	1.3	-1.3
1968	100.0	84.9	25.9	12.6	25.2	1.4	0.4
1970	100.0	82.7	26.8	14.2	24.0	0.5	-0.2
1972	100.0	84.3	21.7	20.3	25.2	-0.4	-0.7
1973	100.0	76.5	25.6	30.1	33.2	-0.7	1.7
1974	100.0	79.5	31.0	28.2	39.8	-0.9	1.9
1975	100.0	81.4	29.4	28.1	36.9	-1.6	-0.4
1976	100.0	76.9	25.5	32.8	34.6	-0.6	0.0
1977	100.0	74.9	27.3	35.1	35.1	-0.6	-1.6
1978	100.0	73.6	31.1	33.7	36.5	-0.5	-1.5
1979	100.0	73.4	35.4	30.3	37.0	-1.0	-1.2
1980	100.0	80.1	31.5	37.7	44.8	-3.1	-1.4
1981	100.0	80.4	28.4	41.4	45.6	-3.7	-0.9
1982	100.0	78.5	26.2	40.3	41.4	-3.7	0.1
1983 ^{a/}	100.0	75.4	28.1	43.0	46.4	-0.1	-

a/ Forecast by Economic Planning Board.

Source: The Bank of Korea.

Table 5. Ratio of investment and savings to GNP
(in per cent)

	Gross investment	Domestic savings	Foreign savings	Statistical discrepancy
1962	12.8	3.3	10.7	-1.2
1964	14.0	8.7	6.9	-1.6
1966	21.6	11.8	8.5	1.3
1968	25.9	15.1	11.2	-0.4
1970	26.8	17.3	9.3	0.2
1972	21.7	15.7	5.2	0.7
1973	25.6	23.5	3.8	-1.7
1974	31.0	20.5	12.4	-1.9
1975	29.4	18.6	10.4	0.4
1976	25.5	23.1	2.4	0.0
1977	27.3	25.1	0.6	1.6
1978	31.1	26.4	3.3	1.5
1979	35.4	26.6	7.6	1.2
1980	31.5	19.9	10.2	1.4
1981	28.4	19.6	7.9	0.9
1982	26.2	21.5	4.8	-0.1
1983 ^{a/}	28.1	24.7	3.4	-

a/ Forecast by Economic Planning Board

Source: The Bank of Korea.

Table 6. Population and employment
(In Thousand persons)

	Population	14 years old & over	Economically active population	Employed	Unemployed	Unemployment Rate (%)
1964	27,984	15,502	8,449	7,799	650	7.7
1966	29,436	16,367	9,071	8,423	648	7.1
1968	30,838	17,166	9,647	9,155	492	5.1
1970	32,241	18,253	10,199	9,745	454	4.5
1972	33,505	19,724	11,058	10,559	499	4.5
1973	34,103	20,438	11,600	11,139	461	4.0
1974	34,692	21,148	12,080	11,586	494	4.1
1975	35,281	21,833	12,340	11,830	510	4.1
1976	35,849	22,549	13,061	12,556	505	3.9
1977	36,412	23,336	13,440	12,929	511	3.8
1978	36,969	24,024	13,932	13,490	442	3.2
1979	37,534	24,678	14,206	13,664	542	3.8
1980	38,124	25,335	14,454	13,706	749	5.2
1981	38,723	25,969	14,710	14,048	661	4.5
1982	39,331	26,531	15,080	14,424	656	4.4
1983 ^{a/}	39,951	27,246	15,367	14,722	645	4.2

a/ Forecast by Economic Planning Board.

Source: Economic Planning Board.

Table 7. Balance of payments
(In million US dollar)

	1962	1966	1970	1972	1974	1977	1978	1979	1980	1981	1982	1983a/
Current account	-56	-103	-623	-371	-2,023	12	-1,085	-4,151	-5,321	-4,436	-2,546	-2,000
Trade balance	-335	-430	-922	-574	-1,937							
Exports	55	250	882	1,677	4,515	10,647	12,711	14,705	17,214	20,881	20,961	23,500
Imports	390	680	1,804	2,250	6,452	10,523	14,491	19,100	21,598	24,299	23,361	23,500
Invisible trade balance	43	107	119	33	-308	266	224	-195	-1,386	-1,518	-619	-500
Credit	108	204	497	550	838	3,027	4,450	4826	5,363	6,598	7,449	8,000
Debit	65	98	378	517	1,146	2,761	4,226	5,021	6,749	8,117	8,068	8,500
Unrequired transfers (net)	236	220	180	170	222	223	472	439	449	501	473	500
Long-term capital	8	212	501	521	946	1,313	2,166	2,663	1,857	2,842	1,352	1,200
loans and investment	5	196	536	524	733	1,496	2,053	1,627	1,896	1,793	1,465	--
Basic balance	-48	108	-121	150	-1,076	1,325	1,081	-1,438	-3,464	-1,594	-1,194	-800
Short-term capital	-7	6	122	-16	-45	21	1,171	844	1,945	-82	-98	100
Errors and omissions	-2	-4	-5	30	28	-32	-312	-329	370	620	-1,441	-700
Overall balance	-57	119	-4	164	-1,094	1,315	-402	-973	-1,890	-2,297	-2,733	1,400
Foreign exchange holdings	169	245	610	740	1,049	4,306	4,937	5,708	6,891	6,891	6,984	7,300

a/ Forecast by Economic Planning Board

Source: The Bank of Korea

Table 8. Composition of commodity imports
(In million US dollars)

	<u>Total imports</u>		<u>Capital goods</u>		<u>Petroleum</u>		<u>Others</u>	
	<u>Amount</u>	<u>%</u>	<u>Amount</u>	<u>%</u>	<u>Amount</u>	<u>%</u>	<u>Amount</u>	<u>%</u>
1962	421.8	100.0	69.8	16.5	28.4	6.7	323.6	76.7
1964	404.4	100.0	69.5	17.2	25.9	6.4	309.0	76.4
1966	716.4	100.0	171.7	24.0	40.6	5.7	504.1	70.4
1968	1,462.9	100.0	533.2	36.4	72.8	5.0	856.9	58.6
1970	1,984.0	100.0	589.5	29.7	133.2	6.7	1,261.3	63.6
1972	2,522.0	100.0	762.0	30.2	217.7	8.6	1,542.3	61.2
1974	6,851.8	100.0	1,848.6	27.0	1,020	14.9	3,982.9	58.1
1975	7,242.4	100.0	1,909.2	26.2	1,271.2	17.5	4,094.0	56.3
1976	8,773.6	100.0	2,427.4	27.7	1,609.0	18.3	4,737.2	54.0
1977	10,810.5	100.0	3,008.1	27.8	1,931.3	17.9	5,871.1	54.3
1978	14,971.9	100.0	5,080.3	33.9	2,190.1	14.6	7,701.5	51.4
1979	20,338.6	100.0	6,314.0	31.0	3,103.7	15.3	10,920.9	53.7
1980	22,291.7	100.0	5,125.0	23.0	5,638.0	25.3	11,528.7	51.7
1981	26,131.4	100.0	6,158.2	23.6	6,375.7	24.4	13,597.5	52.0
1982	24,250.8	100.0	6,232.7	25.7	6,097.3	25.1	11,920.8	49.2

Note: Based on customs clearance C.I.F.

Source: Office of Customs Administration.

Table 9. Macroeconomic targets for Fifth Five-Year Plan

	Unit	1981	1986	Average annual
				growth rate (%)
				1982-1986
GNPa/	\$100 million	610	880	7.6
Per capita GNPa/	\$100 million	1,576	2,103	5.9
Investment ratio to GNP	%	31.2	32.5	-
Domestic savings ratio to GNP	%	22.3	29.6	-
Commodity exports	\$100 million	210	530	-
(Increase rate in real terms)	%	14.1	11.6	11.4
Commodity imports	\$100 million	252	555	-
(Increase rate in real terms)	%	5.7	9.8	8.4
Current account balance	\$100 million	-54	-36	-
Increase rate of wholesale prices	%	20-25	7.0	9.0

a/ At 1980 constant prices

Source: Economic Planning Board.

INDUSTRIAL RESTRUCTURING IN THAILAND^{1/}

Economic growth is change. It implies changes in the industrial structure. These changes are wanted as growth is sought after but they need not be painless.

However, "industrial restructuring" to have any operative significance means something else than just accepting and accommodating the changes of growth. Restructuring as an explicit aim is called for, if an economy has travelled the wrong way with a misallocation of resources as a result and special measures are called for to bring about adjustment.

There can be two reasons for such a situation to have arisen. There can have been changes in supply and demand conditions on international markets calling for output adjustments in the domestic economy. Or, internal policy interventions may have given a distorted and inefficient output mix. These two causes of adjustment needs often coexist in that domestic policies creating distortions often have their initial explanation in a wish among policy makers to shield a country from adjustment requirements arising from changes on the international level. In this way a back-log of adjustment needs is accumulated. For instance, in-depth policy responses to the energy price increases have in many countries given rise to such a back-log.

Indeed, barring major international disruptions, the flexibility of an economy permitted to absorb change is enough for a specific restructuring programme not to appear necessary. It is when domestic policy measures reduce adaptability and when they in themselves create domestic distortions that eventually a need for industrial restructuring is perceived.

Thai economic performance deteriorated during the seventies. Unfavourable external conditions reduced the growth rate. A further reduction was caused by efforts to avoid adjustment to external change and

^{1/} Prepared by Dr. Staffan Burenstam Linder, Stockholm School of Economics, 28 October 1983.

Annex 10(2)

by some inappropriate policies to promote industry. Industrial protection increased, contradictory investment incentives were applied, large-scale capital investment projects received Government subsidies, and unintentionally policies worked to the disadvantage of regional balance.

These problems have been addressed in the Fifth Five-Year Plan. The plan calls for a more outward oriented strategy with reductions in protection and a rationalization of promotional policies.

Restructuring can hardly take place through reallocation of resources in the literal sense of the word. If not physically impossible a reallocation is from political view-points extremely difficult to bring about. Instead, the restructuring must take place as part of the changes which economic growth under all circumstances entails. With growth it is easier to accommodate the pains which restructuring causes. It is from this point of view fortunate that restructuring policies adopted in the Plan would also contribute to a higher growth rate through more efficient use of future resources.

In spite of this and in spite of the considerable efforts made when the Plan was being worked out and when it was presented for adoption to secure necessary political support, its implementation has proceeded more slowly than intended. Given the thinking and the political pressures which in the first place have resulted in a need for restructuring, it should not come as a surprise that there are obstacles to the new policies. Indeed, the vested interests created by faulty domestic policies have increased the political pressures for protection and subsidy.

Nonetheless, it is imperative that the Plan strategy is permitted to be executed. Otherwise, even those who now profit from the rents of protection and subsidy and from the powers of regulatory interventions will in the long run stand to lose through a deterioration in the overall performance of the economy. Yet, they may not easily be persuaded to give up their present favours. In spite of this, what was clearly seen when systematic work was made on strategy must not be lost in the tactics of day to day politics.

Annex 10(3)

The Plan strategy has not been proven wrong. The particular kind of obstacles Plan implementation has run into, i.e. various vested interests, indicate through their existence that the measures set out in the Plan are called for.

The major task ahead is to stay with the convictions which have inspired the Plan and to use available empirical material to educate in order to increase popular and political support for the Plan strategy and to overcome vested interests. This, as I read it, rather than the writing of ever finer and more detailed industry studies is what Thai industrial restructuring is all about in its present phase. Studies which go into the specifics of this and that industry may not be so helpful. If Plan momentum is lost, they will be irrelevant. If Plan implementation continues, well then the very idea is that more of structuring decisions will be left to the markets and to the private sector. I am not arguing that back-up studies for ministries and agencies are not required for their policy decisions. The case I am making is that, in order not to do unproductive or counter-productive intellectual work, great care has to be taken in deciding what studies are required and which are not.

Again, the thinking behind the Plan has not been disproved. If anything it has during the last few years been given additional support from additional experience.

All successful developing countries have relied on an outward looking, trade oriented market strategy. They have managed to secure the benefits set out in international trade theory. It has also become increasingly clear that they have benefitted from the improved feed-back and the increased discipline of responding to it which contact with international markets have given. This mechanism is not well incorporated in trade theory, although surely not contradictory to it.

There are countries which have tried to rely on this kind of strategy and not done so well. There is, indeed, no guarantee of success in adopting this development strategy. For one thing it is, as we can see also from the mismanagement in many of the developed countries, easy to go

wrong in other aspects of economic policy most notably in macro-economic stabilization policy. An outward looking strategy is no guarantee of success. But, if it is not a sufficient condition for sustained and rapid growth, it seems to be a necessary condition. No country trying to do it alone has succeeded. Poor performance in many of these countries also seems to have enticed the authorities to use the centralized planning powers for purposes they were not originally intended for.

The trade oriented strategy has proved to be advantageous even during the turbulence of the last years of oil-price shocks, recession, and protectionism. The market system has permitted a greater, much needed flexibility. Furthermore, far-reaching import substitution has left such countries in a position of extreme dependence on the remaining imports for operating the production apparatus. A rapid terms of trade deterioration, for instance in the form of dramatic oil price increases, has left the economy without the means of obtaining essential imports. The need for flexibility has then become impossibly high at the same time as the capacity to adjust has been made uncomfortably low.

Empirical studies also show that there has not yet at least been cause for an export pessimism. The examples of the newly industrializing countries can be repeated, as well as these countries are on the way of repeating the example of Japan for long thought to be unique. A group of developing countries, and Thailand being one of them, have during recent years been experiencing a faster growth of manufactured exports than have the newly industrializing countries! This growth has taken place from a low base which means that impressive percentages need not stand for so much in absolute terms. Yet, the performance should not be written off for that reason as the first steps on the world markets of manufactured goods may be the most difficult ones.

The trade engine of growth is not just, as is sometimes argued, propelled by a growing aggregate demand in the developed countries creating a demand for the exports of the developing countries. Studies again show that price elasticities are such that even during periods of low or no growth it has been possible to expand exports through substitution.

These points should be made to overcome "export pessimism". Recession and protectionism in the developed countries are problems but they can be overcome. Experience from a number of developing countries show this. Changes of a very different kind of the developed countries - for instance fast technological progress or increases in export subsidies - are also often given presently as reasons for writing down a trade oriented development strategy. Again such phenomena may cause difficulties. Yet, what they call for is flexibility. Trade opportunities do not disappear, but they change. It is interesting to note that in many developed countries a popular argument is that competition from the so called "low-cost" countries cannot be met. And it is difficult - in certain industries. Flexibility and adjustment is needed.

For Thailand as for other developing countries - and developed countries - it is difficult to operate on world markets. But trade also gives advantages whereas operating in isolation from international markets only gives problems. Those who enumerate present difficulties rarely provide an alternative strategy. And those who listed "present difficulties" twenty years ago were also numerous. Yet, some countries have done it and have done it well and continue to do it. (The value of Hong Kong exports for the first nine months of this year has just been reported to be up by 30 per cent.)

To bring about the industrial restructuring that is required industrial and export promotion policies can be enlisted. They must be worked out so that they are in harmony. It is unnecessarily cumbersome to have export promotion policies the main objective of which it is to try to compensate for some anti-trade biases in industrial policies. Such anti-trade biases should be removed. Trade promotion can then be added to try to assist firms in their efforts to overcome certain difficulties in entering world markets.

To bring industrial policies and export promotion in correspondance it may be considered to combine them in one agency. There are certain attractions in such an institutional rearrangement. However, to avoid having agencies of an unwieldy size and to avoid institutional surgery that

may give scars, the necessary co-ordination should be obtained through appropriate guidelines.

One institutional change that could well be made, however, is to upgrade the political standing of the export promotion agency. This should facilitate a reorientation of the philosophy of the industrial policy agencies to a more trade oriented approach. Furthermore, it could set the priorities of the plan strategy more in popular focus and give business an impetus and exporting activities a higher social standing. One may even contemplate copying the Korean regular and frequent export promotion meetings between industry and government presided over by the Head of State. To succeed on world markets is a question of competitiveness but competitiveness is not a question only of price and quality but also of enthusiasm and perseverance. The sociology of this should not be overlooked.

Promotional policies have their risks. They easily become counter-productive. What goes under the name of "industrial policy" is not necessarily good for industry. Industrial policy is presently much in vogue in some of the developed countries. Its attractiveness, however, often seems to be that, somehow, it is thought, it should in this way be possible to avoid hard decisions. The same risks exist in developing countries. It must be understood - but often it is not - that industrial policy is no substitute for good macro-economic policy resulting in economic balance and good basic growth conditions. Nor can export promotion ever succeed, if the economy is not competitive and exchange rates have become unrealistic.

The promotional policies must be general in their nature. Otherwise they come in conflict with the basic development strategy of market and outward orientation. Complex discretionary policies have a bias against small scale business. Small business does not have the capacity to stay informed about rules and regulations and subsidy opportunities. Nor does it have the time to solicit favours in the corridors of power; and the bureaucrats do not have the time to see them all. Big companies are in this way favoured at the expense of small firms but the history of economic

growth shows that progress is borne by small- and medium-sized firms growing. For very similar reasons complex policies work against firms outside the capital city. Businessmen there are put at a disadvantage as they have greater costs of being in contact with the centres of power. Complex policies also tend to yield capital intensive projects rather than labour intensive.

Industrial policy must be transparent. Otherwise business uncertainty increases in a detrimental way. It is one thing to try to cope with market uncertainties. It is another to try to handle the uncertainties of discretionary industrial policies which imply frequent changes in the rules of the game. Adjustment to changing market conditions is difficult but it appears more acceptable as it is a condition of efficiency in the allocation of resources. Adjustment to what often may appear as capricious governmental decisions is more taxing. As windfall profits - and losses - from government decisions can exceed what can be obtained on the market, management resources will be diverted from the running of company affairs to the running of government relations. This system also carries with it risks of corruption.

Industrial policy must create a good industrial infrastructure: labour training, engineering schools, research and testing facilities, quality control standards, patent office, a system for transfer of technologies, clear rules for foreign investment, a tax system which does not destroy incentives and which does not set up the wrong sort of competition from smuggling or from a "grey" production system outside of government control; and so on.

These are the tasks: to create a fertile soil; not to try to pick winners by extensive tariff and subsidy schemes. Government is organized to shape a political process. It is not organized to take business decisions. These decisions must be taken where the particular expertise can exist and where the economic responsibilities rest for the decisions in question. In virtually every country state-owned business enterprises have a bad record. It has for political reasons proved difficult to take the hard decisions necessary. Similarly, studies show that governments have been poor pickers of winners in the industrial race.

Indeed, certain studies show that, on the whole, governments have picked losers rather than winners. Or, perhaps better, potential winners have often become losers when interventionistic policies have distorted the decision making process.

To the extent government wants to single out industries for special support, be it through tariffs or subsidies, it must be clearly understood that it is in this way only possible to support a limited number of industries. It is not possible to support all through protection because support to one will raise costs for the others which use the services of the protected industry. If tariffs are high on steel imports, this will raise the cost level of the engineering industry. High tariffs on machinery will hurt consumer goods industries using the machines. Extreme protection of an automotive industry makes the tourist industry less competitive and all other industries using transport services. And so on. It is possible to close off trade altogether but this will not help everyone. It will be harmful to the potential export industries and also to those industries which lose markets from the decline in incomes associated with such an isolationist trade policy. These observations are elementary but nonetheless often overlooked.

Similarly, subsidies to one industry hurt other industries as the subsidies must be paid for by taxes, taxes which will end up as burdens on economic activity.

Governments to give direction and stimulus to a solid development effort must have strength. They must be powerful. But a powerful government is a government that knows not to try to decide everything but use efficient mechanisms to decentralize decision making. In this way government can concentrate on the crucial functions. A government exercising powers to do everything is not powerful: it is bogged down with an agenda problem and fierce inter-departmental and inter-agency strifes and contradictory policies and saddled with a weak economy.

To stimulate efficiency and development the Fifth Five-Year Plan adopts a outward trade-oriented strategy. This implies a lowering of trade obstacles and a stream-lining of tariff structures. This deregulation is

attempted because it serves Thailand and not because it would fit into some sort of international code of behaviour. However, there is also such a code laid down in the GATT. The members there assume certain obligations in order to secure for themselves certain rights. The obligations are to apply most favoured nation treatment to other members, to abstain from the use of certain particularly harmful trade obstacles, and to participate in international efforts to bring about a general lowering of trade obstacles. These obligations should not be looked upon as a burden in the sense of something a country would undertake to do only to get other countries to do the same. It is not a burden as it pays a country under all circumstances to have a liberal trade regime. In line with this analysis the Fifth Plan sets out a new trade policy irrespective of what other countries are doing. Yet, it is an added advantage, if other countries have the same ambitions. The GATT serves the purpose then of making it additionally attractive for any one country to have liberal trade policies. The GATT brings together countries in a framework of mutual undertakings.

Thailand has recently joined GATT. The majority of developing countries have long been members. However, these countries have really not been parts of the GATT system. They have tried to use the GATT machinery parallelly with UNCTAD to secure a special treatment hopefully resulting in special advantages. However, by opting out of any obligations they have made it too easy for the developed countries to opt out of their obligations. The developed countries have made certain concessions to the developing countries, e.g. preferences, but having done that they have not hesitated to absent themselves from important and central undertakings in GATT.

If GATT membership shall prove to be valuable to Thailand, the country must try to join not just in name. To join in practice does not mean a wholesale scrapping of import obstacles. It means the imposition of certain rules in trade policy but the assumption of these makes it possible to ask for a better treatment by the advanced countries. A price could be extracted for tariff reductions which Thailand wants to undertake anyhow. It would become more difficult for other countries to impose high-handed

trade obstacles on Thailand. The relatively weak countries have more to lose than the strong countries, if power rather than law is allowed to rule on the international trade stage. Considering the intensity of present protectionist sentiments these considerations should not be overlooked.

Indeed, these sentiments may be so wide-spread that isolated Thai activities in the GATT along these lines may not give much results. Under all circumstances it would be useful for Thailand to seek co-operation with other countries to get more muscles in international trade policy. By spending their energies on many irrelevancies in the North-South dialogue the South has not managed to secure more important market access assurances. If, for instance, the ASEAN countries would participate in GATT activities so that they would get more than a moral case to refer developed countries to and then combined forces to penalize those countries that discriminated against them, they could achieve considerable results. There is surely a loss of income in those developed countries which apply quotas on textile imports but that cost is not so easy to make visible in the domestic political processes where battles over trade policies are being fought. If, on the other hand, a concerted behaviour by an important group of countries made it very clear that particular restrictive measures would bring with them retaliatory measures, for instance in Government procurement policies, this group of countries would get important allies among exporters in the developed countries.

In such a way ASEAN could get an important new role in the complexities and dangers of current international trade policies. This role is in line with keeping ASEAN on an outward looking integration course. If ASEAN instead tries to meet international protectionism by inward looking integration behind high trade obstacles, the centrifugal forces of costly trade diversion would soon break the group apart.

By a reorientation of its GATT policies and through co-operation Thailand and ASEAN could gain an important initiative and leadership much needed on the international stage presently. Increasing strength of South East Asia could make such an effort possible. Its chances of success are enhanced by the likelihood that it should prove possible to make the many other successful Asia Pacific countries join in this great effort.

Summary of proposed programme for engineering industries development^{1/}

Main issues	Dept. of Industrial Promotion (DIP)	World Bank	IMC
A. Objectives	<ol style="list-style-type: none"> 1. To restructure the industries by improvement an development of technology for SMEs. 2. To prepare manpower necessary for potential development of the industries. 3. To improve the capabilities of the DIP personnel. 	<ol style="list-style-type: none"> 1. To substantially enhance the technological capabilities of SMEs. 2. Enable the more advanced Thai enterprises to take advantages of state-of-the-art production technologies. 	<ol style="list-style-type: none"> 1. To upgrade the technology and capability of SMEs, esp. those providing basic engineering supports services. 2. To promote adaptation of foreign technology in connection with the need of the country. 3. To encourage R, D and E.
B. Scope	Propose programme to upgrade manufacturing efficiency by improvement in the DIP's operational activities. DIP would be the co-ordinator for various government departments concerned.	Provide guideline and approach for enhancing the capabilities of the institution concerned and setting up the technical assistance and training scheme.	Delineate policy framework, guidelines and approach for undertaking various programmes of action.
C. Action programme	<p>Phase I (1985-86) aims at improving capabilities if DIP's staff and providing technical assistance, training and other industrial services.</p> <p>Phase II (the Sixth Plan period) aims at improving technical efficiency of the enterprises, reducing imports of engineering products, and developing manpower for the industry.</p>	<ol style="list-style-type: none"> 1. Enhancing the capabilities of DIP, TISTR, NISD by selective upgrading plant and equipment and providing training fellowships. 2. Establishing a Production Technology Improvement (PROTIP) Fund for undertaking Technical assistance and training for industry. The Fund consist of board of directors and managerial staff with complete operational autonomy, subject to industrial development policy. 	<ol style="list-style-type: none"> 1. Restructuring of ISI. 2. Establishment of Engineering Industries Promotion Fund. 3. Establishment of the Technological Development Centre. 4. Incentives packages for technological development. 5. Strengthening the capabilities of Thai Industrial Standards Institute.

^{1/} Presented by the RESCOM secretariat at the Seminar in Pattaya.

Main issues

Dept. of Industrial Promotion
(DIP)

World Bank

IMC

D. Resource requirements

(a) Finance

Phase I financial requirement was estimated at B15 million, all from budgetary allocation. Now DIP received aid from Belgium about B3.7 million for 1984

For Phase II technical assistance has been requested from Japan and international organizations.

1. Institution-building component requires about US \$6,6 million
 - DIP US \$2,8 million
 - TISTR US \$2,2 million
 - NISD US \$1,6 millionOf these, US \$5 million from international aid sources and the rest from budgetary allocation.
2. PROTIP Fund needs US \$15 million
 - US \$10 million from aid
 - US \$2,5 million from RTG
 - US \$2,5 million from private sector

6. Establishment of the National Measurement Standards Board.

7. R and D system.

1. Budgetary requirement for restructuring of ISI was estimated at B29 million.
2. Engineering Industries Promotion Fund (EIPF) requires B50 million from foreign source and some additional amount from private sector.
3. Technological Development Centre (TDC) requires B4.6 million from government budget and supplemented by private sector's grant.
4. Strengthening the capability of TISI requires government budget of B5,8 million.
5. Establishment of the National Measurement Standards Board requires government budget of 13,6 million.
6. Contribution from various sources for establishment of R and D Institute for Metallurgy was estimated at B83 million.
7. Budgetary requirement for TISTR restructuring was estimated at B7,8 million.

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Main issues	Dept. of Industrial Promotion (DIP)	World Bank	IMC
(b) Manpower	Phase I requires 65 technical staff of which 29 additional persons have to be recruited. 5 foreign technical experts are also required.	<ol style="list-style-type: none"> 1. No detail for institution-building component. 2. A limited number of high calibre staff was identified. Chairman of the Fund needs complete support of both government and private sector. The Fund manager should be a professional and able to manage and motivate a large group of technical experts. 	<ol style="list-style-type: none"> 1. Restructuring of ISI needs 29 additional staff. 2. Strengthening of TISI requires 25 additional staff. 3. Secretariat office of NMSC consists of 20 staff, 10 of which are engineers and scientists. 4. R and D activities of TISTR should have at least 14 staff by 1986. 5. R and D Institute for Metallurgy required 45 staff.
(c) Executive agency	<ol style="list-style-type: none"> 1. DIP be the executing agency with an advisory board of 11 persons chaired by Director General of DIP and Director of the project as its secretary. 2. After implementing the phase I project, Engineering Industries Development Committee would be appointed to undertake the future plan. 	<ol style="list-style-type: none"> 1. Each participating institution is responsible for its own reform. 2. The legal form has yet to be designed. The executing agency should be specified. 	<ol style="list-style-type: none"> 1. ISI 2. A committee would be set up to administer the Engineering Industries Promotion Fund (EIPF). 3. RESCOM would oversee and co-ordinate the establishment of TDC. 4. National Scientific and Technological Testing Board would be set up with the secretariat at TISI to co-ordinate and supervise product testing services.

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Main issues	Dept. of Industrial Promotion (DIP)	World Bank	IMC
			<ol style="list-style-type: none">5. National Measurement Standard Committee would be appointed with the Secretariat at Ministry of Science Technology and Energy (MOSTE).6. Universities would individually set up R and D Centre.7. TISTR.8. For R and D Institute for Metallurgy, MOSTE would appoint a committee for the Institute establishment.

