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**Strategic Approach to the Socio-Economic
Development of Northeast Asia:
A Case of Regional Cooperation
in South-South Cooperation Context**

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**Strategic Approach to the Socio-Economic Development of Northeast Asia:
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General Introduction to Issues in Northeast Asian Economic Development

Northeast Asia presents us with a twofold challenge. First, it tests our ability to overcome the economic, political and psychological cold-war barriers obstructing the construction of a historically legitimate society with a reliable structure in a region that has been plagued by instability and mistrust. Second, it challenges us to develop a model which addresses the disparities in economic development among Northeast Asian countries. At stake are not only political assets and economic benefits for Northeast Asia alone, but a paradigm of peace that is meaningful as well to other regions of the world. If effective, the paradigm would halve the 1992 world defense expenditure of \$717 billion in due course of the implementation of this paradigm and quadruple the ODA to \$234 billion in the end, even if a half of the saved budget is reserved for use in the saving-originating countries.

The Northeast Asian countries have been released from the constraints of the cold war security system. The concept of national sovereignty has considerably changed its meaning and role, together with its historical legitimacy. The formation of EU is a witness of such a change. Also, augmenting the contribution by, and partially substituting sovereign nations, a variety of interdependent systems of citizenry bodies are emerging to contribute to regional stability. Essential to these systems is the international cooperation of small and medium-sized enterprises (SMEs), not only because they need linkages with international business networks to benefit from open economic systems, but also because it involves many more people with high stakes than large scale enterprises.

Due to vestiges of the cold war structure, Northeast Asia remains economically underdeveloped. Its enormous development potential can be realized only when the technology and natural resources of Far East Russia, labor force of China, and capital and technology of South Korea and Japan are integrated by business enterprises. This requires cooperation not only among businesses but also among the governments and between public and private sectors in NEA for exploiting all the development opportunities.

The agenda for development of this subregion calls for concrete action programs undertaken by international organizations, the creation of a long-term development strategy embraced by all the countries concerned, and the participation of businesses at the construction of international interdependent links through trade and investment. Strategic objectives in the initial stage of the development include the establishment of development nuclei within the subregion, participation of international financing organizations to facilitate smooth international financial transactions and foreign direct investment, and the provision of technology support and diffusion systems for SMEs, especially in incubating supporting industries. To accommodate development

studies, a long-standing international research institute should be established to integrate the currently scattered research activities in Northeast Asian countries. Above all of these, the agenda should be supported by a secure mechanism to guide, monitor, improve the process of, and as a trouble-shooter in, the implementation process of the paradigm.

I. Overview

1. Northeast Asia in the Historical Context of the 21st Century

The twentieth century witnessed the strongest sovereign powers and severest insanity of physical confrontation among them, together with recurrent and concurrent numerous regional conflicts. The economy, which should have been the most promising instrument to enhance the human welfare and frontier, has been subjugated to militarism and politics. As of 1992, the world defense expenditure came up to 717 billion dollars, while the aggregate official development aid (ODA) was only \$56 billion, the ratio of which falling roughly 1:13 against the world defense expenditure. In line with this, the twentieth century has been an era when the states pick up the winner industries and enterprises that would best serve their sovereign governments. Implicitly or explicitly, the economic capacity used to be translated into military capability, but was not used to eliminate poverty.

The collapse of the cold war regime has, however, opened an unanticipated but extremely promising opportunity for establishing a more rational and reliable world community. The discussions among the experts engaged in the world security issues in the 1990's on formulating a better world seem to have converged on two basic ideas. The first is economic development to eliminate or reduce the potential cause of regional conflicts prior to their outbreaks. This was manifested in the Norwegian Process that spurred the Arab-Israel reconciliation. According to a finding by the Applied Social Science Research Institute (FAFO), Norway, a majority of the causes of the regional conflicts are poverty and economic welfare differentials between or among the concerned regions. The second convergent point is the economic interdependent system to secure the achieved stability. This idea is based upon the proposition that interdependence tends to prevent outbreaks of conflicts because of the stakes to the engaged parties are greater than the expected gain from the confrontation. This proposition has many supporters among international political scientists and economists. Robert A. Scalapino and his intellectual allies are well known for their extensive campaigning of this idea aiming at establishing international security, especially in Northeast Asia. The regime of development-cum-interdependence systems, which let us call *the paradigm of peace*, can be the main framework of the coming twenty-first century world.

There is a potential threat to this regime, however, coming from the obsolete concept of the state sovereignty and its materialistic representation of national interest in a narrow sense. Obsolete, because the world has elapsed, or is shifting from the confrontation-oriented regime where the

sovereign states are best suited, to the paradigm of peace where the interests are shared by community members across the national borders. However, excessively strong national sovereignty will tend to veil the domestic conflict and stress the conflict of other interests between domestic and foreign groups. The threat from such an obsolete concept of state sovereignty has been even strengthened, rather than reduced, by the collapse of the cold war regime, because the post-cold war international society is in danger to become caught in unrestrained nationalistic competition for economic interests. In the long run, this competition could lead to another arms race on a global scale.

In view of a thaw between the former East-West camps, many experts have come, on the other hand, to have a perspective that the twenty-first century will have less presence of sovereign states, and that in a reformed structure. S. Fukukawa presented his view, for example, at an international seminar held in Beijing, October 1997, that in the 21st century the global business will choose countries as a market, rather than the nation state picks up industrial sectors or excellent companies to make winners in the international market. Implying that the nation state will decline if they fail in providing adequate business environment, he added that the weight of the sovereign state as a direct player in the market will naturally decrease. The role of the nation state will shift, according to him, to provision of the preconditions for efficient market mechanisms and to participation in the international management of trade, investment and money. The presumed primary role of the sovereign state to stockpile military capability and enhance its territory in pursuit of national interest in natural resources will have come to an end, and the nation state will convert itself into an entity to organize human intellect to find ways to accommodate each other country in the world community. N. Matsunaga, former Deputy Minister of Foreign Affairs, Japan, also stated at the "NEA Economic Conference in Niigata 1997" that in the coming era, the balance among the three currents of globalism, regionalism, and nationalism (an idea or policy of placing the interests of respectively the entire world, a region, and a nation above those of any other) will be the most important in formulating the world community. These observations imply that nation states will be living in a drastically restructured community. These perspectives are in a sharp contrast with the conventional concept of the world that is constituted, dominated, and defined by the own-interest-seeking sovereign states.

Thus, the world toward the end of the twentieth century is at a crossroad of the future, to be supported by the paradigm of peace, and the past dominated by confrontation-oriented obsolete sovereign states. At this unique phase of the human history, it is the privilege of the contemporaries to take part in the realization of the new model of the twenty-first century world. The Northeast Asian subregion draws our special attention, in this sense, to the prospective challenge of making the history of a desirable model of the paradigm of peace. The negative vestiges of the nation states in NEA make this subregion the idealistic site to test the human rationality against conventional ideas leading to only suboptimality represented and led by the obsolete concept of the twentieth century type sovereign states. If the twenty-first century world can establish the legitimacy of the paradigm of peace, it is in no other parts of the world than this subregion, because here we see a great deal of challenge and at the same time a great potential of success.

Real progress in shaping interdependent systems has been observed in many places of the world. The Greater Mekong Delta concept, for instance, started to move toward forming a more integrated and interdependent economic region across the national borders among former centrally planned economies and free market ones.

Northeast Asia deserves our special attention, however, for its enormous challenges in proving the effectiveness of the interdependent system that defines the basic structure of the New Regime embodying the paradigm of peace, not simply as an intellectual exercise but the established facts. The widely observed local initiatives leading to formulation of this subregion in practice, one of the characteristic of NEA, is perfectly in the spirit of the proposed paradigm.

2. The significance of Northeast Asia to the world community

Historical legitimacy in the post-cold war world mandates reallocation of world defense expenditure to world welfare. The collapse of the cold war regime has made it possible for major powers to embark on unrestrained nationalistic competition for economic benefits. Nations have been able to do so because they no longer have to worry about providing support to former partner countries for political or military security concerns. There seems to be remaining the power that is unduly preoccupied with the so called "obsolete concept of national interest." As long as the obsolete concept of the national interest remains dominant, the priority of the nation states will be to seek security for the sake of economic interests with military power. The result will undoubtedly be another rearmament race. If the world admits that the collapse of the cold war regime was historically legitimate, also it should also admit that the political international system governed by pressure-group-oriented national interests has lost its legitimacy. In reality, as a matter of fact, the twentieth-century notion of the sovereign state is losing ground. In politics, as F. Heisbourg states, "... in the post-cold war world ... the notion of the sovereign state as formed in the 16th and 17th centuries, is being challenged not only from above: by the attempts to share sovereignty at a higher level, both by international organizations and by regional organizations, but below: by smaller ethnic groups, and from the sides: by links between non-state actors brought on by the information revolution." The sovereign state will have to manage these challenges by facilitating emerging regional economic and political institutions.

In economics, it is well known that the so-called national interest simply represents in many cases the interest of a pressure or lobbying group. The liberalization of rice imports to Japan, for instance, benefits Japanese consumers through reduced rice price in Japan and the rice producers of exporting countries through an increase in the sales price of rice there, while Japanese rice producers and consumers in the exporting countries are affected adversely. In this case, the national interest doesn't represent the interest of the sufferers in that country if the beneficiaries don't actually compensate for the sufferer's losses. Thus, as far as the military value of food self sufficiency has been reduced, the very notion of national interest in protecting the food producer is no longer relevant, and the decisions of production and consumption are to be left to the market mechanism functioning across national borders. Northeast Asia is an important experimentation

field for the post-cold war world to decide which way to embark on: to the future, or to the past.

Northeast Asia is not a regional economy defined by any international agreement or contract, as is European Union (EU) or NAFTA. It is an economy born out of natural development, dominantly led by economic rationalism. Economic potential has been manifested by the flourishing border trade and frequent negotiations over megaprojects since the collapse of the East-West confrontation. NEA's constituent sub-regions, however, have been an arena of military confrontation for a long time, psychologically and economically remote from and deserted by the respective central governments. An adverse effect of the history is revealed, for instance, in the poor accumulation of infrastructure. Consequently, NEA has been left disadvantageous in the international market.

In NEA, the international relationships have not been normalized yet. This subregion still embraces the centrally planned and managed economy of DPRK, which does not hold membership with major international financial organizations. In addition, the northern territories dispute between Russia and Japan is not settled, DPRK and Japan have not yet established diplomatic relations, and the Korean Peninsula is divided politically and economic transactions are restrained.

The lingering vestiges like these from the cold war structure make Northeast Asia unique to the challenge of constructing the paradigm of peace. The stakes here are inseparably combined economic value and political asset of security to the world community. The success or failure of the conversion of the military-industrial complexes in RFE, which is in itself a purely economic transition problem in domestic domain, will determine to a considerable extent the mode of the international security system in Northeast Asia. The stake of the conversion may be greater to Japan, for instance, than to Russia itself. Japanese journalism has at last come to grasp the significance to the Japanese national security of the prospective of the defense industry in Russia, symbolically in conjunction with the crash in December 1997 of an Antonov carrying two Sukhoy air fighters to be exported to Vietnam.

NEA challenges us to prove the efficaciousness of the paradigm of peace, i.e., prevention of regional conflict through prior economic development and anchoring the achieved stability to interdependent systems, not in writing but by deed. The question we have to answer is this: How could we accumulate development momentum and implement efficient and viable interdependent systems in Northeast Asia? If NEA can establish a model case of the paradigm of peace, the essence can be applied to other regions in conflict as well.

3. Inclusive Partnership with Present and Prospective Participating Countries

The Northeast Asian subregion is comprised of sub-areas with mutually complementary production factors and resources, and its location is geopolitically advantageous in providing external economies to bordering regions and beyond. These two characteristics determine the extent of the functional membership of this subregion. The complementarity of the production factors shared by the constituent countries determine the NEA's internal mutual economic benefit. Also, the geographical connectedness of the whole area is critically important to realize external

economies in many sectors of economic activities. In the transportation sector in a foreseeable future, the proposed Eurasian Land Bridge (ELB) with South-North trunk railroads connected to it will be only feasible with the geographical connectedness of the participating countries and regions, hence the participation by all the countries and regions along the planned ELB. As is well represented by the Finnish interest in the TRADP, potential extent of the NEA economy is not confined to its geographical area but extends to South and Southeast Asia, Central Asia, Middle East, and beyond to Europe.

There are several impediments to smooth development of ELB, such as the monetary crises in East Asia and Pacific involving ROK that has been one of the greatest users and promoters of this newly emerging network, and complications caused by the competition between ELB and Siberian Land Bridge (SLB.) Since July 1997 the Russian federal and local governments held a series of meetings to reboost the SLB, and its revitalization was packed in the recent Yeltsin-Hashimoto agreement. In the long run, however, a sound market competition will determine the division of labor between these two accordingly to the relative efficiency of ELB and the demand for shipping out the vast amount of natural resources transportation along the Siberian railways.

In the energy sector, likewise, there remains a point that could lead to complications between the consumer countries and the supplier ones. The linkage between the primary energy suppliers, i.e., Russia and potentially Mongolia in NEA and Central and Western Asian countries outside NEA on one hand, and energy importer countries including the People's Republic of China (PRC), Republic of Korea (ROK), and Japan on the other, through pipelines and other mass transportation facilities, is the prerequisite for the development of all the comprising sub-areas. Regarding this linkage, there seems to be an inclination of the concerned countries to become excessively keen to maintain control over the energy resources. It has not been adequately addressed to policymakers in NEA by international intellectual leaders, and to the general public by the policymakers in turn, however, that in the long run the energy system is economically risky both to the suppliers and consumers, as has been experienced in the last two decades. In an oil embargo the consumers suffered greatly because of the sharp rise in the price, and in a glut the suppliers because of the price decline. Both suffered in different times, but in a similar way, because of the intrinsic nature of the demand for energy: low price elasticity of energy. An efficient energy system in the long run must be based upon a reliable supply to the consumers, and stable purchase by the users. Construction of such efficient energy systems requires that all the major concerns be coordinated through mutual confidence or a solid institutional scheme.

After all, in formulating the future NEA economy well supported by the world community at large, substantial participation by all these countries are essential. Since this subregion encompass many transitional economies that have not been linked with conventional market economies as naturally developing economies should have been, the construction of export-oriented open economy requires strong policy support by assisting bodies. This situation makes it particularly necessary that at an early stage of the formulation of this subregion, either or both confidence building and institutionalization of economic networks will be crucial in deriving cooperation among the present and potential participating countries. This aspect is distinctly

different from other market-led subregions. The needed incubator services will be best provided by the United Nations that facilitates the widest membership in the international community.

Recently, initiatives have been observed toward strengthening the linkage of the NEA economy with adjacent areas. Among the United Nations family, ESCAP has been engaged in promoting trade and investment of NEAⁱ, separately but in spirit in the same orientation of formulating an open NEA economy, from the UNDP's TRADP. In 1998 also, it is planning to continue studies, titled as 'Inter-subregional cooperation between North-East Asia and South-East Asia in trade and investment through TCDC (technical cooperation among developing countries) and tripartite cooperation, on enhancing and fostering economic cooperation between the two Asian subregions and tripartite cooperation including transitional economies, aiming at constructing building blocs for global cooperation. So far, a series of ESCAP activities included assistance of implementing concrete border clearance system among Asian countries, including all the NEA countries and local areas therein.

Bilateral international relations have kept improving in NEA, along with the increasing presence of U.S. The Russian Federation and PRC exchanged top political leaders and in 1997, settled long pending territorial issues, not completely but to a satisfiable degree. Russia and Japan also improved their political relations favorably to economic cooperation. A series of recent meetings of the Russian and Japanese politician and high-ranking government officials indicate that Japan is substantially diverting from its conventional diplomatic policy toward Russia of the non-separation of economics and politics. This is a drastic change in this bilateral relations that is expected to improve their economic relations distinctly (see Annex 1.) PRC and DPRK, long time allies since the cold war era, installed a 95km of optical fiber cable between Hunchun in the Korean Autonomy, PRC, and the Rajin-Sonbong Free Economic and Trade Zone (RSFETZ), DPRK, and will start operation on January 1, 1998. While there is no diplomatic relationship between DPRK and Japan, local governments and NGO's in Japan supported the investment promotion seminars for the RSFETZ authority extensively for the past few years. The first passenger ship to enter a seaport in DPRK from Japan after World War II, entered the Rajin port in September 1996, carrying hundreds of participants to the investment promotion seminar in the RSFETZ. This voyage between Niigata, Japan, and Rajin was originally proposed by ERINA, which could never have been done by the government without diplomatic relationship, and serviced by a Japanese travel agent. The Korea-PRC relations also markedly improved in 1997, while the ROK's businesses have been energetically investing in NEA, including RFE where the first intelligent building was completed by a Korean company on a BOT scheme. The ROK-Japan economic relations are complicated because of the competitiveness and complementarity according to the sector and the kind of technologies involved, on one hand, and the negative historical vestiges hampering the development of friendly business partnership. If appropriately worked out, these two countries can closely collaborate with each other toward creation of job opportunities for DPRK laborers as a preparation for the soft landing of DPRK on the Asia-Pacific community. ROK's business people often express their ambivalence toward economic cooperation with Japanese businesses, but general atmosphere between these two countries has much softened

through non-economic contact, such as sports events and Korea-Japan joint research of the history of the Korea-Japan.

What is lacking in such visible development of economies in the NEA subregion is a macro scheme to effectively and meaningfully integrate these improving bilateral relations toward the formulation of NEA as a whole. The situation of this region where there is provided no official institution nor favorable arrangements for economic cooperation, requires the central governments' proactive commitment in providing favorable economic environment for fostering interdependent economic systems. For the time being, initiatives can be expected of local entities appealing to their respective central governments to commit in the international collaboration for implementing infrastructure, promoting friendly international politics, and aligning legal, regulatory, and institutional frameworks to boost international economic transactions. In line with this, the central governments are expected to join with others in the formulation of the perception of the Greater NEA. A symbolic evolution of such international collaboration is the establishment of the TRADP Coordination Committee and Consultative Council, though with neither of which Japan has membership yet. The Consultative Council issued a unanimously supported request to the Japanese government to take part in this program, and are waiting Japanese government's response to it.

4. The Formulation of the Perception of Northeast Asian Community

The NEA subregion has been perceived by many experts on NEA as a naturally developing economy with no formal institution to shelter the potential dynamism therein. Gradually, however, the need to facilitate the potential dynamism of NEA came to attention of experts on the political economy of this region. An international workshop entitled as 'Collaboration for the Formulation of a Strategic Vision for the Development of Northeast Asia'ⁱⁱ was held on January 29, 1997, in Niigata in collaboration with ERINA and the DDSMS, United Nations, with participants from all the six NEA countries including Japan and from UNDP, in addition to the co-organizing bodies. When the meeting adjourned, a participant pointed out the probable similarity of the subregional integration process of NEA with the formation of EU. This comment is in a sharp contrast with an observation by Japanese government officials, expressed at the international conference held immediately before the above-mentioned workshop, that it would be too early to institutionalize this subregion in whatsoever the format may be.

So far, although NEA is comparable with EU in the size of population and GDP, no basic macro framework to formulate this subregion has been meaningfully presented to the policy makers because a comprehensive vision of the future of this subregion is missing. International collaborations in implementing infrastructure and provision of free economic zones along national borders are mainly designed as individual and separate projects based on gradualism and bilateralism placing priority on the local interests. While it is intended to maintain the developmental process by avoiding setbacks with the adopted gradualism, realization of overall development potential of NEA is not contemplated yet by the concerns in NEA.

This is causing disadvantage to the NEA economy in lagging the improvement in

international competitiveness and in changing the initial conditions adversely for its long-term development process. These aspects are reflected in several phenomena. Rather fragmental infrastructure building projects, relatively weak international business linkages of the local areas in comparison with Southeast Asian subregions, and consequential small inflow of foreign direct investment are the symptom of the lack of macro framework for this subregion. In view of the decision process of investors where the object region is first selected taking into consideration the regional development potential vis-à-vis its investment environment, NEA must be perceived as provided with reliable macro conditions for investment. Thus, the creation of a reliable image of NEA is the key to the long-term development using the foreign investment supplementing scarce capital fund within the region.

Successful development of NEA will sooner or later claim its identity as something more than a mere geographical area. Substantial interdependent systems across the national borders will demand international coordination of rules, standards, policy measures, and, above all, well concerted strategy for their own sakes. After all, it seems inevitable to facilitate all of these in institutionalized macro frameworks. The process for this is the one referred to as the road to another EU in NEA. There should remain for a long time differences from the EU because the constituent areas of NEA are parts of comprising nations rather than the whole countries themselves. In spirit, however, a perception of NEA in its entirety similar to the idea of the European Union will accelerate its own development. In practice, the perception of NEA will promote confidence building among the central governments and, at the same time, institutionalization of this subregion, leading to formulation of spontaneous action plans.

The perception of NEA has been drastically changing, as a matter of fact. The representative of UNDP at the Northeast Asia Economic Conference in Niigata 1997, showed strong interest in institution building for NEA. It was the energy sector in this region that interested the UNDP representative, and its implication to general strategy was not clear. On this occasion, Japanese government officials were highly conservative about the institution building for NEA. In no more than half a year, surprisingly one of them expressed his modified opinion that the Japanese government might not be necessarily against institution building, at least for selected sectors like energy, at another international seminar held in July, 1997ⁱⁱⁱ. In addition, not few experts on NEA from the United States expressed serious interest in stabilizing this subregion through institution building. The task needed here is to gather and consolidate these moves into an impact to policy makers in the NEA member countries.

II. Multilateral Cooperation

1. Preconditions for Northeast Asian Development

Confidence building and eventual institution building among the countries comprising the Northeast Asian subregion will be the precondition for implementing a living image of the historically legitimate model of the 21st world structure that deserves to be presented to the world

community. As we will see in our case study in the following section, there have been impediments to international cooperation stemming from lack of mutual confidence, and it is not easy to give birth to a reliable momentum for the NEA development as a whole.

For the confidence building, there are at least two fundamental tasks to be achieved. One is the formulation of *a vision of Northeast Asia* as an efficiently integrated subregional economy in a very long perspective, say up to the year 2025. Another is an *established fact* of successful multilateral collaboration to prove the feasibility of such an economy. In principle, this will imply the promotion of multinational and multilateral cooperation instead of a collection of piecemeal bilateral or unilateral ad hoc development projects. The objective of envisioning the future NEA is two fold. The obtained vision itself will contribute to building an efficient economic systems across the national borders, especially in the field of infrastructure building and energy resources development, and the *multilateral process of the vision making* will increase steady and mutually predictable commitment of the participating countries. In this sense, while the vision of NEA 2025 may be drawn up by experts from any country, it is more desirable that all the constituent countries will be directly represented in the vision making process. Such a multinational cooperation may be able to establish an economy where not only goods but production factors can move freely across the boundaries and borders that really conduce to interdependent systems.

In the economic domain the twentieth century has established the GATT, and subsequent WTO, system to advance international trade, in spite of the hot and cold confrontations and conflicts among the sovereign states and regions. This achievement was founded on the simple Ricardian economic doctrine: 'free trade maximizes the world production.' This proposition refers specifically to the trade of goods. In the coming 21st century, the natural extension of this principle will be reduction of constraints on the better organization, if not free movement, of production factors across the national borders. Even if international trade substitutes mobility of production factors in principle, in reality the limited speed of adjustment of factor inputs over national borders mitigates overall economic efficiency. There should be implemented, therefore, better schemes to bring complementary production factors together to promote more efficient division of labor (the Le Chatelier principle in international economics.) The outcome of the reduced border constraint on factor utilization will also enhance and strengthen economic interdependent systems among the constituent countries, and consequently the stability of the entire subregion.

Our study of the optimal Chinese transportation system^{iv} (see Annex 2) demonstrates a good example of the economic benefit gained through multilateral cooperation. As is shown in the study in Annex 1, the northeastern provinces can benefit from substituting the domestic food transportation, based on 'food security' reason, with an international transportation system using Tumen River Area land and seaports, at a rate of 0.5% of its current total transportation cost.

In view of the current tight financial markets in East Asia, the cost saving effect in infrastructure building, such as the case shown in Annex 2, may stimulate the Chinese authorities to formulate a long term development strategy for NEA. Similar cases in other NEA regions may also favorably affect the respective governments. It is in this context that a shared vision of Northeast Asia should be formulated. If this subregion can establish the economic development and

interdependence in the spirit of the paradigm of peace, NEA can claim its unique value to the rest of the. Unique, because this region is still suffering from the vestiges of the cold war, the negative legacy of the twentieth century and symbol of the obsolete regime. And yet, in spite of these handicaps, Northeast Asia can be a forerunner, not a follower, in the new century to come, and that not in document, but by the deed rendered.

There are at least two drawbacks in the process of implementation of this model in this area. For one thing, long-standing negative images of partner countries are impeding construction of cooperative relations among the local entities across the national borders and hindering smooth implementation of international development projects. For another, because of negative legacies of the past, including the military confrontations and territorial disputes, no solid institutions have been created for this region as an integrated subregion. When and where mutual confidence is not strong enough to derive the participant countries' commitment in the project, institutionalization can sometimes effectively supplement this insufficiency. It is only very recently that some concerned people started discussions of founding economic institutions to facilitate development efforts, albeit only for limited areas of activities, such as energy or food supply and at informal levels. All the available measures should be taken to build up and strengthen mutual confidence and install institutions to supplement drives leading to shaping of efficient interdependent systems, in order to ignite autonomous economic development of Northeast Asia. A take-off of this subregion will materialize only when an appropriate economic environment has been provided for international economy and international relations that are favorable enough to compensate for the negative legacy of the past.

Even in such a disadvantageous situation in Northeast Asia, local and private initiatives have achieved economic progress based on multilateral cooperation. The following case will exemplify the future possibility of establishing the paradigm of peace in this subregion.

2. A Case Study of Multilateral Cooperation in Tumen Area Transportation Projects:

2-1. The Project

The case presented in this section to demonstrate the real situation of NEA is the multilateral transportation network building in the Tumen River area that has been partially put into operation and being expanded to an incommensurable scale early in the twenty-first century. This project is a collection of several transportation infrastructure construction projects. One is the railway construction in the Jilin Province, China, and in Primorsky Territory to be connected with each other, and redevelopment of the Zarubino port in Khasan, Primorsky, located only 60 km from the China-Russia border and 80 km from Hunchun, the easternmost major city in Jilin. Right now, the railways have been physically connected with each other, and are expected to start services in 1998. The Zarubino port project is under consideration by Russian authorities. Similar railway projects are improvement and connection of railways in the People's Republic of China (PRC) and the Democratic People's Republic of Korea (DPRK) at several places. In parallel with the railway

improvement and connection there are also several road construction plans in all of the three riparian countries. Along with these land transportation facilities, seaports are also planned to be improved and expanded in their handling capacities. Combined together, the established transportation network is supposed to service transit cargoes flowing between this subregion and third countries, including not only the rest of Asia but also central and West Asia, Europe and U.S.

The following presents the complications, development issues, and local and private initiatives in this development process, and derives recommendations for future development planning of Northeast Asia. It is not meant that central governments and international organizations did not make contributions, but it is stressed that in the post-cold war regime, truly proactive initiatives have come to be found in sectors and areas that were not found in the former regime.

2-2. Outstanding Issues

There were, and still are, a number of outstanding issues in this infrastructure building, although a long run prospect of this project is distinctly promising. First of all, the Russian authorities in the central and local governments did not come to correctly understand the real situation of their interest in this transportation network at an early stage. They believed that should the Zarubino port be developed it would help the export of Jilin coal to third countries and hamper the potential export of Russian coal in future. This point used to be repeated at international conferences, expert meetings, and other meetings at various levels, formal or informal. In reality, however, the quality of the Jilin coal is not good enough to compete in the international market. It took a few years for the Russian concerns to come to grasp the absence of risk or loss on their side in developing the Zarubino port. Inadequacy or *shortage of exchange of information over the national border* has been so obvious that a third party NPO (ERINA) had to mediate flow of reliable information to the right people at the right time. In a private and indirect dialogue between a Russian authority and ERINA in early spring of 1994, the former produced a counter proposal that the railway tariff could be negotiated to a half if the cargoes would be shipped through Nakhodka instead of the Zarubino port. To this proposal, ERINA responded with a remark that, since the major portion of the cargo to be handled at the Zarubino port would be Jilin's, it would only be rational to transport the cargo through Zarubino rather than Nakhodka. ERINA made it clear that it could cooperate with any party but only when the plan is rational and beneficial to all the parties involved. No later than three months after the dialogue, the Primorsky Territory and the Jilin Province started direct negotiations over the provision of the international connection of the railways between Hunchun and Zarubino. The concrete effect of the advice provided by the NPO is not known. However, the construction works directed to the completion of the railway connection were resumed at a permissible speed within the limit of the fund availability. In October 1996, the both parties jointly held a celebration ceremony for the connection of their railways.

In the second, there are *differences in the perceived interests* by the Russian central government and the Japanese. If so agreed, a part of the credit to be offered by the Export Import Bank of Japan to Russia could finance the Zarubino port redevelopment project. While the Russian

Federal Government opts, however, to use the credit line provided by Japan for promoting economic development of their European Russia, claiming that the overall efficiency of investment is higher in the West than in the East, the Japanese government consistently expresses its preference of the use of the Japanese fund in the Russian Far East to the use in the European'. In addition, unfortunately to the supporters of the Zarubino port development, the importance of this basically multilateral collaboration does not seem to be well understood by the Japanese government. The economic value of the infrastructure building around the Tumen River area to Japan is not an immediate one. It will be beneficial mostly to the future Japanese enterprises doing business in Northeast Asia, but the amount of expected benefit accruing to them may become the biggest, in view of the huge amount of potential investment and short distances among potential business partners.

In the third, it is widely believed that the Rajin route in DPRK and the Zarubino route are in a hard competition with each other. In a very short run, these two routes will compete with each other for the given amount of transit cargo. However, since the introduction of an alternative transportation route increases the reliability of shipment and safeguard against political instability in this sub-region, foreign direct investment in the Jilin industrial areas will dramatically increase. This will generate additional cargo that will reach several times the current amount thereof to benefit the transportation industries related to the two routes. In the long run, therefore, these two routes are more complementary than substitutive. As a matter of fact, the total amount of the Jilin transit cargo distinctly increased after the Rajin route was opened, and Zarubino also started services for containers carrying industrial materials and finished goods to and from the Yanbian area in Jilin.

In the fourth, the Republic of Korea (ROK) and DPRK do not allow ships carrying the other's national flag to enter their ports. This policy basically denies the implementation of container liners connecting the Rajin in DPRK and Pusan or other ROK's ports. To clear this hurdle, by a marine transportation corporation founded by the Yanbian Korean Autonomy and a private shipping company in ROK established a joint venture in ROK to negotiate with both governments.

In the fifth, DPRK and Japan do not have diplomatic relationships, hence economic transactions are almost negligibly small. Most of the economic transactions are made between North Korean residents in Japan and their counterparts in DPRK. Exceptions are those being carried out by small local businesses of Japan and DPRK corporations located in the Rajin-Sonbong Free Economic and Trade Zone. Non-existence of diplomatic ties between the two countries prevents effective business promotions by Japan that has greater financial capability.

In the sixth, Japanese businesses have not yet looked into the industrial development potential in Jilin. It is only in August of 1996 that a representative of the Federation of Economic Organizations (Keidanren) Japan paid their first visit to rapidly growing industrial zones in this province together with a mission of Japanese experts conducting the FS of the Zarubino port. In spite of the closeness of Japan and Jilin, the FDI from Japan to this area ranks only at below the fifth in the amount, behind Germany. Japanese FDI is now going to the Indo-China countries, against expectations of local industrial zone authorities in the Northeastern China, whose marketing

capability is severely limited by shortage of the fund to conduct such activities as launching investment promotion seminars in Japan, preparing reliable documents, establishing communication channels, etc. Here we see mismatching in the interests of the concerned parties causing waste of time in exploiting the development potential, along with shortage of capability to correct macro-mismanagement of the subregional economic resources.

Lastly, there still remains reserved antagonistic feeling of residents in the Northeastern China against former occupier, Japan. In this context, Japanese investment into this area is possibly taken to be another occupation with money. Danger is always there that a small incident can trigger overt hostility to destabilize this area.

2-3. Local And Private Initiatives

In spite of these complications, the Yambian Autonomy took the initiative, and the Jilin Province government backed it up jointly with an ROK marine transportation company, to cultivate a container route combining the rapidly industrializing parts of the eastern Jilin Province with foreign markets. The first route was to Pusan via Rajin, DPRK, and later to other seaports along the Sea of Japan, including Osaka through Vladivostok under negotiation. In the case of the Rajin-Pusan route, a venture maritime company was established in ROK jointly by a Yambian maritime company and a Korean private company. This international joint venture was first confronted with the national policies of both the North and South government that do not allow any ship carrying the other's national flag to enter their sea ports. Their determination to open transportation routes to the Sea of Japan brought the managements of these companies to the idea to take advantage of the declarations of the both governments that there was one Korea. They persuaded the two governments to give the container sea line between Rajin and Pusan a domestic status on account that there could not be international sea lines between two cities in one country, so that the North-South sea line is domestic rather than international^{vi}. The two governments nodded after all, and the joint venture shipping company started operation in 1995, using first a 1,500 ton ship and within a matter of half a year upgrading the ship to 3,500 tons in size. The Jilin Province government subsidized this venture with US\$0.7 million to cover part of the expected deficit at the opening of stage. Cutting the transportation cost by 20 to 30% relative to the Dalian route, the company quickly attracted customers, and the amount of cargo passing through this route rapidly expanded with industrialization of the eastern Jilin Province and progress of the import of KEDO-related materials. Now the management is planning to use a 10,000 ton class container ship for this route.

In Russia also, in 1995, Governor Nazdrachenko of the Primorye Territory sent letters to both Governor of Niigata Prefecture, Japan, and the Federation of Economic Organizations, requesting to conduct a feasibility study of the Zarubino port redevelopment. In Japan, in response to his request, eighteen private companies and four prefectures, including Niigata that donated JY10 million, contributed fund, and ERINA conducted the feasibility study. This feasibility study was formally handed to Governor Nazdrachenko in Fukui on the occasion of the Far Eastern

Governors Meeting in 1996, and is now supposedly being translated into Russian standard, in the Russian language. During the following several months, the business leaders related to Russian and Chinese business, accompanied by the director of the study, extensively disseminated the meaningfulness of this project to the authorities in Japan, Russia, and PRC. Through contacts in this regard, it was confirmed that after all the meaningfulness to the international economy of this local development project and local enthusiasm are not necessarily correctly understood by the central government officials in charge of local economy.

In general, the NEA subregion requires local and private initiatives for development momentum building. As a matter of fact, local governments have been markedly active in the promotion of the development of this subregion, and sometimes private entities' spontaneity provided breakthroughs in the development momentum building, as is in the above-cited case.

In all the NEA countries, first of all, it is not the central government but local economies that have direct interest in the development of overall NEA economy. Secondly, serious diplomatic complications hampers central governments' commitment in the practical actions, and the respective central governments opt to leave the initiatives to the localities so that they could maintain the desired degree of freedom in diplomacy: no official engagement, no intervention, no financial burden with laissez-fair stance. Thirdly, in the open market economies where the government only basically provides an economic environment and abstain from direct business transactions except in a few limited sectors of the economy, it is private business enterprises that can tackle business opportunities.

It has been observed that in industrialized countries generally the central governments started to lag behind business corporations, especially those globally operating enterprises, in access to relevant business information. The frequency and magnitude of the complaints of the company officers directed to the central governments' officers in charge of economic affairs have been systematically increasing. Mismatching of the policy intention and the actual effect is exemplified by a Japanese government's policy on the foreign fishing boats. The Japanese government makes it almost impossible for foreign fishing boats to enter a Japanese seaport in an attempt to protect Japanese fishery. This policy is now impeding sound growth of international trade of fishery goods, against the interest of the Japanese fishery businesses to turn over to more profitable international trade of marine resources. Combined with other restraining regulations, this policy is now forcing a considerable amount of catch in the Sea of Japan to be once transported to third countries before it is imported to Japan. Another example of a positive role taken by a small private enterprise in Japan is seen in a fish meat plant in Rajin where the fish meat manufacturing process is controlled with Japanese management and know-how, and the product is imported by the Japanese firm that provides the skills for the quality control needed to meet the Japanese market's specifications.

Diplomatic complications also sometimes give private entities access to the foreign central governments, which is denied of the government officials due to the lack of normal government-to-government relations. The UNIDO/UNDP-sponsored Rajin Investment Seminar benefited much from a Japanese NPO's initiative in providing needed scheme of logistic services

including accommodations of participants from abroad on a Japanese passenger boat. The Japanese government officials were formally prohibited even to attend this seminar as observers, because of the lack of the diplomatic relationship between DPRK and Japan, though some were present at the seminar on non-official status or by taking leaves.

Thus, now NPOs are coming to hold ever increasing degree of freedom in action, though not in authoritative capacity. In Japan, NGOs are becoming major implementing bodies of the bilateral foreign assistance. It is now high time for international opinion leaders to properly address the advantages of NPOs to policy makers, especially in those countries where the recognition of the potential capability of NPOs is weak.

In the diplomatic arena, fortunately, general atmosphere is rapidly improving. Foreign ministers' meeting between China and Japan at Vancouver on Nov. 23 (Japan time) agreed on strengthening Japan-U.S.-China-Russia four party communications, invitation of Go President to Japan in 98, and a concrete action of exchanging people; 100 Chinese young government officials will be invited in 98. At the U.S.-China-DPRK-ROK four party preparatory meeting held in N.Y. on Nov. 21 (22 in Japan time) also came to an agreement to have a full meeting. A favorable turn for multinational framework was also observed in the APEC Ministerial meeting at Vancouver. Here, they agreed to discuss the participation of Russia together with Vietnam and Peru in 98, although Australia and New Zealand are against the Russian membership.

Since multilateral cooperation framework can provide better solutions than bilateral mechanisms, it is time to organize these favorable changes in the international relations toward the construction of the paradigm of peace.

3. Formulation of the Subregional Vision of Northeast Asia

A vision of the NEA economy in the long run, say for the period up to the year 2025, can serve best as a means of fostering the perception of NEA to be shared by the concerned policy makers. Since economic progress generally follows a fairly uniform development path in the long run, such a vision can be obtained by modeling development scenarios. If properly modeled, such scenarios can provide policy makers with guidelines in formulating development strategies, setting policy agenda, locating potential developmental problems and preparing policy instruments to cope with them.

While modeling work can be conducted by qualified experts from one country if so desired, it should be taken into consideration that international cooperation may promote confidence building by itself. The values of the alternative envisioning and formulating processes should therefore be carefully assessed. In case such a cooperation is not feasible, the United Nations should prepare a scheme for undertaking the envisioning task under its own umbrella, because a vision prepared by a country will easily invite suspicions from other countries.

A quantitative planning model, called a PERT-econometric model, was already experimented on making long-term development plans for several economies^{vii}. One of the applications was to the TRADP to calculate the overall capital investment required to fulfill the proposed development.

Although this model should be refined and expanded in many ways, reliability of this type of approach seems to be high enough to serve the envisioning task discussed above. While verbal expression of a vision may be appealing to politicians and executives, reliability stems after all from the consistency among the comprising parts or elements of the subprograms. For a vision to be presentable to policy makers, business leaders, and other influential entities interested in NEA, it must be exposed to logical and quantitative rigor and precision. Therefore, in the end it boils down to a quantitative modeling. The model thus obtained can accommodate the strategic parameters, policy instruments, monitoring variables, and other key datum parameters to be referenced in legislation and jurisdiction, and identify individual major development projects to be implemented by the specified time.

At a later stage of the formulation process, the macro vision should be supplemented with finer micro studies, including a set of rough feasibility studies of the candidate development projects to be included in the plan. This is a lesson learned from the experience of TRADP. When the TRADP was first introduced to the Japanese public, the reaction to it was rather negative because of the enormous amount of cost involved, without sufficient explanation of the basis supporting the presented figures. In addition, as understanding deepened, individual projects of the Plan came to scrutiny by financial experts, who criticized the basic structure of the Plan for its lack of eligibility to loan consideration. These points should be kept in mind, not as criticisms but as lessons for formulating a strategic vision.

A desirable byproduct of modeling and formulating the NEA subregional vision is that the preparation of the database for NEA will supply basic indicators of the NEA subregion as a conceptually integrated economy. If the GDP statistics on NEA is to be published annually, for instance, it will definitely foster the identity of the region. The database building and the expected full-fledged application of the model will, however, necessitate the task force to access the statistical authorities of the respective constituent countries. In view that many of them are still centrally managed, the task of envisioning NEA will in effect require support by the governments involved. Thus, the process of envisioning and formulating process must be also acceptable to the NEA comprising countries.

Most of the opinions expressed at the Niigata meeting on February 29, 1997 supported the proposed envisioning project. Prior to this meeting, interviews were conducted, informally on casual basis, with government officials of the Russian Federation and PRC. They also issued strong messages to the other officials present at the interviews that, although they usually did not support international nonsensical things, this envisioning project should be supported by the respective central governments.

4. Long Term Development Strategy and Intermediate Macroeconomic Management

4-1. Basic Policy Issues in Developmental Phases: Implications of a development model

The development of open economies with export orientation follows a fairly common pattern as is described by development models in the references in foot note vii when the economies satisfy some basic conditions. If an open economy has a big enough population to allow a sufficient degree of domestic inter-industrial linkage and satisfies some other conditions, then the development path can be broken down into three phases. The initial Phase I is characterized by autonomous surge of export using readily available resources and excess production capacity in the traditional sectors. The second phase is the stages of the preparation for take-off, which lasts at least five to ten years until the necessary infrastructure building has been completed. Only when the necessary conditions are met for take off, Phase III or the golden time of prolonged high growth ensues. In due course of development there arise a variety of strategy and macro management policy issues. Accordingly to the need in the respective phases, the strategy and macro management issues change from foreign currency control to industrial policy to infrastructure building, and so on. The three phase pattern will repeat round after round in spiral to fully catch up with the most advanced economies. The Thailand economy is in phase II, for example, in the second round, with the growth being constrained by shortage of transportation infrastructure.

The Phase II economy must go through a long period of painstaking preparation, and most of the failures in the development occurred in this phase in the past. To enumerate some of the hurdles in this phase, foreign reserves must be maintained at a certain level not to invite country risks while continuously importing capital goods and high quality intermediate inputs to meet the international market standard. Sometimes the import dependency of export in this phase comes up to as high as 70%, according to empirical analyses of the developing Asian economies. Infrastructure must be strengthened especially in the energy and transportation sectors. The necessary condition on infrastructure is either the ratio of the value-added of the economic overhead capital to GDP must reach around 10% or it is raised by two to four per cent relative to the initial level. Since the capital-output ratios in these sectors are several times higher than the economy-wide average, capital accumulation for this condition requires that the ratio of investment to GDP must increase distinctly. At the same time, the modernization of the basic production facilities render the capital stock in the traditional sectors obsolete and destroy their economic life. In NEA, state-owned heavy industries are operating on aged capital stocks inherited from the old regime produced even in the pre-war era. This is one of the phenomenal characteristics of RFE and northeastern provinces of PRC. Sooner or later, these obsolete stocks must be replaced by more efficient facilities if these state companies are to survive market competition. It is inevitable that this causes a relative decline of the growth rate of the real sector, hence, in spite of the ever-increasing demand for capital investment, investment financing out of domestic savings becomes difficult to that extent. Unless the size of foreign capital inflow reaches a certain amount that can make up for the I-S gap, the economy can not enter the take-off phase. It was not until the external assistance to developing countries grew to that level in

1970s that NICs emerged in Asia.

In Phase II, many other difficulties accompany these major tasks. The penetration of market mechanism into traditional sector may cause serious problems to minority groups in certain countries. Some of the cultures and social life of the twenty-two ethnic minorities in Russian Far East and fifty-three in China, fairly well protected so far, are on the verge of extinction. These phenomena will call for due measures of protection. Increasing income differentials among the sectors and regions also cannot be neglected in the long course of development. The differentials will depend upon the degree of their linkages directly with the international market or indirectly with fastest growing export-led sectors. This point is discussed in Section 3-3, Part III below. Since there naturally is a limit to the social acceptance of widening differentials, in the course of development, measures must be taken to moderate the lagging sectors, trading off some efficiency in growth. In the midst of excess supply of labor force, skilled and highly professional labor force is in shortage. This usually causes low efficiency in administration and management, which in turn defines the limit of absorption capacity of advanced technology and modernization of social structure. No matter how long the gestation period may be and consume a sizable amount of valuable domestic savings, investment on higher education must be undertaken, and that not only for economic reasons alone but in conjunction with constructing a healthy society.

Along with these structural changes in macro economy, certain balances must be maintained, through market mechanisms or not, among industrial sectors. This is due to the functional relationships between per capita income and composition of final demand on one hand, and the input-output relations defined by the competitive technologies adopted at the respective level of development on the other. Within the inter-industrial linkages, thus, the I-O balances must be maintained through domestic and foreign trade. The inter-industrial balances can deviate only to the extent that the trade can absorb the discrepancies. Since external trade mars these relationships, the existence of such balances may be overlooked by development planners. After all, however, the inter-industrial relationships penetrate into the industrial structure. The inter-industrial relationships will force any deviation from the development-specified balance to be adjusted after all, and artificially aimed at sectoral composition will be corrected. This proposition warns development planners of the danger of pitfalls of picking-up-the-winners policy. This point has not been duly taken into subregional plans.

In Phase II, the industrial composition will visible change due to changes in income level and in technologies. The mechanism of the shift in input coefficients has long been studied. A conceptual planning scheme with interim report of the study under way is given in the attached material. For the purpose of designing the future NEA economy, however, use of updated data is recommended, for the continental NEA encompass former centrally planned and managed economies that have different I-O structures.

Notwithstanding these difficulties lying in Phase II of development, multilateral cooperation can ease the progress drastically in NEA. Diversity in the natural resources endowment is a characteristic advantage of this subregion. Complementarity of productive factors across the national borders can be made best use of if adequate measures are arranged on a multilateral basis. This argument logically leads us to the idea of implementing a variety of adjustment of production factors and resources mobilization across the boundaries, and provision of an economic environment that is favorable to development of the whole NEA subregion.

4-2. Process of Formulating Frameworks for NEA Subregion

The greater the degree of freedom in adjustment of factor input, the greater the production efficiency will be. This proposition well applies to NEA. While an independent development plan by a single country and for its own sake has to take into consideration a greater number of constraints on factor inputs to greater extents than bilateral one, a multilateral development plan for the whole subregion can substantially reduce the factor input constraints. This point may be appealing enough to political leaders in the respective countries to induce agreement among them to shift the development strategy from the current gradualism to more comprehensive and rational multilateralism (defined as the benefit aggregated over the comprising countries be prioritized over individual interests.) In fact, former prime minister of ROK, Mr. Nam Duck-Woo stated that, somewhat compromising to the majority support of bilateral approaches (to TREDATA project), multilateral approach should not be ruled out while embracing the bilateral^{viii} for promoting the formulation of the NEA subregion.

The adjustment need not be limited to factor input alone. Division of labor across the regional boundaries and national borders will improve macro efficiency. The comparative advantage of northeastern PRC in grain production can be used for the RFE economy to specialize in marine resources industry and trade the outputs with each other, since the RFE agriculture can barely supply 50% of the needed food while being endowed with rich renewable marine resources. Another example of possible industrial adjustment across the national border is the increasing demand for energy in PRC to be partly met by exploiting hydroelectric power resource in RFE.

These considerations indicate that the long term development strategy and macroeconomic policies for NEA should be designed in a broader perspective beyond the regional boundaries and national borders. The formulation of the subregion should include the design of a desirable framework for market mechanism^{ix} and provision of legal and regulatory frameworks to accommodate basically borderless economic activities. will be a key to sustained the subregional development.

The strategy for NEA should focus on the creation of a mechanism and process for designing the framework. The fora provided through the process will convene intensive and extensive exchange of views, opinions, and researches so as to secure transparency and compatibility of law, regulations, standards and norm of practice among the regions and countries

in NEA. The multi-faceted content of the subregional framework can be decided by experts from the respective fields, ranging from development economics, international and regional development planners dedicated to the construction of the paradigm of peace, to specialists in economic law and regulation assisted by international law specialists. In addition, the process of formulation will require a considerable period of time. The mission of realizing the paradigm of peace will also demand attendance, monitoring, advisory services to people both in government and private sectors. All of these requirements combined, the task calls for management by a standing body.

Dedicated service to the development of NEA subregion is not necessarily scarce today. However, they are specialized in mutually separated and segmented areas. International aiding organizations' financial operations are limited to separate individual countries because of their lending codes binding the loan eligibility to sovereign entities. Not few United Nations family organizations tend to be motivated by quick and visible achievement, rather than by intellectual leadership. Occasional international meetings on NEA produce only short-lived impacts to policy makers, which is insufficient to lead to materialization of the recommendations, advice, or proposals made at the meetings. Supposedly dedicated NPOs lack required expertise and strong financial base to promote the ideas. Local governments tend to pursue short-sighted immediate economic interest, neglecting long term potentials.

After all, the United Nations Headquarters seems to be in the best position to integrate these services under an umbrella toward the paradigm of peace orientation. Practical jobs can be left to individual entities, but the spirit of the model community building should be firmly maintained and repeatedly addressed to the world by the U. N.

III. Common Tasks of Each Country

As an autonomously and naturally developing subregion, the NEA needs to be strengthened in many areas to be strategically formulated as an integral economy. A first step will be to start tackling common tasks that will promote formulation of this subregion. There are a number of categories of such common tasks. One is the provision of the framework of the environments in which all the kinds of development activities take place. The second is solutions of concrete problems common to the NEA comprising countries that can be solved in similar ways. Instead of trying to make the discussion comprehensive, selected theme will be taken up here to intrigue further studies by the people in charge of the respective affairs.

1. Decentralized Planning for the Formulation of the Basis for NEA

The roles of the central and local governments should be properly defined in the respective countries in the Northeast Asia countries. In the division of labor between the central and local governments it is desirable that the central governments be engaged in providing favorable policy environment leading to intensified international economic cooperation, and the local

governments in practical, on-site implementation activities. In interdependent systems, without of which NEA development cannot be expected, local initiatives will increase distinctly. The enhanced competence of localities will promote provision of the base for subregional development as has been verified in the process of implementing transportation infrastructure in the TREDAs.

A strategic development planning of the Northeast Asian subregion should therefore exploit the capability, specific advantages, and, above all, the initiatives of the local entities in the respective countries in the NEA subregion. The subregion is comprised, not of countries in entirety but of local areas of each country, and the local entities have the greater and more direct interests in this subregion than the central governments. Moreover, especially in China and Russia, the psychological and political remoteness from the respective capitals of the localities in this subregion makes it difficult for the central authorities to closely attend, ready to take necessary actions, to the development process so as to maintain proper management thereof. Decentralized development planning of the local areas will more naturally lead to the formulation of the economic bases for the NEA subregion, and help the central governments reduce their burden of the management of the local regions.

The central-local government relationships in NEA countries are in many cases far from perfect in information gathering, exchange of opinions, managing the project implementation processes, and making adjustment with foreign entities. The case of the Zarubino port redevelopment project exemplifies the situation. In Moscow, a surprisingly small number of central government officials had knowledge about the location of the port, and only a handful officials knew the situation of the port and its bearings with foreign countries, including the relations and the interests involved in there of the Primorsky Territory. Circulation of information on local issues among the central government officials is slow, casual, and often used for other purposes out of the context. On the occasion of the presentation of the feasibility study of the Zarubino Port redevelopment project, the project's strategic importance in the international relations was also relayed to officials of the Russian major economic ministries, in line with its economic value to reverse the declining real sector economy. Till then, there was an attempt to modify a major precondition of the project for a certain political purpose. Thus, the urgency of this project, in connection with railway construction in Khasan, Russia and in the Jilin Province in PRC had to be explained repeatedly.

To strategically envision the NEA, existing candidate components of the subregional vision, i.e., development ideas, long term plans, project proposals and the like for the respective sub-regions and countries should be made use of. The task is common to all the NEA member countries and localities, but the burden falls inevitably on the individual members. The job could be done by the respective countries, sometimes independently and sometimes in collaboration with other countries depending on the individual needs, or using technical assistance of the U.N. extended to those needy entities. In the following, we will discuss such specific useful items in turn. We expect that utilization of such elements will give us insight into the crux of the matter of the development of NEA.

1-1. Russia: Exploiting the RFE Development Program As an Instrument To Cope with Adverse Factors

The outcome of the Russian Far East has much bearings not only on the welfare of the residents in this region but also on the process and forms of the bilateral and multilateral relationships in Northeast Asia. Let us discuss in the following, therefore, selected key issues on the reconstruction and development of RFE from proactive point of view to supplement the Long-Term Development Program for Russian Far East and Trans-Baikal Region (hereafter simply referred to as the Program, in this section) so as to make it accommodate external assistance as well as domestic, both federal and local support.

The macro economic conditions in Russia have not been favorable for the reconstruction and development of its Far East for several reasons. First of all, the 'order of economic liberalization' in the Russian transition to market economy was not adequate. Contrary to the well known Ronald McKinnon's prescription that the fiscal sector, particularly the state enterprises should be liberalized before the monetary sector is brought to the market mechanism^{*}, the monetary market was first liberalized. Giant state companies and military-industrial complexes remained almost untouched for a good many years after the paradigm of peace had been politically established. Consequently, because of the force to protect vested interests in the public enterprises, the expected market mechanism did not come to function in major areas of economic activities. The result was chaotic and the Russian economy was paralyzed especially in RFE where fundamental conditions for market mechanism, such as access to market information and reliable transportation systems were scarcely provided.

After consecutive declines of the real sector, however, the collaboration of the federal and local authorities to rebuild a healthy economic structure materialized in the Program with a status of the presidential decree in April 1996. This Program deserves special attention because it has possible capability to organize development efforts for RFE, despite the fact that the Program was not properly designed and formulated in the concrete terms required for implementation.

The Program can be improved in many ways. To illustrate some of them, the Program can be strengthened by incorporating the implementation strategy and policies as part of itself. The context may be modified to attract both domestic and foreign investors and traders. Indispensable central government's support for RFE in providing sufficient incentives to potential foreign direct investment into this region could have been built-in in the Program. Such a federal support will be vital, especially at the initial stage of the program implementation, if the objectives of the Program will ever be attained. Federal government's guarantee of the foreign investment, to take up one of the most seriously negotiated conditions with Japanese investors as an example, has not been given to foreign businesses considering investment into RFE. The listed development projects had better be disclosed to overseas business enterprises for business considerations, be subjected to feasibility studies, no matter how rough they may be, for the screening by the concerned parties, and the transparency of the relevant data could be increased to earn reliability from business. A monitoring mechanism should be incorporated in the Program to identify and locate the problems

and activate corrective measures over all the stages of the implementation process, both for the Program and projects listed in it as well.

If properly used, the Program could be instrumental to the overall recovery of RFE, because it could integrate the federal strategy, local initiatives, and even foreign interests to create a set of parameters attractive enough to stimulate undertaking of projects proposed in it. The federal government can provide basic infrastructure for the market mechanism, such as transportation and information network, align the macro economic environment as is now being formulated in the tax reform in Duma, and extend support to RFE to cope with adverse region-specific problems. As a matter of fact, a considerable amount of economic freedom was once given to some areas in the Far East, at least on the desk plan, as in the idea of the Nakhodka Special Economic Zone in an effort to rescue the area.

Since it had had many predecessors that had already failed to earn public credibility, the Program should have been made to earn public trust through actual disbursement of federal budgeted as was initially expected. The Program is politically blessed in that it was the first of the local development programs to be given presidential decree status. If it would turn out to be another failure, there cannot be any more in a foreseeable future, and it will cause the government to lose an important tool of managing the macro economy. Therefore, the implementation process must satisfactorily meet the public expectation and as exact as stated in the Program, in structuring the managing body and providing the federal budget so that it can earn and strengthen the credibility. Unfortunately, the process of founding the program implementing bodies was slow, and the allotted federal budget was too small relative to the planned total investment, and has not been smoothly disbursed as set in the federal budget. The Program is thus rapidly losing the reliability. Even worse is that it is not only at home but also abroad, as in Japan, where officials informally started to express their concerns over the decaying impact of the Program on the Russian decision makers. Unless the Program is taken back to the right track at home, it becomes harder for the Russian authorities to obtain otherwise possible foreign loans for the implementation of the development projects listed in the Program.

In spite of these adverse developments of the Program implementation process, there still seem to remain supports from within and without. After the announcement of the Program, Program-related issues were touched upon, no matter how briefly it was, in discussions between Russia and Japan at various kinds of meetings. Several Russian experts of the Program were invited to Japan to hold seminars and discussion meetings with Japanese experts on the Program. Also, a high-ranking Russian government official took the labor to visit various institutions in Japan, including ERINA, to exchange views with, and obtain advice from economic experts. After these meetings, the Zarubino port redevelopment project, one of the strategically focal multilateral project described below, has come to be added to the list of the Program projects sooner or later.

As far as there could not be another development plan that will be trusted and effective in deed, and as far as an integral set of knowledge and information is needed to promote reconstruction of the economy, there is left no choice but to improve and rescue the present program.

Usually, in an uncertain situation, a clear de facto success exerts strong influence on mobilizing resources to the point at a great scale. In this context, the Zarubino port development is recommended to be used as such a leverage. If this project turns out to be a success, favorable impacts will spread not only within Russia but also in PRC, ROK and Japan. This project^{xi} will also illustrate the essential nature of an international project and automatically indicate measures to be taken to lead it to a success. For one thing, it will reveal the value, complications in domestic politics and international relations, financial difficulty, business concerns, technical problems and so on, of the issues related to planning and implementing of a project. For another, it will show how the process of negotiations between or among the concerns should be moderated.

The Zarubino port project is the renovation and expansion of the capacity of the port to handle mostly transit cargo from and to the Jilin Province, China, in conjunction with extension of the railways of the two countries to be connected over the national border. The railway connection can also serve other regions of RFE in their trade with China and beyond. The detailed feasibility study shows that all the countries around this port can benefit considerable.

At first, however, the Russian side was suspicious that they might lose their potential overseas market for their coal in competition with Jilin. Their concern was groundless because their competitor is the Heilongjiang but not Jilin, and the former will use for its coal export, if at all, the Nakhodka port, which the Russian side can control. This point had not at first been understood well by the policymakers in the local as well as federal government. It is surprising that the site is only within a proximity of a hundred miles or so from the place of local policy making. What is needed here for constructing healthy economic structure is reliable information channels both between the central and local governments and also across the national border. The style of information exchange may also have to be improved in the way that the contacts will contribute to confidence building, rather than causing complications.

For this project to be successfully implemented, there are many additional conditions to be met. At the macro economic environment, a sound constitutional regime must be provided, and the political and administrative governance should be recovered to such an extent that the businesses can be persuaded of the reliability of the economic rules. Also, the tax system must be internationally competitive enough to induced necessary foreign capital, as the DPRK is trying to invite FDI by lowering the corporate income tax to 14% which is one percent lower than that in the would be competitor, Vietnam, for instance. For region specific factors determining the industrial development, the federal government should provide selected regions in RFE with specially favored status, as far as it desires the population size at a satisfactory level from the point of view of, say national security.

So far, interestingly, it seems that the Japan side showed more positive attitude toward the Program, in conjunction with her economic cooperation with Russia. If Russia is really serious about the reconstruction of the economy of the Far East, the federal government embrace the Program^{xii}. in the Russo-Japanese economic cooperation package. Some of the promising projects in the Program were as a matter of fact included in the Hashimoto-Yeltsin agreement made at Krasnoyarsk.

1-2. Northeastern Provinces of the People's Republic of China

In the People's Republic of China it is institutionalized for the provincial governments to make provincial Five Year Plans in the quinquennial cycle of development planning along with the FYP of the central government. Accompanying these five year plans are the respective provincial long term development plans providing guidelines for development project identification and implementation. Although provincial plans must be approved by the central government later on, it is the local governments that originally map out the skeleton of the plans.

Since the identification of development projects requires detailed data and commitment of interest-bearing groups, the local governments have advantage in the formulation of the basis for NEA. It was the Jilin Province government and authorities, as a matter of fact, that realized the connection of railroads across the Sino-Russia national borders, without substantial financial support from their central government. It is dubious, in view of so many obstacles confronting the implementation of this international transportation network, that negotiations between the central governments alone has realized this breakthrough to the shaping of the Japan Sea community comprised of at least five, and potentially six or more countries.

The provincial Five Year Plans and accompanying long term plans will affect, and be affected by, the development of neighboring areas. In this sense, these are the elements to be directly linked with development plans for the neighboring regions and countries. These plans can be coordinated with the Long Term Development Program for RFE, and logically, both Chinese provinces and RFE benefit from each other by doing so. Although there is no formal channel to coordinate local plans across the national borders yet, there seems to be no impediments for local authorities to engage in international adjustment in order to improve the plans. Recognizing the national interest born out of improved local plans, central governments in NEA have good reasons to encourage local initiatives in making their respective local plans.

1-3. Local/Private Initiatives in International Cooperation

At local government levels, there are many more initiatives leading to the NEA economic community. Picking up adequate timing, Jilin-South Korean joint venture sea liner companies and local government authorities convene international meetings among local entities to discuss possibility, and how to implement if it is possible, of opening new sea routes or lines. Having been backed up by the Jilin government, one of such companies is now engaged in full-fledged marketing activities extensively with Japanese businesses. The Japan Sea has now come to be called the stage of the Great Voyages that are arising at tens of sea ports along the Japan Sea both on the Japan's coastal areas and the Eurasian Continent. If the central government of Japan deregulates maritime economic activities to allow, for instance, to foreign fishing boats to use Japan's sea ports for repair and maintenance services, the intensity of the Russo-Japanese maritime exchanges will rapidly increase. Certainly, it has been more than three-century old aspiration for the

Russian sea-going hunters to be serviced by Japanese ports, and today Russian fishery industry is seeking not only markets for their catches and products but also closer cooperation in production activities, including financial and technological support, transfer of managerial skills and quality control. As far as the general trend of deregulation in Japan is not to be reversed, a bird-eye view of the Japan Sea in a few years will give the spectators the conviction that the NEA countries are melted in this bridge of peoples.

Another example of opportunities available for widening and deepening exchanges of views at local levels in the eastern part of NEA is the Far Eastern Governors' Meeting. Although this meeting has been financed by the MOFA, Japan, the local entities are proactive, and made this meeting convene another annual meeting of Japan's four prefectures on the Japan Sea coastal areas. It was in Fukui City on the occasion of the 1996 Meeting that the Feasibility Study of the Zarubino Port was formally handed to Governor Nazdrachenko by the representative of the Russo-Japanese Economic Committee, Keidanren (the Federation of Economic Organizations) after fairly detailed explanation by the study team. Incidentally, the predecessor of this FS financed by the Niigata Prefecture and conducted in 1994, has come to be known as the first foreign assistance by the local government in Japan.

Even smaller localities, in PRC, ROK, and Japan, came to seek development momentum across the Sea of Japan. The cause of this move in Japan is the disastrous failure of their development efforts in the past. In 1960's and 1970's, small localities facing the Japan Sea enthusiastically sought economic partners in the Pacific coastal areas. The result was that their valuable labor force and capital emigrated to their partner economies connected by strengthened transportation networks due to the backwash effect. Similar experimentation and failure were observed in ROK as well; the Seoul region came to absorb more than half of the national economic resources, draining local economies of the scarce productive resources. After these experiences, Tottori in Japan and Sokcho in ROK came to tie up in collaboration across the national border and the Sea of Japan. In PRC, local municipalities in the Northeastern provinces are developing industrial estates to facilitate foreign direct investment, and looking for effective channels to access overseas potential investors. Since their experiences in the international financial markets are limited the rate of success is not very high. However, in cases where contacts are provided, such as by way of overseas Chinese businesses, real investments are seen in cities remote from the conventional business centers. In a suburb of Changchung, for instance, Thailand capital-financed broiler processing plant is successfully operating, using poultry collected from nearby farmers, each in a small quantity but amassed in total to a sufficient size to be exported to Japanese markets. Industrial estate authorities are trying to approach Japanese investors with beautifully printed brochures in their hands but with no idea how and where to go. Here is a great possibility that a small service of mediation will spur business transactions between SME's across the Sea of Japan.

In the past several years, non-profit organizations were established in Japan in the Japan Sea coastal prefectures solely aiming at the economic cooperation with other local economies in NEA, and establishing a similar one is under discussion in ROK, though the recent depression may delay the realization by a few years. These organizations are financially supported by the respective

prefectural governments. Their activities are sometimes complementary in inducing otherwise excessive amounts of international cargo shipment and sometimes competitive as in inviting new sea liners to their own ports in the international arena and in obtaining domestic transportation infrastructure investment. In general there is a shared view among them, however, that their individual economies are too small for the economic development of local areas of NEA to be accelerated, and need functional integration of scattered potentials into an effective single economy. So far, practical collaboration was rather weak among them, but the shared view of the continent-Japan linkages is gradually drawing them toward shaping a greater view of the NEA and beyond, to the central and western Asia, and farther to Europe in connection with the idea of the Eurasian Land Bridge. If adequately assisted, the group of these Japan Sea Rim NPO's can be turned into a driving force of the NEA subregional development in Japan where the central government's commitment is not yet a reality.

As the above-quoted examples show, it is the pressing need of local economies and societies that are driving the local initiatives for international cooperation. This aspect is in contrast with other subregional development in Asia where the central governments took initiatives. This fact alone will be sufficient to qualify the local governments and authorities to proactively participate in the formulation of the NEA subregion. While necessary legal and institutional arrangements are to be provided by the central governments, therefore, greater degree of freedom in policy making and creating implementation instruments should be given to local entities in the each country in the NEA subregion.

2. Public-Private Partnership for Infrastructure Building in NEA

Conventionally, provision of infrastructure used to be viewed as the central governments' responsibility. The successive takeoff of Asian NIEs since late 1970's proved that the big-push theorem in development economics is especially relevant to the infrastructure building in the area of transportation and energy. The condition of takeoff stated by the big-push regarding the procurement of required capital fund came to be met by drastically increased ODA in 1970's mostly to finance big-scale transportation facilities; the last ODA to Japan was financing the Tokaido bullet train railways by the World Bank.

The shift of the financial capability from central governments to private sector, coupled with tendency toward open economies and privatization of economic activities in developing countries, however, changed the notion of the distribution of responsibility and division of labor between the public and private sectors. The central governments of industrialized countries tended to suffer loss in financial degree of freedom due to ever-tightening financial balance, and failed to maintain pledged increase in their offer of external assistance, while big-scaled business enterprises accumulated huge amounts of investment fund. In such a financial situation, the outward-looking development strategies adopted by Asian countries provided, and will keep providing, fairly profitable investment opportunities for global private enterprises. It is natural that the keen competition among developing economies for limited ODA

and FDI will sooner or later press the governments of developing countries to open and enhance the area of foreign investment in conventionally beckoned as military sanctuary sectors. As a matter of fact, in Indonesia, coal-fueled power plants were put on international bidding early in 1990's.

This tendency of government-promoted infrastructure building by foreign private businesses is promising to enhance financial capability of fund-limited developing economies, which is undoubtedly the severest bottleneck of economic development in most of the NEA countries. The build-operate-transfer (BOT) scheme for provision of infrastructure is actually the apparatus to carry out this mechanism. As governments will come to realize that in practice there is no danger to national security in allowing foreign ownership of constructed infrastructure, even the BOO (build-operate-own) scheme may become realistic measures to be widely adopted, in the light of ever increasing demand for capital fund. Recent financial crisis in Asian countries will probably accelerate the adoption of BOO across the board. Thus, the collaboration between the public sector in NEA and private foreign businesses should be promoted by all the means. However, there are two basic points to be kept in mind when engaging the governments of the recipient countries in mapping out the infrastructure building, on one hand, and foreign businesses in implementing the projects, on the other.

The lingering obsolete notion of national sovereignty over the infrastructure, typically in the fields of international transportation and energy networks, strengthened by the concerns over international competition for the foreign capital fund, has a tendency to lead the respective countries to self-complete but multilaterally suboptimal plans of infrastructure designs. From the point of view of promoting overall efficiency of the subregional economy, therefore, the concerned governments should be strongly advised to embark on multilateral cooperation in mapping out blue prints of the infrastructure provision. The governments related to potentially multilateral infrastructure networks should be advised that they will benefit in many cases from not only increased efficiency but also from reduced financial burdens.

The implementation of infrastructure changes the investment opportunity and business environment for the private businesses, hence the initial conditions of overall economic development. The changed initial conditions then affect the future resource allocation. The businesses to be engaged in the construction of infrastructure based on BOT do not plan their project, however, in such a way as to optimize the long term macro-efficiency. Hence, their toll road, for instance, will only take into consideration of the current distribution of plants and population, no matter whether it is optimal from the view point of long term development. To the extent that the change in the initial condition causes deviation of overtime resources allocation from the long term optimality, therefore, there remains the unfavorable effect of the BOT-led infrastructure provision.

It is highly desirable, therefore, that the governments that are planning to adopt BOT or BOO scheme will make long term development plans in advance and lay down conditions that the BOT project is designed to comply with the long term efficiency conditions. After all, these necessities will require that the development potential be first assessed, the long term development plan be mapped on the basis of the long term efficiency criteria, not on the market-led short term

efficiency, and the necessary conditions for the long term optimality conditions be specified as conditions for the BOT or BOO scheme investment projects.

3. Linkage between Small and Medium-Sized Enterprises and the International Market

3-1. Latent contradictions in the high economic growth of Asia

The recent high economic growth of Asia is due to the effective strategy of an export-oriented industry. This strategy, however, inevitably expands the inter-industrial gap, and each country's internal regional differential at the same time. This contradiction, which emerges more clearly as economic development succeeds, ends up jeopardizing political stability. How to assist the traditional sector that has seen little or no development for a long time, such as local enterprises or small and medium-sized enterprises (SME's), should be a major policy issue in economies that are taking-off or preparing for economic take-off. To effectively solve this problem, the government must assist SMEs in building their SMEs' cooperative relations with foreign enterprises, a task difficult to achieve without governmental assistance. We note that as a result of recent economic developments among developing countries, the mutual complementarity among developing economies, markets for consumer goods of medium quality, and the possibility of international interchanges by SMEs have emerged.

The economic development policies of import-substitution-oriented industrialization and of infant industry protection before 1980's intended to make leading industries perform as a driving force based on the linkages among domestic industries, resulted in failure. On the other hand, policies after 1980's aimed at picking up domestic industries that could link with the existing international inter-industrial systems found a larger market abroad even though they pulled down the systematization of enterprises. The fact that inward-looking development policies of up to the 1970's all failed and outward-looking policies succeeded in the 1980's implies that there are solid technology systems defining inter-industrial relations, so the products could not be competitive in international markets with the technology of traditional industries in developing countries. Consequently, the domestic differentials between advanced industries that connect with international linkages, which are usually large enterprises in developing economies, and those in traditional sectors with little linkage with foreign enterprises with reliable technologies, expanded rapidly. The higher the economic growth rate driven by international linkage is, the faster the inter-sectorial and inter-regional differentials grow. Thus, the more successful the macro economic development is, the severer the equity issue tends to be. It has not been recognized well that economic development in Asia is built-in with such a contradiction. However, this contradiction reveals sooner or later in all countries experiencing rapid economic development.

3-2. Stability Implication of Development Contradiction

The maximum permissible limit of the inter-industrial or inter-regional differentials provided in politics^{xiii} is said to be around fifteen to twenty times or more. If the differential goes beyond this limit, the political instability may reveal. The observed regional differential in China between the coast and inland areas has reached thirty to fifty times. However it rarely makes headlines because of so many political conflicts in the inland farming areas.

World history tells us that domestic problems can trigger regional conflicts and, in turn, international friction. It is exactly this point that was pointed out by the Applied Social Science Research Institute (FAFO), Norway, that offered the Oslo Channel that triggered the rapprochement between Israel and Arabs. The reduction of the domestic inter-regional differentials is therefore imperative not only for the country concerned, but for the international community. Promoting international cooperation among SMEs across the national borders, especially between those of developing areas and industrialized ones, and meeting the needs of the newly emerging intermediate-class enterprises, will definitely contribute to effectively alleviate or reduce the potential cause of regional conflicts.

3-3. Measures to Link SMEs and the International Market

One of the impediments of the linkage of SMEs, especially those in developing countries, with internationally competitive enterprises, is the lack or insufficiency of information exchange between those two groups of business entities. A variety of groups struggled to fill in this vacuum of information in the past. An example is the experiment conducted by a unit of the United Nations Center for Regional Development, called the Business Information Support System. The official of that unit extensively interviewed SMEs in Japan and abroad, and derived findings of practical importance. They classified the information into general information on the economic environment of potential investment areas and an enterprises-specific category, and tried to disseminate these two kinds of information both ways between the industrialized countries and the investment accepting, developing countries.

The reactions to this system in combination with professional consultative services seemed to be promising of meaningful linkage of the SMEs in industrialized countries and those in developing countries. Some Southeast Asian governments took interest in this trial program. In Thailand, the Board of Investment came in to provide basic services aiming at interfacing foreign investors and domestic SMEs as well as international trade promotion. In Japan, the core of the former UNCRD unit moved out of the Center and organized a standing NGO to support this activity, which attracted attentions of several other NPOs and local governments. The basic scheme of this program also earned attention from ADB officials.

The demand for business information across the national borders is observed to be strong in many countries, especially those in transition to market economy, where the access to market information is difficult or prohibitively costly. In the Northeastern part of China, not few local authorities are running around to invite foreign direct investment to their specially designed industrial zones or special economic zones, without sufficient knowledge of how to make it happen.

In the privatized sector, producers of local materials-based commodities are waiting, with sales samples in their hands, for foreign buyers to come to their desks to start businesses, with no financial, managerial, or sales capability to conduct marketing on the international market. Common to business people in transitional economies, SMEs are reactionary rather than proactive in business, and tend to blame foreign business enterprises for not coming to them. It is highly probable that provision of adequate information will ignite their spontaneity and initiatives.

An information supply scheme will greatly improve the economic conditions of SMEs, promote interdependent economic systems at grass roots level, and turn conventional local businesses into pioneers of partnership building on a multinational level. We observe the potential demand for the business information, recognize its nature as a public good and see it as part of the essential precondition for the market mechanism that is missing in majority of the sectors in NEA region that encompasses a great deal of transitional economies and SMEs in existing industrialized.

Further, the information network as described above can supplement significant part of industrial policy. As part of TRADP promotion, recommendations were made by experts on the sectors of industries to be induced to the Tumen River Economic Development Area. Implementation of a business information network may, however, better serve the creation of efficient subregional economy, including the selection of the sectors, in this area through improved market mechanism, rather than with more or less subjective judgement.

4. Environmental Protection Measures in and out of Market Mechanism

4-1. Current Environmental Problems in NEA

In Northeast Asia, there is no solid institution engaged in protection of regional environment and solving transboundary environmental problems. There are some changes in the general situation, but the level of activities is low. One of a few favorable moves regarding the environmental protection is that the Environmental Protection Agency, Japan, took the initiative to invite an international meteorological environmental research institute to Hyogo prefecture and an acid precipitation research center to Niigata. Another is that the UNDP-assisted TRADP succeeded in having an MOU for environmental protection ratified by the five participating countries in 1995. Except these, stronger interest in economic development than in presumed minor issues including environment of decision makers of the NEA countries seems to discourage commitment to solve environment problems across national borders.

The awareness of the seriousness of environmental problems among the residents in this subregion, however, has been widening and deepening. In Japan, not few local center cities sponsored seminars open to the public, inviting experts from abroad. In China also, the awareness of the business people and government officials has recently increased visibly. According to an

interview article with an official with the Sino-Japanese Friendship Environmental Protection Center established in 1996, the number of private corporations showing interest in the ISO 14,000 Series of ISO has been increasing. One of their seminars on the ISO 14,000 held in Kuangchou obtained a participation by more than 50 cities and business representatives from 17 business sectors, for instance. Also, in the public sector, the central government increased the environmental protection expenditure in its budget from 0.7% to 1.3 in the last ten years (Nikkei 971201). In Russian Far East, even under the severe shortage of fund to accommodate environmental protection activities, efforts are extended to a variety of ecological preservation activities, though at a fairly limited scale.

Many environmental problems are, however, left as they have been in NEA subregion. Some of them are highly pressing of immediate actions. A briefly summary below will address the severity of the problems and necessity to take measures to improve the environment in this subregion. Some of the issues give impacts to international economic and security relations. If appropriately resolved, they may contribute to strengthening international ties in this region, instead of destabilizing the basic structure of international relations.

For Russian Far East, there are several serious environmental problems. One of the pressing concerns is the prevention of the possible nuclear contamination of the Japan Sea, and consequential Northern Pacific Ocean, by the not yet dismantled nuclear submarines of the Pacific Fleet moored at several ports along the coast of RFE. The number of the nuclear submarines to be dismantled is around 100 or 70% of 140 nuclear-powered submarines decommissioned in conformity with the START II. Almost all of those submarines have ages over the physical life span, while the Russian financial capacity to process them is two per year, because of the tight budgetary situation of the government. Improved nuclear waste processing technology has already been provided by Russian experts in creating on-the-barge plants for processing low level liquid radioactive waste, by using Japanese financial assistance. However, the estimated total cost of dismantling the unprocessed submarines and processing solid wastes is between fifty to one hundred billion U.S. dollars. So far, no plan has been announced by the Russian authority or by any concerned foreign governments or international organizations, to speed up the process, and the danger is left there as it has been. A means was proposed whereby creating extra SDR to mobilize fund procurement for this purpose at a U.S.-Japan-Russia tripartite international seminar^{dv} on monitoring the nuclear contamination of the Japan Sea, held at Niigata in 1996. This idea has not reached any decision-making entities that have capacity or leadership to mobilize funds at such a big scale. It seems that a groundless optimism that the Russian nuclear submarines are durable for many more years beyond their life expectancy is delaying required commitments by the concerns.

There are other specific environmental problems in RFE. Notably, the preservation of biodiversity and marine resources in the Far East, protection of the sea from potential oil contamination, and deteriorated mining technologies and management leading to environmental destruction around the mining sites are calling for improved environmental management. Accidental contamination of the Japan Sea by the oil spill from the Russian tanker Nakhodka in 1997 drew attention of a variety of groups. This event contributed to diffuse the awareness of the

potential danger, and will improve the attitude of decision-makers to implement effective preventive measures, though no concrete actions have been taken to establish reliable schemes toward this end.

Sanctuaries for migratory birds have already been set up, and efforts are being extended to other wild animals, like Amour tigers and fresh water fishes and mammals that are on the verge of extinction. Not yet answered is the question of the ultimate value of the variety of species to the human being, when, on a global scale, nearly a half of the kinds of big animals are in severe danger of extinction. There are tens of minority peoples in the RFE, some of whom are making livings on wild animals. For them, preservation of a sound ecological environment is needed. Otherwise, apart from the preservation of their cultures, means must be provided for them to secure sound life.

In China, because of the mere size of population of economy, present and future emission of environmental pollutants is drawing ever increasing attention of the neighboring countries. Air and water pollution problem will become severer as the economy develops, grows, and industrialize. No thorough study has been conducted so far on the magnitude of the impacts of the emission of Sox and water pollutants that will flow beyond the national boundary. Being heavily dependent upon coal, China's power generation and railway systems will increase emissions of Sox, and industrialization of inland areas along the Yangtzechiang River can cause a new environmental threat not only to downstream local areas but also the Northeastern Pacific areas, unless properly managed. Concentrated air pollution in major cities is easy for politically influential people to grasp the seriousness of the damage, as has been observed in other big cities in rapidly industrializing Eastern Asia and calling for action programs, as in Chungching. Reliable standards have not yet been effectively enforced, however, in the damaged areas, and Technological and economic cooperation have not been extended from abroad at a sizable level.

On the Korean Peninsula, the situation differs greatly. In the South, in line with the economic development, environment generally deteriorated, but the solution of them is feasible as far as the concerns stay committed to damage-preventive policies. In the North, economic development is much more important in raising the general welfare level of the residents than environment problems.

In spite of implemented policies and efforts to cope with environmental problems, their effectiveness is not necessarily sufficient. In many cases, shortages are observed in fund, personnel, and knowledge and skills. Further, basic nature of environmental issues as is described in the following section is not yet fully understood by policymakers, hence reliable strategies are needed to be mapped out to cope with new but foreseeable threats to the NEA subregional environment.

4-2. International Aspects of Environmental Problems

Environmental problems can be classified according to the nature of them: long lasting or short-lived, global or local (in particular, whether the range of damage is domestic or across-the borders), and the degree of potential loss in general welfare. Since domestic problems can reasonably be left to the preference of the residents over the trade-off between the environment and

economic goods, this paper focuses on the international environmental management of long lasting problems the damage of which goes beyond the national borders.

Discussions of international environmental management tends to converge on a concept of 'justice' leading to how to implement and enforce the polluters-pay-principle. Effective actions cannot be expected of this principle, however, because of the intrinsic nature of externality lying in this kind of problems. The damages or loss of economic value incurred by inadequate management by a country is partly or wholly burdened on other countries. In addition, there are many cases where the trade-offs of the environmental damage against economic value differ from country to country. Usually the trade-off ratio between the quality of environment and economy depends upon the standard of livings, as well as preferences. As far as the living standard changes over time, the trade-off ratio also changes. This raises the issue of discount rate of the future state of environment and economy. If the policy-set discount rate is lower, the optimal level of environmental protection will be lowe, and vice versa. In such a case, the future cost of recovering the quality of environment desired at that future time will be greater. Another issue related to international relations is that, in setting environmental standards, negative reactions from other parties are taken into calculation only partially or not at all, ending in insufficient legislation and law enforcement in practice. Hence, external diseconomy in international environmental problems tends to lead to a suboptimal level of protection.

Recognized environmental issues around the Japan Sea, the Sea of Okhotsk, and the East China Sea are no exception to the above-described tendency. Eventually, unsolved environmental problems and the differences in the priority of environmental problems relative to other economic issues may eventually cause frictions in international relations in this region.

4-3. Mechanisms and Measures Solving Environemntal Problems

Out-of-Market Solutions.

In view of the intrinsic nature of externalities in environmental problems, the basic solutions of the problems seem to require, at least, to establish mechanisms to accommodate international exchanges of information, data, personnel with expertise on environmental problems by the area of the problems, and a strategic study institution to guide the concerned governments in their environment policies. The mechanism should be so designed that information of vital importance generates actions by policymakers. As far as the impacts of ethe problems take place out of market, policy by the central governments must mandate the protective actions.

In Noertheast Asia, technologies, experts, funds, and monitoring facilities are sufficiently available once an effective mechanisms are established. The discussions in the preceding section calls for establishment of an environmental protection institution covering the whole region. By the nature of the problems, unilateral or bilateral schemes seem to lack the NEA subregional rationale. In due attention to negative image of the environmental protection, i.e., negative to industrialization and economic development in general, the scheme should be designed to introduce positive elements. A candidate area of focal attention is the natural resources management. If properly

managed the profitability of forestry, such as those in RFE, for example, can be markedly increased in the long run. Joint marine resources management of the Sea of Japan and the Sea of Okhotsk by the NEA countries is another example. Proven economic profit will certainly strengthen cooperation among the countries, leading to another favorable feed-back from environment-protective business practice to policies.

In implementing international rules, sufficient flexibility should be incorporated in practice. A country willing to conform to the polluters-pay-principle may not be able to pay the cost now but in later years. In such a case, loan financing mechanisms should be provided to financially difficult countries, preferably at a favored interest rate in view of the possibly lower discount rate in the international society than in those needy, developing countries.

Solutions through Market Mechanism.

Some environmental problems can be solved, at least to an appreciable degree, through market mechanism. Creation of environment-friendly businesses has been underestimated by industries, because of the obsolete paradigm of conventional economic systems. Public perception is changing drastically, however, and time seems ripe to initiate massive dissemination of business information across the national borders and business sectors. Utilization of production factors and resources across the national border can be accelerated by lowering the trade and investment barriers, contributing to the overall saving of environmental load from economic activities. As has repeatedly been proposed by RFE authorities, for instance, hydropower resources of the Amour River can be explored to serve an international electricity system covering ROC and DPRK, as well as Russia.

An important measure has been left unadopted that could greatly contribute to save future emission of air pollutants from thermal power generation plants to be rapidly implemented in developing economies in Asia. Technology is available for desulfurization of exhaust gas from the power plant. Lacking is the international agreement to protect clean air by implementing the technology. The power generation efficiency is estimated to decrease by two to three per cent if the desulfurization device is applied, but an incentive mechanism can be built-in following the spirit of the Kyoto Declaration on the global warming problems, if the carbon emission right can be sold on the international market. Thus, the World Bank and other major international development assistance organizations should be encouraged to consider this possibility, at the time the NEA economy will truly incorporated into the global community.

Concerted efforts should be directed to business creation for environmental protection by drawing wide attention from business circles, present or potential, throughout the world. A good example is dissemination of information on small types of hydropower- and windmill-generators can be introduced to international market at a much greater scale, and that at much lower prices. Small scale power generation technologies are especially suitable to an economy where the users are sparsely distributed like the RFE. Diffusion of the carbon emission right transactions in the coming era will support sovereign governments' efforts to accelerate implementation of business opportunities like this.

IV. Capacity Building

The implementation of the paradigm of peace requires particular mechanisms because of the variety of kinds of actors involved in the process. A mixture of the central and local governments in the major constituent countries in formulating multilateral development projects is one of the aspects that makes assistance by a third party or parties most productive. In the following, essential parts of the plan of a process and mechanisms will be discussed particularly in terms of its capacity building.

1. Major Tasks in Implementation of the Paradigm of Peace

The implementation of the paradigm of peace in the NEA subregion will require four broad categories of tasks: dissemination of the concept of the paradigm, confidence building among the constituent countries, the formulation of the framework of the Northeast Asian economy, and, implementation of multilateral development projects.

The paradigm of peace should be addressed to the international community persistently as the new guideline for the world community in the twenty-first century. Although similar agendas have been proposed by the United Nations, material impacts borne out of them have not been strong enough to trigger formulating the concrete ideas and action plans for their implementation. Thus, as part of the process for implementing the paradigm of peace, this concept itself must be widely disseminated to the leaders in policy making in all the relevant fields: international institutions including the U.N. family members and other international assisting organizations, political leaders of the countries in the NEA subregion, local authorities, and private business and NGO's.

The NEA subregional countries are not yet ready to embark on multilateral enterprises of building interdependent systems due to lack of sufficient mutual confidence. The confidence building among the political leaders in the region is a prerequisite for the NEA subregion to be developed voluntarily by the constituent countries, with or without assistance by international organizations, as an efficient and internationally competitive economy. A sharable vision of long term development is highly instrumental for this purpose, because the leaders are not yet assured of the difference in economic efficiency between the partial cooperation, i.e., economic development through cooperation among a limited number of countries, and that through maximum possible cooperation across the national borders. The vision making should desirably be directly conducted by representative research institutes of the major constituent countries so as to secure transparency and compatibility of ideas of the participating countries. Assistance by experts from an international organizations or a third party country will be productive to leading their efforts to the critical points in multilateral cooperation.

The NEA economies are not yet provided with appropriate economic environment to start

long term development. Impediments to fostering favorable development environment in policy, legislation of economic activities, laying out economic regulations favorable to international transactions, jurisdictions to administer and settle frictions in business activities and the like are that most of the constituent countries are still in transition to market economy, and differ in developmental stage. Thus, the constituent countries of this subregion need collaborate with each other, as they are straightforwardly heading to open economies, to establish mutually acceptable frameworks, or even a common framework, for various international economic activities. The formulation of frameworks will eventually lead to the integration of this subregion into an institutionalized economy like NAFTA or ASEAN.

To accelerate the diffusion of the sense of community among the constituent countries and local areas, multilateral development projects should be identified and selected to be jointly implemented that will prove that multilateral projects can realize more efficient economy than unilateral or bilateral ones. An energy system, such as natural gas development in Russian Far East combined with pipelines across the national borders or hydroelectric power generation on the Amour River and electricity network extending to the neighboring countries, and transportation network covering all of the countries in NEA are promising projects for this purpose. Other candidate development projects should extensively explored before embarking on this enterprise.

2. Capacity Building for Implementing the Paradigm of Peace

2-1. Creating the Process

In view that at present there is no entity that can persistently carry out the missions discussed above, capacity must be first built. The required capacity will be two in kind: a forum or process to facilitate discussions among the constituent countries, and a standing body to provide services for the implementation of multilateral development projects. The process will provide opportunities for the meetings among the constituent countries at various levels ranging from business leaders, local and central governments, experts, and to international organizations. To maintain the basic spirit of the paradigm of peace, these schemes should be housed in an umbrella provided by the United Nations.

The forum or forums thus created will be engaged in maintaining the continuity of the process of disseminating the spirit of the paradigm, materialization of the economic frameworks for NEA in the respective domain of long term development and macroeconomic management. Technical experts should be provided to lead the series of meetings toward establishment of concrete measures and actions. Unlike one shot meetings, the output of the whole process should be stockpiled into organizational memory.

To illustrate a process for the envisioning of the future NEA as an example, a multi-step process may be tried. The first step will be an international meeting for the presentation, followed by discussions by representatives from the participating countries, of a brief sketch prepared by an expert group of the NEA in 2025, say, based on the full-fledged multilateral cooperation, on one

hand, and another where there will have been no serious international cooperation among the countries. The following steps will include individual envisioning tasks in the respective countries and seminars for the presentation of the national development plans and fully represented round table meetings involving experts and policy makers representing the constituent countries.

The difference in efficiency between two cases, one in full-fledged multilateral cooperation and the other in only partially cooperated development, will be compared and assessed by the respective countries at the round table meetings. The final stage will be, idealistically, to draw a development vision of the NEA subregion to which the long term development plans of the respective countries and sub-areas will be tuned to the realization of the vision, and interdependent mechanisms.

In this process, several visible outcome will be produced. Databases will be constructed in the respective countries which, it is strongly recommended, will be collected and compiled to regularly publish the Northeast Asian Economic Accounts. Development projects will be identified and priorities will be placed in the respective national/local development plans and subjected to identify candidate multilateral development projects. The whole vision of the future NEA will modeled and investigated to secure consistency and compatibility of the component elements of the vision.

Throughout the process, the spirit of multilateral cooperation will be promoted by the U.N. umbrella. In the same way in the same spirit, series of meetings will be planned for exchange of information and views on specific issues as are enumerated in the above sections. It is strongly advised that experts and, depending upon the need, moderators be provided to mediate productive exchanges.

2-2. Establishing a Standing Body/Mechanism for Supporting the Process

The whole process of the realization of the paradigm of peace cannot be simply carried out through meetings of the concerned people. In the current situation of NEA where there is no fully engaged entity in this mission, it seems to be almost imperative to establish a new mechanism, or, preferably, a long standing body or both, to be devoted to this mission.

The all-the-time-attentive mechanism can be provided by the U.N. umbrella, managed by the DDSMS or its equivalent after the reorganization of the U.N. headquarters, comprised of core representative experts from the respective countries who are devoted to the spirit of the paradigm of peace. The selection of the experts will be crucial to this mechanism. The major role of this mechanism will be intervention in international exchange of information, views, and wisdom at important moments in the development of the process toward formulating the NEA subregion.

Agenda on the promotion of concrete activities, including both the formulation of the economic framework and promotion of multilateral development projects, will demand extensive and laborious services. This can only be borne by a properly staffed standing body. It will require well qualified, in-house or externally rendered expertise, stable financial support, and the continuity to make best use of the stockpiled organizational memory. More concretely, this standing body will

be required to design series of international meetings at various levels, access qualified people in professional, political, and business circles, and raise funds to support activities related to their missions. A form of an association or federation of NGO's may be a passable substitute of the organization discussed here, though there remains a possibility that the mission-orientation will be weakened by the individual jobs of member bodies.

The process will be improved through practice and organizational memory accumulated in the process itself. The experience of the experts in this kind of enterprises shows that one of the most effective approach to this kind of missions is to combine clear ideas and established facts to prove both the soundness and feasibility of the mission.

V. Findings and Recommendations

Northeast Asia is the testing field of the paradigm of peace to be embodied in the structure of development-cum-interdependence to prove its historical legitimacy. To realize its vision in this subregion, two missions must be completed. The first is to address the philosophy of the paradigm of peace to the world community as the model of the community guiding the twenty-first century. The second is to prove the efficacy of the paradigm of peace by establishing the fact of multilateral cooperation in the development of the NEA subregion. In the long run, enhanced and strengthened interdependence will lead to the formation of an integrated subregion. Since the NEA economy will affect and be affected by other countries and regions through external economies to be rendered by this subregion, participation from other areas also should be accommodated in this regime.

With due recognition of the critical importance of the collapse of the cold war regime, the paradigm of peace will set forth the welfare-oriented structure of the world community. The efforts toward this purpose converge on the promotion of multilateral approaches, not only as a means but also as a value itself in its capability to advance mutual understanding and confidence.

We observed in the twentieth century that free trade system has been established in the domain of the world economy. This outstanding achievement will be enhanced to more global economy involving freer movement not only of goods but also of production factors and other economic resources across the national borders in the spirit of the paradigm of peace.

In the enterprise of building the paradigm of peace in Northeast Asia, The United Nations should take the intellectual leadership and provide processes and mechanisms under its own umbrella to effectively accommodate and integrate presently scattered activities leading to the formation and development of the NEA subregion. The processes under the proposed umbrella are expected to provide fora for extensive and substantial exchange of views and opinions among the member countries. Activities there should include agenda setting for the development, defining the economic environment comprised of legislation and jurisdiction on economic matters, regulations, and the subregional macroeconomic management. Coordination for border clearance, joint countermeasures against a variety of new threats will be also major topics to be covered in the

process. Implementation tasks may better be left to other entities, except when it is about creating a breakthrough.

The formulation of the paradigm of peace should not wait for the international politics in NEA to improve. Rather, the process of the subregional development should aim at improving the international relations related to the security and stability of NEA, thus to prove the efficacy of the paradigm of peace in this matter, as well as in increasing economic efficiency. Having lacked in institutional schemes to embrace development activities and in mutual confidence to promote spontaneous initiatives, both due to the remaining vestiges of the cold war, a new process for the socio-economic development of this subregion to this end must be strategically created and supported by multilateral mechanisms. The nature of this mission mandates that this process of implementation be continuous enough to make best use of the accumulated organizational memory.

Annex 1. Recent Trend in Russo-Japanese Relations

The Yeltsin-Hashimoto meeting on November 2, Krasnoyarsk in East Siberia, informally but substantially agreed to cooperate in the following: 1) improvement of the Russian guarantee of Japanese investment, and Japanese cooperation for reconstruction and modernization of the Siberia railway; 2) Japanese support of the integration of the Russian economy with the world economy, including her support of Russian WTO membership, and the adjustment of the Russian standards with the international ones; 3) enhancing the Japanese support for Russian economic reform; 4) training by Japan of Russian business people, acceptance of one thousand trainees of business and government officials into the Japan's SMEs' Training Center operating in RFE; 5) strengthening energy dialogues with focus on the RFE-Siberia energy resources development; and 6) peaceful use of atomic energy. The implication of this agreement differs from the Japanese conventional policy of separating politics and economics, with the top priority being on the settlement of the Northern territories. Preceding this summit talk, Prime Minister Hashimoto disclosed his intention at an informal meeting with a Japanese business circle that Japan would place its long-term relations with Russia on mutual confidence. This speech instantly spread all over the people interested in the Russia-Japan businesses in Russia as well as in Japan.

Annex 2. Economic Benefit of Multinational Transportation System: A Case Study on the Northeastern Provinces of China

China is said to be maintaining a 'Food Security' strategy that prohibits use of foreign territories for the transportation of its domestic food. However, if the PRC uses the sea lines on the Sea of Japan for corn and beans produced in the northeastern provinces and rice produced in the southern regions through Tumen area seaports in Russia and North Korea, a significant amount of transportation cost can be saved. In addition, this route will generate indirect benefits such as increased inland transportation capacity from reduced grain transportation. This extra transportation capacity will promote economic development through increased shipments of industrial goods now bottlenecked by capacity shortage, or reduced required transportation investment in the future. At the same time, collaborating countries can benefit from increased sales of seaport services. Furthermore, the areas surrounding the TREDAs will benefit from a more competitive investment environment provided by more reliable transportation network in inducing foreign direct investment.

This study compared optimum patterns of Chinese food and coal transportation, with and without Tumen routes, first to derive the transportation cost differential between the two cases, and secondly to calculate the differential port service incomes earned by the ports in the region. This programming model was also applied to the projected Chinese regional economies in 2010, to derive the benefits of using the Tumen routes. These benefits can be interpreted as estimates of the Le Chatelier principle effects in its international context for the TREDAs. The result indicates

the magnitude of the relative advantage of a subregion over a sovereign-state-constrained regime. The total transportation cost in the optimal plan for 1995 without using the TREDAs ports was calculated at US\$4,681 million, where corns and beans are transported from Northeast China to Shanghai through railway and through Dalian port. If the TREDAs seaports could be used, however, the total transportation cost was calculated at US\$4,649 million for the same year, hence US\$32.86 million could have been saved on food transportation alone, and the ports of the Tumen River area could have collected additional US\$67.04 million in handling costs. In the same way, it is estimated that 25.56 million tons of food could be transported through the ports of the Tumen River area in 2010, although increases in food production are estimated at a low level. China could save US\$44.11 million in transportation costs, and the ports of the Tumen River area could collect extra US\$106.50 million in handling costs in 2010.

ⁱ Economic and Social Commission for Asia and the Pacific, Studies in Trade and Investment: Trade and Investment Complementarities in North-East Asia, Vol. 18, United Nations, New York, 1996.

ⁱⁱ This meeting was proposed, designed, consulted to central government officials of several countries in NEA, and co-chaired by the author together with UNDP representative under the assistance by the DDSMS, United Nations.

ⁱⁱⁱ A Japan Foundation workshop "Japan and Russia in NEA: Building a framework for cooperation in the 21 century," Tainai, Niigata, Japan, held on July 29 and 30, 1997.

^{iv} Paper presented at the annual meeting of the Regional Science Association, Japan, September 1997. The first version of this study "Optimum Transportation Program for Northeast China Using Tumen Area Sea Ports: An Assessment of International Cooperation Based on Le Chatelier Principle," was presented at The Northeast Asia Economic Conference in Niigata '97, co-organized by ERINA and the DDSMS, U.N, and held in January 1997.

^v The expected rate of return to the investment on this development project is high, especially for the subregion as a whole. According to the feasibility study mentioned in the text, the internal rate of return comes up to around eleven percent, while the social IRR reaches almost 50%. The benefit accrues to all the countries surrounding this port, but the great discrepancy between the private and public rate of return makes it difficult for private companies to engage in the project without sufficient support by the government.

^{vi} Interview with one of the business leaders of the joint venture.

^{vii} The first of the kind was constructed for the Second Twenty-Five Year Development Plan for the Republic of Indonesia in 1991, and revised versions were applied to the assessment of the TRADP, particularly to the evaluation of the required capital investment for the plan. See the following papers:

Nobukuni, M, DISCUSSION PAPERS ON LONG-TERM PLANNING, Vol. I (1990) and Vol. II (1992), BAPPENAS, Government of the Republic of Indonesia, 1990.

Nobukuni, Makoto, et. al., "Economic Development and Overhead Capital Services: PERT-Econometric Approach to Development Planning," Studies in Regional Science, Vol.23, No.2, Dec. 1993, pp. 19-36.

Nobukuni, Makoto, "Required Capital Investment for Tumen River Area Development: An Application of the PERT Development Planning Model," Atlantic Economic Journal, Aug., 1996. A diagrammatic exposition of the development phases of export-oriented industrialization was presented at several conferences, and briefly summarized in, Nobukuni, Makoto, "Contemporary Chinese Economy in Long-Term Development," ERINA REPORT, Vol. 8.

Also, for a sketch of the possible expansion of the model for practical application, see Makoto

Nobukuni, "PERT-Econometric-Dynamic I-O Approach to Long Term Development Planning," ERINA REPORT, Vol. 14, December 1996, by the same author.

^{viii} Duck Woo Nam, "Economic Cooperation in Northeast Asia: A Korean View," ERINA REPORT Vol. 6, 1995.

^{ix} Market mechanism functions in the environment defined and specified by a certain set of institutional setting, rules, political situations, and natural datum parameters. The efficiency and effectiveness of the market mechanism are a function of these factors. The relativity of the market mechanism should be taken into consideration in the design of a long term vision of the subregion. At least, market mechanism is not practically almighty in solving over-time allocation of resources, as far as uncertainty does not have a market for itself.

^x Ronald I. McKinnon argued in his The Order of Economic Liberalization: Financial control in the Transition to a Market Economy. The Johns Hopkins University Press, 1991, that unless the fiscal sector has been liberalized by the time the financial market is done so, the inefficient fiscal sector absorbs the scarce capital to crowd out the efficient investment in the private sector.

^{xi} The Zarubino port project was not listed in the Program. In the summer of 1995, a governor of one of the Far Eastern provinces, however placed a request with a Japanese governor and a leading economic organization that a feasibility be conducted for this project. In response to this request Japanese central government, some prefectures, and private companies having interest in business with Russia contributed the fund for the study. The feasibility study was completed by ERINA under the author's supervision and leadership in late 1996, and presented to policymakers in Russia, China, and Japan, face to face, in a few months following the completion. As of September 1997, the full text in the Japanese language is being translated by a Russian authority into the Russian standard in the Russian Language for policy consideration.

^{xii} With due attention to the above-described utility of the Program, the author had it translated into Japanese for publication by the Economic Research Institute for Northeast Asia (ERINA.) Fortunately, Professor Granberg, the president of our ARD, kindly contributed the foreword to this Japanese edition forthcoming shortly from the printing office, the Ministry of Finance, Japan.

^{xiii} The final report on the causes of violent conflicts and preventive measures of the Carnegie Commission is going to be published soon.

^{xiv} "Multi-National Workshop on Nuclear Waste in and around the Sea of Japan, Sea of Okhotsk, and the North Pacific Ocean" held in June, 1996, in Niigata.