

Chapter 4 Summary and Proposals for Improvements

1. Summary

1.1 Strong Need to Improve Logistics Services

In a questionnaire survey, initially the three aspects of services, costs, and infrastructure were compared, in order to gain an understanding of the overall urgency and priority of issues in logistics. The results indicate that the area for improvement having the greatest priority was logistics services, with 34; this was followed by logistics infrastructure with 27, and logistics costs with 22.

1.2 Strong Need to Improve Information Services

Logistics services were broken down into the four areas of transport, storage, cargo handling, and information, and problems in each of these areas were then examined, in a two-stage process. As a result it was found that in the area of logistics services, which was first in priority, information ranked first in all countries with 46, far beyond second-place transport with 18 and third-place cargo handling with 14.

1.3 Need for Further Development of Foundations with Emphasis on Roads

Results on logistics infrastructure are arranged into issues of the development of “hardware” infrastructure, and “software” issues including regulations. Judging from the questionnaire results relating to logistics infrastructure, top priority is given to the level of infrastructure development, with 55, followed by restrictions on market entry, with 25, and business regulations, 23; thus promotion of development of the physical infrastructure itself remains the area greatest in need of improvement.

Viewing the level of infrastructure in terms of priorities of transportation means, the first priority, roads with 60, reflects the high proportion of concerns about transportation means; second place is railroads with 34, and ports are in third place.

By country, roads occupy first place in The Philippines and Thailand, whereas ports are first in Malaysia with 13, followed by railways in second place with 11. In Singapore, the level of infrastructure development is itself high, and so it is expected that the “level of development” demanded will itself be different; but railways, which currently are not being developed, are in first place, with 16 responses cited.

When the hearing results on specific issues and the free opinions provided in questionnaires are comprehensively summarized, a number of interconnected problem-structures become apparent.

In order to organize these interconnected problem-structures, it is deemed appropriate to first give an overview of the common backgrounds of traffic infrastructure and legal systems relating to logistics, and then to ascertain the relations of these to problems with logistics services and costs in various production and distribution industries.

2. Organization of Major Issues

2.1 Issues Relating to Logistics Services

Logistics services were broken down into the four areas of transport, storage, cargo handling, and information; and issues in each of these areas were then examined, in a two-stage process.

The results for the number one priority of logistics services indicated that information ranked first for all countries, with 46, well beyond number two transport with 18 and number three cargo handling with 14.

This “information” is further broken down to give, as the number one priority for improvement, cargo and merchandise tracking management with 21, followed by the lack of stability and speed of communication lines with 19, and delays in customs informatization with 17.

There are characteristic differences in the priority order for different countries. Viewing the number one and two areas by country, in Singapore and Malaysia cargo and merchandise tracking management was first priority (with eight and six respectively), while delays in networking with other parties was second (five and four responses apiece; in Malaysia there were also four responses noting delays in customs informatization). In Thailand, the lack of stability and speed of communication circuits was first, while delays in networking with other parties and delays in customs informatization both had six responses. In The Philippines, delays in customs informatization was first (five), and the lack of stability and speed of communication circuits was second (four).

Viewed in terms of transaction types, there were no great differences in either domestic stocking/overseas sales (export type) or in overseas stocking/overseas sales (overseas-overseas, international type); but clear differences were seen in 11 responses of domestic stocking/domestic sales (domestic-domestic type), the number-one area in logistics services was “cargo handling” rather than “information”, and the number one issue in this area was “frequent inspection errors”.

Taking priority in first place with respect to transport services is the unreliability of arrival times, with 33. However, as was clear from the hearing results, in The Philippines, Thailand and Malaysia congestion problems in urban areas are mainly responsible, whereas it should be noted that in Singapore there is unreliability of the time of arrival of ships sailing international routes.

Top priority regarding cargo handling services was the frequent occurrence of damage to and breakage of goods, with 25. However, here too there were differences in priority for different countries. In The Philippines and Thailand, the top issue was the frequent occurrence of damage and breakage, but the number-two issue in The Philippines was forklifts, whereas in Thailand it was the frequent occurrence of inspection errors. In Malaysia, the same number of items were reported for frequent damage and breakage and for frequent inspection errors. In Singapore, the lack of

pallet standards and compatibility was the top issue, followed by frequent inspection errors and shortages of forklift operators.

Where improvement of storage services was concerned, top priority was given to shortages of manpower for inventory management and other tasks, with 21; this was followed by incomplete management of storage locations and periods, with 19, and frequent damage and breakage, with 12. By country, because of the small number of samples there is some scattering in the number of items noted for each subject; in The Philippines there were three responses noting shortages of transport equipment, and while some differences existed, they were not great.

2.2 Logistics Costs

Details of problems related to logistics costs were ascertained, grouping them into five areas. The highest-priority problem relating to logistics costs, at 29, was the high cost of freight charges relative to the service level. This was followed by the “lack of a table of fees (tariffs) and opacity of contract conditions”, at 19.

By country, there was some deviation as to items with the most responses; in The Philippines and Singapore there were numerous responses to the effect that “fees are high relative to the service level”, while in Thailand the top priority was the “lack of a table of fees (tariffs) and opacity of contract conditions”, and in Malaysia there were numerous responses citing the problem of “failure to observe payment conditions and frequent change of conditions”.

In terms of types of transaction, the above trends were observed for domestic stocking/overseas sales and for overseas stocking/overseas sales; but given that 11 responses were cited for cases of domestic stocking/domestic sales, “time is required for contract negotiations” becomes the number-one problem.

3. Problem-Structures and Countermeasures Viewed by Active Agent

Problems related to logistics infrastructure are common to all active agents. However, it was found that there are differences in the structure of problems confronted by the manufacturing industries, industry for production of consumables for domestic sale, and large-scale retailers in the special export zones in which these hearings were held.

Consequently logistics-related needs, the causes of noted problems, and relevant background are summarized for the three types of Japanese cargo owners.

3.1 Manufacturing Industries in Special Export Zones

The manufacturing industries in special export zones have little relation to the domestic infrastructure; needs focus primarily on connections with international markets.

However, international markets are seeing increases in exports to other regions rather than to Japan, and increased ties with China.

Issues that were noted included securing speed and stability of the Internet and other communication lines in the communication infrastructure; improvement of the convenience of the high-speed transport infrastructure and bonded transport between international airports/ports and special export zones in the transportation infrastructure; securing of a freight railway transport network; improvement of the convenience of air freight (number of departures etc.) for transport of semiconductors and other goods; custom systems and other networking with trade and financial information systems; and streamlining of inventory management systems through adoption of international standards for pallets and the like.

Hereafter, as companies situated in special export zones which previously had focused only on access to international airports and ports and the role of which was mainly as a base for international division of operations begin to provide products to domestic consumers in various countries, in response to increases in domestic consumption primarily in the major cities of those countries, connections with domestic shipping in the various countries will become stronger, in a manner similar to the situation of distributors described below, and mounting needs for development of transportation infrastructure in the respective countries is anticipated.

Figure 4-3-1 Case of manufacturing industries in special export zones

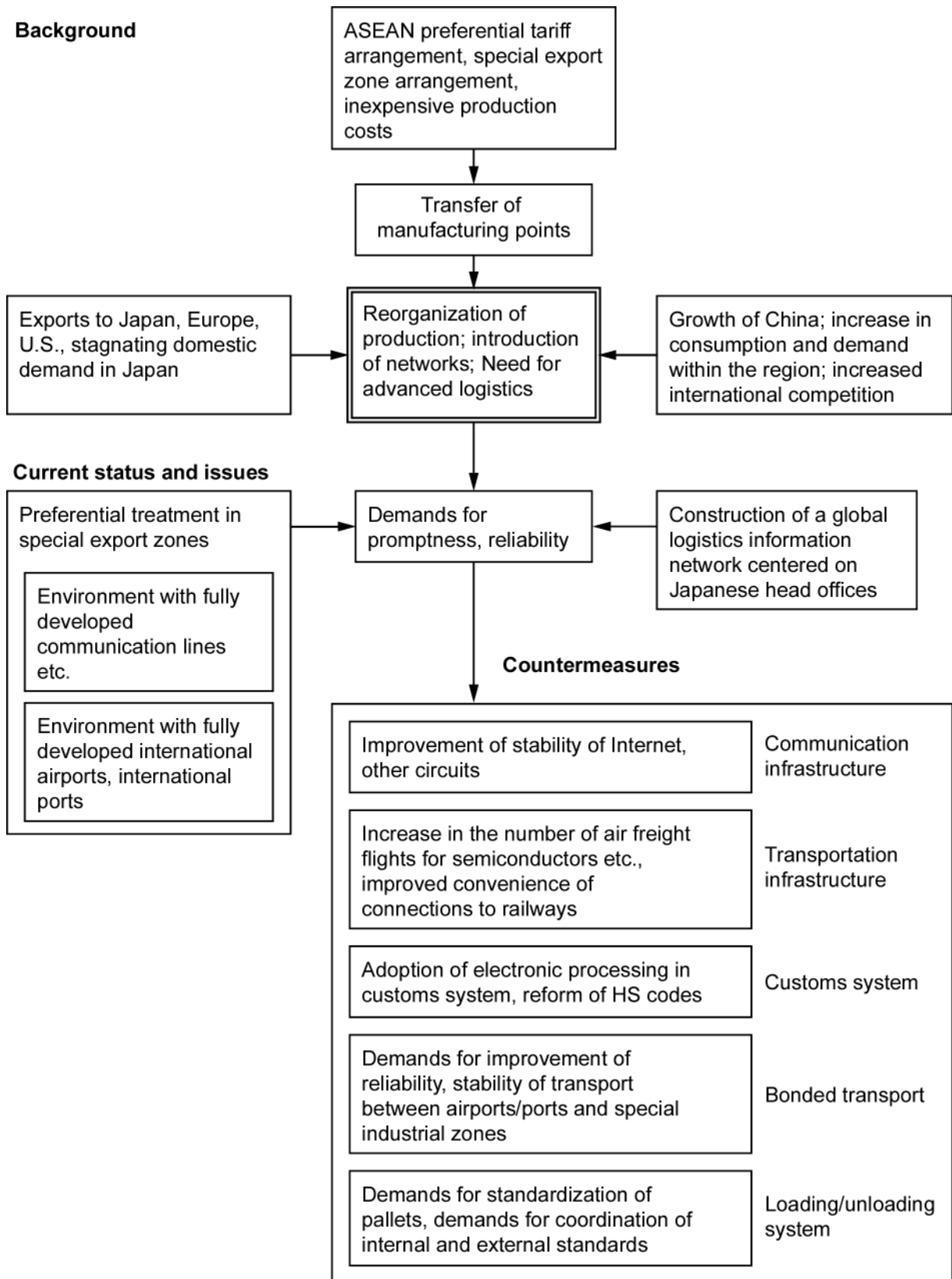
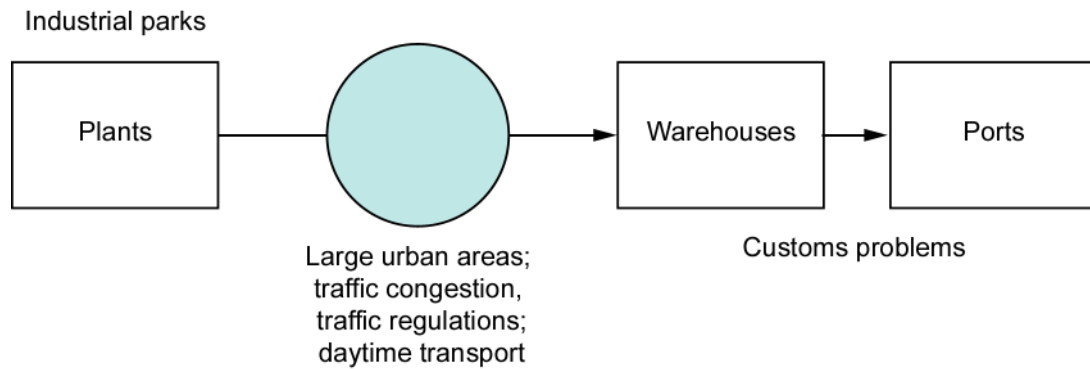


Figure 4-3-2 SCM issues faced by manufacturing industries in special export zones



3.2 Industries Manufacturing Consumables for Domestic Markets

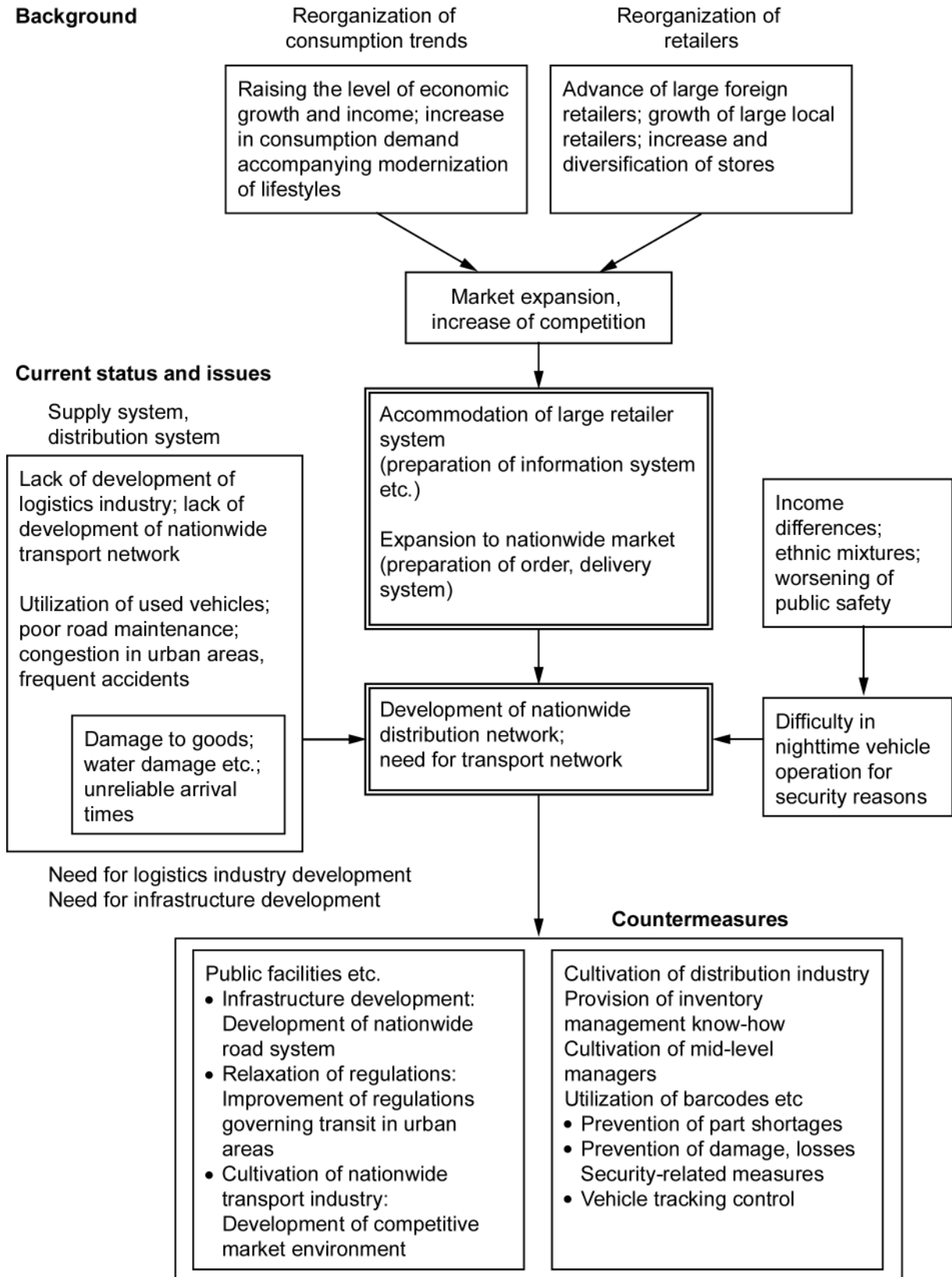
Consumable manufacturing industries have close ties with local logistics firms, including domestic sales networks, and an efficient transport system accommodating small mixed loads as well as development of a logistics system are deemed necessary.

It is this consumables manufacturing industry which is most strongly affected by the lack of development of domestic transport networks and intermediate distribution industries in the countries surveyed.

There is a need for information systems to accommodate the rapid growth of large foreign-capitalized distribution industries in major urban areas and electronic commercial transactions, and in addition there is a need to secure networks for collection and distribution of order information necessary for product supply networks for retailers in various locales within these countries, constituting a two-tiered information system.

Advances in informatization within nation-wide order systems are deemed particularly necessary, and in addition there is a need to ensure security in distribution networks, and to develop an environment for the competitive growth of large transport businesses handling nationwide transport.

Figure 4-3-3 Case of Industries for Manufacture of Consumables for Domestic Markets



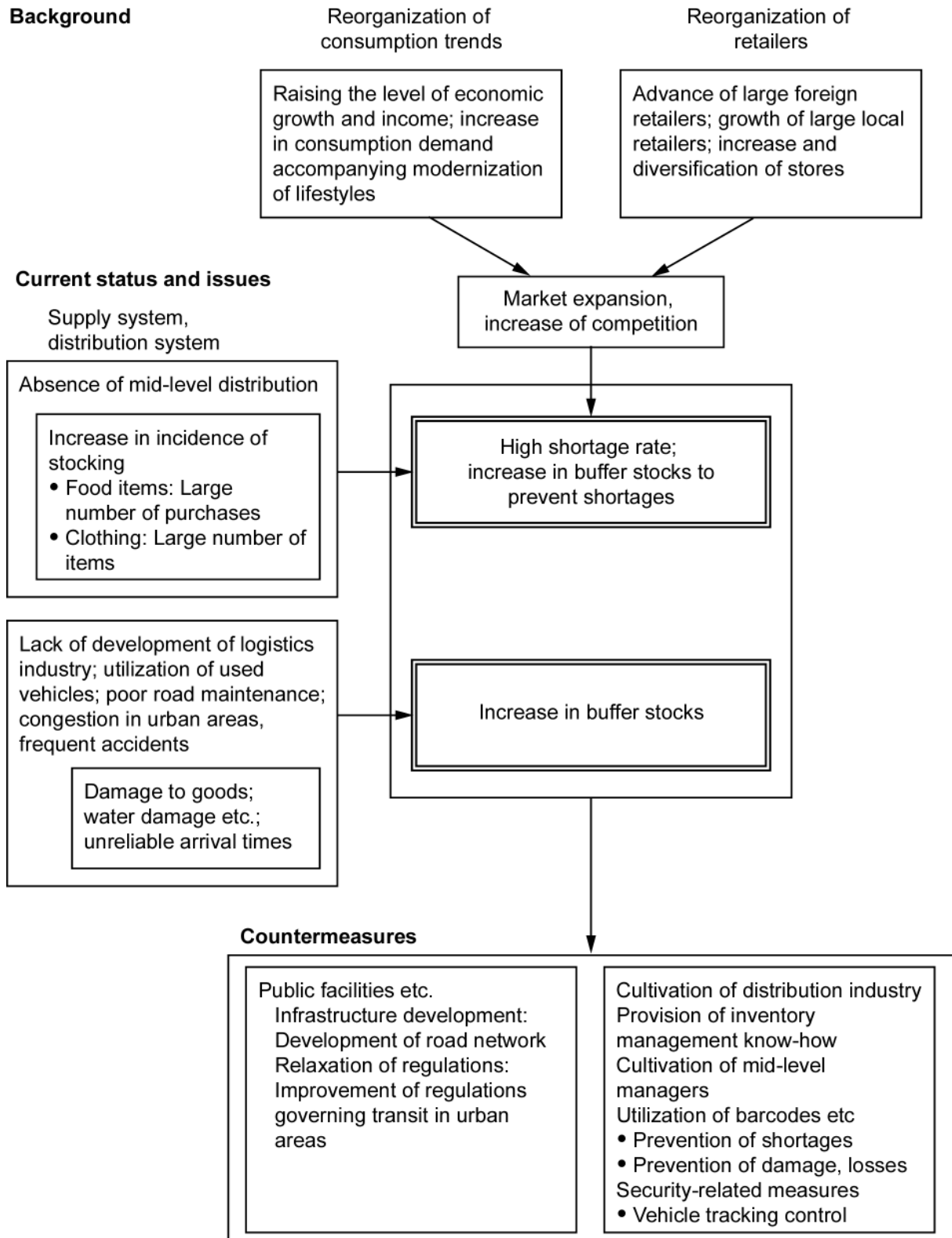
3.3 Large Retailer Industry

Large retailers face serious problems centering on inventory management, and development of an intermediate distribution industry is thought to be necessary.

Particularly in stocking, whereas purchases from large manufacturers are quite sophisticated and efficient, stocking of raw and fresh goods, clothing and other items mainly relies on direct stocking of multiple items, due to the absence of intermediate distributors. Not only is transport efficiency poor, but there is a high rate of shortages, and in addition to raising the level of buffer stocks, time and labor are required for management of deliveries; consequently a substantial burden is placed on sorting management within large retailers themselves.

Also, there is a need to develop infrastructure and raise the quality of transportation in order to alleviate damage to goods and water damage arising from traffic regulations in major cities and the fragility of road traffic conditions.

Figure 4-3-4 Logistics needs of large retailers



4. Arrangement by Common Issues

4.1 Issues Relating to Unit Load System Construction

In each of the four countries surveyed, all operations involved in cargo handling, storage, and inspection relied primarily on manual labor, and the frequency of use of pallets and forklifts is low. However, as items become more diverse, lead times are shortened, and efforts are made to improve freshness control and inventory management, some degree of mechanization and investments in barcode management and other informatization are judged to be necessary; and use of pallets remains an important future problem.

Particularly in domestic logistics, the adoption of pallets will itself be necessary; and because there are several coexisting standards for pallets in international logistics, unification on a single standard is vital.

In addition, packaging and packing for transport are also inadequate, cushioning material is not used, dedicated boxes are not used, and there are many other problems preceding packaging. It is deemed necessary to improve the quality of transport, including methods of cargo handling and storage, and to cultivate workers for logistics businesses.

4.2 Issues Relating to Informatization

In the four countries surveyed, informatization is being implemented only between large manufacturers and large retailers, and most transactions rely on faxes and paper documents. Consequently there is a need to promote informatization of transactions, including utilization of e-mail among small- to mid-size businesses.

Informatization lags in the fields of distribution and logistics, and there are many manufacturers which do not add barcodes to their products. Consequently barcode management is limited to inventory control within the depots of large retailers and to storefront sales management, and management is limited to affixing proprietary labels at depots and adding price tags. Hence it is necessary to prepare an environment enabling the affixing of barcodes at the manufacturing stage.

4.3 Issues Relating to Logistics Streamlining

In the four countries surveyed, neither logistics companies nor intermediate distributors are mature as industries. Among distribution aspects, direct dispatch from manufacturers to retailers is common, and there is the problem that it is difficult to promote streamlining such as inspections on receipt, batch deliveries, common deliveries and the like when making volume purchases of diverse products, as in the case of major retailers. With respect to transport, the operation of chartered vehicles is the rule, and there are no systems in place for mixed loads or for large batch transport between truck terminals. On the other hand, excessive loads are common, there are numerous accidents and malfunctions, and delivery times are not reliable; this is also the cause of damage to goods during transport and cargo handling. Consequently it is

necessary to cultivate specialized businesses able to improve distribution and logistics services.

4.4 Issues Relating to Development of Company Infrastructure

In the four countries surveyed, whereas infrastructure development is proceeding rapidly in international ports and airports and also in special export zones directly linked to both these types of facilities, it was noted that there remain delays in the development of inland transport means, among them ports for internal shipping, roads, and railways. There is also an urgent need to develop electric power and communications infrastructures. These needs are summarized below.

1) Development of electric power and communications infrastructure

In the four countries surveyed, there was evidence of a need to develop both electric power supply, of vital importance for manufacturing infrastructure, and also communication infrastructure, which is of even greater importance in the Internet age.

(1) The Philippines

Regarding development of infrastructure for companies in The Philippines, it was noted that in addition to simple traffic infrastructure including roads, ports and the like, there are such problems as the frequency occurrence of power outages due to inadequate electric power facilities as part of the manufacturing infrastructure, inadequate data communication infrastructure, and frequency occurrence of Internet server shutdowns.

In The Philippines, power crises in the first half of the 1990's were accompanied by frequent power outages, exceeding six hours a day. Although the situation improved thereafter, the prospects for power demand are grim, and plans are underway for construction of new power plants and for electrification in rural areas using new forms of energy.

In order to alleviate the high costs of operations at state-run companies, under an electrical business reform law enacted in 2001, the National Power Corporation (NPC) will be privatized.

Where the data communication infrastructure is concerned, while it is thought that business-use telephone communications are being used more widely, the adoption of fixed telephones in individual homes is lagging. However, through the spread of cell phones, communications have become considerably more convenient.

(2) Thailand

In Thailand also, problems such as the interruption of international communications were noted. And, in rural areas the infrastructure remains undeveloped.

Communications companies are state-run and costs are high; leased circuits are provided by several companies within Bangkok, but there is no nationwide network, and there is only one relay company providing business offices throughout the country.

(3) Malaysia

In Malaysia, similarly to Thailand, there are striking differences between major cities and outlying areas in both hardware and software aspects of the infrastructure, and nationwide networks are needed.

Power outages occur at a rate of about once a year even in Malaysia's industrial parks. Power outages are experienced even in Port Klang. Telephone lines are also interrupted at least once a month. When telephone lines cannot be used, cell phones are used instead. There are also problems with disconnection due to circuit congestion, and excessive transmission times caused by drops in data communication rates. Earnest efforts to promote the utilization of laws for private business activation are needed to prepare such foundations.

2) Roads

(1) The Philippines

The road network is for the most part developed, but in The Philippines the fraction of paved roads is small. Also, the following problems were noted.

The state of road maintenance and repair is poor, there is considerable unevenness in the road surface, and goods are badly damaged.

Development of the highway network is delayed.

Traffic control is poor, and traffic jams are worsening.

Flooding during rainy periods causes road networks in rural areas to be cut off frequently.

In the example of Luzon Island in Manila, the distance for transport to customers on a daily basis is, in the north, 250 to 300 km (about eight hours from Manila), and in the south, about 80 km (about one and a half hours from Manila). There is one trunk road northbound, and three branch roads; of these, two routes are generally used.

However, Of these, one route is impassable for as long as six months due to landslides. When this route cannot be used, an addition hour is needed to travel the alternative route.

(2) Thailand

In Thailand, roads are developed primarily with trunk roads radiating outward from city centers toward the suburbs. However, the chronic congestion in Bangkok has, unlike the other countries surveyed, not been alleviated.

In addition to the basic problem that road construction has not kept pace with the rapid urbanization and increase in automobile traffic, traffic congestion in Bangkok is also due to the following circumstances.

In the center of Bangkok, as a result of individual unplanned development by major landowners, block streets do not form a hierarchical road network, there are numerous cul-de-sacs, and traffic within blocks must necessarily intermix with trunk roads; in addition, there is an extremely large number of intersections and one-way

traffic is common, leading to increases in detours, U-turns and right and left turns. Also, signal control within the city relies on manual operation by police officers, so that congestion is further worsened.

(3) Malaysia

In Malaysia, the north-south highway on the west coast side is completed, but there are delays in construction of the north-south axis on the east coast side of the country and of east-west lateral roads. It was also noted that the state of construction of access roads to Port Klang and the interior is poor.

3) Railways

(1) The Philippines

The railway network is shabby. Railroad facilities are decrepit, and there are many areas which cannot be used due to illegal occupation.

Development of the railroad network is necessary not such much for direct freight transport as to convert passenger demand in major urban areas to mass transportation means, so as to alleviate congestion of roads within cities.

(2) Thailand

The Thai national railways operate freight rail service; the fraction of freight transport is 2% (in FY 2000). Major items for transport are oil and cement; general items are mainly transported by truck. Because trains are stopped, connected, and released at some 3000 handling stations nationwide, time is required, and so times of arrival become uncertain, and this is cited as a reason for a move away from rail service by cargo owners.

On the other hand, direct container service (11 trains per day) to the inland container base at Lat Krabang and the port of Laem Chabang is convenient; transport volumes are secured and account for 43% overall, and development of a direct railway transport network between base points is desired.

(3) Malaysia

In Malaysia, railroads are used for shipments with Thailand and Singapore.

The number of trains operating is a problem. Restrictions on “hours of operation” are thought to include, in addition to the hours of the customs service, constraints on hauling of cargo to freight stations and cargo handling arising from the small number of trains in operation.

4) Ports and airports

Development of international ports and airports is being pursued energetically in all the countries, and in both questionnaire surveys and hearings, no major issues were pointed out.

Hereafter, it will be important to develop sea routes serving as feeders to inland areas, as well as railway, road, and other access transportation means.

5) Traffic regulations in major cities

Freight transport in major cities of the countries surveyed relies primarily on road transport. Trucks account for a fairly high percentage of traffic volume, and have a large influence on land use and the environment. Principal freight transport in major cities is concentrated in trunk roads linking the principal industrial districts and harbors; and crowding on these trunk roads is severe.

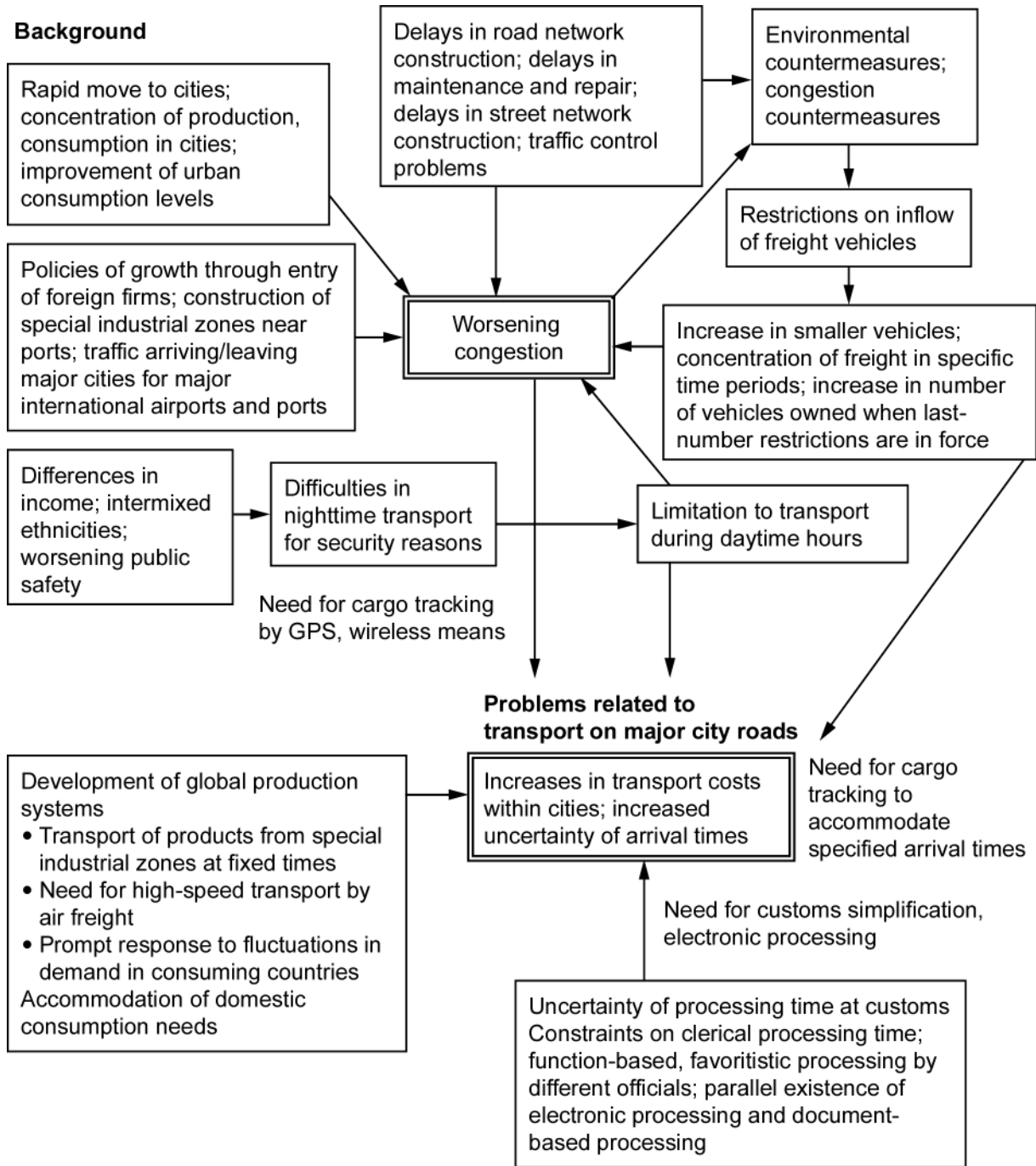
Because cities are centers of production and consumption, in general cargo inflow exceeds outflow. In the cities of developing countries, there is an extremely large amount of inflowing traffic, and outflowing traffic is often trucks with no loads. In areas where traffic regulations are lax, excessive loading of trucks is commonplace, and this is a chief cause of road degradation. In addition, because many trucks are used and decrepit diesel trucks, the traffic environment constantly deteriorates.

In the surveyed countries, basic road networks have been developed to a reasonable level, and efforts are being made to reinforce road networks and to fortify basic hub areas; but traffic regulations in major cities and related issues have had a serious effect on logistics.

In this survey, numerous limitations on trucks due to traffic regulations primarily in Manila and Bangkok, and unreliability of arrival times, were pointed out.

Conversion of passenger transport through the development of rail networks and other measures to promote infrastructure development are essential solutions for improvement of traffic within cities, but such measures will take time, and so truck terminals have also been constructed on belt roads in Manila and Bangkok. However, many transport firms are small- to mid-size companies, and transport by chartered vehicle predominates, so that in essence there is little need for reloading as at terminals and for mixed loads, and at the present time such efforts are not succeeding.

Figure 4-4-1 Logistics and traffic problems in major cities



4.5 Issues Relating to Legal System for Logistics Businesses

There is some scattering in the priorities of problems relating to restrictions on market entry of Japanese logistics firms in the various countries, with 42 responses citing “unfairness in enforcement and monitoring”, 40 responses citing “details and level of restrictions on entry into the logistics market”, and 30 responses referring to “lack of standards and documentation regarding operations”.

Logistics is an industry which receives protection in all countries, but with advances toward globalization there are mounting needs to link domestic and international transport, and demands are increasing for more sophisticated logistics, including links with logistics firms in different countries.

4.6 Issues Relating to Customs Legal System

In this survey there were many Japanese businesses related to international transport, and numerous issues were cited pertaining to logistics in connection with customs operations.

However, in recent years there have been rapid improvements in customs operations, moving toward international coordination, simplification, and improved efficiency. As a result there are significant differences in the perception of existing legal systems even among forwarders.

From the standpoint of cargo owners also, in addition to outsourcing to forwarders and trading companies, it is deemed necessary to share the most recent information concerning international and domestic trends in related fields in order to promptly adjust to changes in business conditions, so as to be able to identify and alleviate problems in a cross-industry manner.

5. Proposals for Improvements by Country

In the three countries other than Singapore, there were many desires expressed for improvements relating to infrastructure and business law. However, as indicated below where they are arranged by country, these comments differ somewhat and reflect the situations in each country.

Proposals common to each of the countries were organized into three types which are the major areas of activity of the Japanese companies participating in this study. Among manufacturing businesses in special export zones, proposals centered on coordination of pallets etc. with international standards and electronic processing of customs operations; among producers of consumables for domestic consumption and major retailers centered in large cities, there were strong demands for cultivation of logistics personnel and inventory management, and in particular for cultivation of manpower for middle management capable of providing on-site logistics supervision, as well as provision of know-how for inventory management and cargo handling operations, together with cultivation of distributors.

5.1 The Philippines

1) Construction of unit load systems

In The Philippines, there is breakage of external packaging materials due to stacking in companies' own warehouses, and because there is little use of pallets or forklifts, stacking and cargo handling are primarily done manually; there is a need for introduction of pallets.

Standardization of pallets themselves lags behind, and even when pallets are used there is mismatching of the sizes of returnable boxes and pallet sizes, so that use of modules is necessary.

2) Promotion of logistics informatization

Informatization between most mid- and small-scale businesses is delayed, and there is a need to press forward with informatization of transactions.

Also, informatization lags behind in the fields of distribution and logistics, barcode management is limited to some larger retailers, and hereafter it will be necessary to promote its spread among mid- and small-scale businesses. It will also be necessary to have upstream manufacturers apply barcodes to products.

3) Promotion of logistics streamlining

In The Philippines, large buffer stocks are maintained due to labor disputes and to delays resulting from restrictions on truck operation in Manila and traffic congestion. In improving logistics efficiency, it will be necessary to reduce stock levels through reform of such systematic problems.

4) Improvement of the level of maintenance and repair of infrastructure

It is necessary to promptly return to service roads which have been closed due to accidents or other causes, to repair roads the surfaces of which have deteriorated due to daily use, and in other ways to maintain usable roads. This is linked to reduction of damage to goods during transport and delivery.

Also, development and maintenance of communication circuits necessary for data communications are necessary.

5) Preparation of logistics-related laws

There is a need to make transparent the system of granting of various permits, which tend to be linked to upward resilience of prices and to bribery and corruption of officials granting permits. Laws which render transparent the procedures for entry into a market need to be introduced.

6) Security of transport

There is a need to prevent theft (and, in some cases, murders) of trucks during transport.

The frequent occurrence of incidences which threaten human life, and increases in insurance rates, have the effect of reducing the number of companies entering markets in The Philippines, and this negatively impacts the country's economy.

5.2 Thailand

1) Construction of unit load systems

While domestic standards for pallets have been stipulated, there is no coordination with Japanese standards; hereafter it will be necessary to coordinate standards. Also, development of commercial warehouses, and other aspects of cultivation of specialized storage and cargo handling services, will be needed.

2) Promotion of logistics informatization

Logistics informatization is limited to only some companies, and there is considerable deviation between the awareness of operators of mid- and small-scale businesses and national policies. Activities to promote the continuous spread of informatization suited to the actual state of small- and medium-size businesses are needed.

It is also necessary to promote standardization through adoption of new international standards based on the Internet.

3) Promotion of logistics streamlining

In order to streamline distribution, it is necessary to cultivate intermediate distributors, as in the case of wholesalers in Japan.

Intermediate managers must be developed capable of accurately conveying on-site the decisions of companies and of efficiently managing workplaces.

4) Improvement of the level of maintenance and management of infrastructure

There is historical background to the evolution of streets in large cities, and as a result traffic regulations are complex; as a consequence, it has been noted, there are frequent traffic jams, and review and revision of traffic regulations is needed.

In addition, development of roads, and installation and maintenance of communication circuits essential to data communications, are necessary.

5) Strengthening of customs functions

Black-market imports must be prevented, to give legally imported goods the ability to compete fairly in the marketplace.

It is necessary to prevent unclear code assignment thought to originate in favoritism of customs officials, and to clarify the methodology of code assignment.

6) Transport security

There is a need to prevent theft from trucks during transport.

5.3 Malaysia

1) Construction of unit load systems

The level of transport packaging and other services must be raised. Returnable boxes, hangar transport and other transport containers, and transport systems have not been introduced, so it will be necessary to develop a palletized or other unit load system and to improve transport systems.

2) Promotion of logistics informatization

There is a need to promote “paperless” processes in keeping with advances toward electronic operations. Where a transition from paper media to electronic media for public documents and the like with important legal significance are concerned, it will be necessary to reform or introduce legal provisions.

3) Promotion of logistics streamlining

Problems occur involving inspections on receipt, sorting, storage, and other operations when directly delivering products to mid- and small-size manufacturers and to large retailers of primary commodities. In order to streamline distribution it will be necessary to cultivate intermediate distributors, as with wholesalers in Japan.

4) Development of infrastructure, improvement of maintenance and management methods

Because the content of traffic regulations remains unstable, waste, difficult conditions and irregular quality occurs in operation of vehicles for logistics, and as a result costs are inevitably increased. Enforcement of traffic regulations must be regular and in a standard pattern.

It is also necessary to expand railway networks and rail freight stations, and to improve the number of air cargo flights and other convenience factors.

5) Documentation of legal procedures

Oral “guidance” by officials must be halted, and legal procedures set down clearly in print.

5.4 Singapore

1) Construction of unit load systems

In addition to the need to secure international coordination of pallet standards, including relay points for international logistics, it is also necessary to cultivate a rental pallet industry.

2) Promotion of logistics informatization

While electronic systems in government are making advances, it is necessary to promote informatization among mid- and small-size businesses.

3) Promotion of logistics streamlining

Logistics primarily entails transport within the city, and except for terminal transport, consists of cross-boarder transport with Malaysia. Logistics and distribution services at present pose no problems, but in future it will be necessary to deploy a system to accommodate increases in transport to inland areas.

4) Promotion of regulation relaxation

Among the four countries surveyed in this study, relaxation of regulations related to logistics such as import procedures has made the most headway in Singapore; but there are still many requests for loosening of regulations. Hereafter it will continue to be necessary to relax regulations in these areas.

There are diverse points of view on the use of buildings in various zones stipulated by urban planning, and it will be necessary to study relaxation of regulations in this area.

5) Lowering of international communication fees

There is a need for less expensive international communication rates.

6. Issues for Future Surveys

6.1 Further Analysis of Production and Distribution Structures Needed

An international system of division of labor does not involve only import and export; domestic production and distribution are also linked closely to factors corresponding to domestic demand in each of the ASEAN countries, competition with products from China and South Korea, and other international trends. It will be necessary to ascertain these interrelationships and analyze future logistics needs.

6.2 Need for Collection of Basic Industrial Data

Comprehensive and periodic industrial and commercial statistics are lacking in each country; because there is no data, there is no means for objective evaluation of the seriousness of issues in accounting for overall trends. Hence the preparation and collection of data on industrial activity will be necessary.

6.3 Need for Detailed Studies of Legal Issues

Transport businesses in the various countries receive some of the strongest protection. Where policies are concerned to improve legal systems in moving toward construction of a global logistics system, detailed studies will be needed on the overall framework of legal systems, and on trends in reform and the possibility of reform.

6.4 Need for Detailed Studies of Problems Specific to Local Companies

This survey has focused on Japanese companies situated in The Philippines, Thailand, Malaysia and Singapore, and on local companies with close relations to Japanese firms. Consequently although it was possible to systematically review structural problems and the desire for improvements relating to international logistics, in essence the problems discussed are seen from the perspective of Japanese companies, or are problems centered on comparisons with logistics in Japan. Hence this survey has not necessarily managed to identify logistics issues encountered by local companies or problems seen from the standpoint of local firms, including viewpoints and reasoning, and differences in business customs. These questions remain, together with the question of study of the survey methodology itself, as issues for future study.

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- 1 The Asian region is defined as the following 21 countries specified by the Ministry of Foreign Affairs. (The Democratic People's Republic of Korea (North Korea), with which Japan does not have diplomatic relations, is not included. Taiwan and Hong Kong are included in China.)

India, Indonesia, Vietnam, Cambodia, Singapore, Sri Lanka, Thailand, Korea, China, Nepal, Pakistan, Bangladesh, East Timor, Bhutan, Philippines, Brunei, Malaysia, Myanmar, Maldives, Mongolia, Laos
 - 2 Newly industrializing economies (NIES). In the Asian region, these are the four countries/regions of Korea, Taiwan, Hong Kong and Singapore.
 - 3 The 14 countries where per capita GDP is in the three-digit range in US dollars were further divided into top, middle and lower groups.

The top group consists of countries where the per capita GDP is higher than the average value + standard deviation of the 14 countries; the middle group consists of countries where the per capita GDP is higher than the average value less standard deviation; and the lower group consists of countries where the per capita GDP is lower than the average value less standard deviation. (average value 491, standard deviation 229)
 - 4
 - 1) Per capita GDP figures are taken from the web page of the Ministry of Foreign Affairs: www.mofa.go.jp/mofaj/area/asia.html
 - 2) The data are taken from the most recent year, but the actual year and surveyed features vary between countries.
 - 3) The figures for India, Singapore, Bhutan, the Philippines and Malaysia are GNP.
 - 4) The Singapore data are released in Singapore dollars, so the conversion rate of 1 Singapore dollar = USD 0.58 (as of January 15, 2003, 15:46) was used to convert to USD.
 - 5) There are no data for East Timor.
 - 6) The per capita GDP for Japan is USD 320,605 (2001).
 - 5 2002 List of Companies Expanding Overseas, Toyo Keizai Shimpo
 - 6 A variable-length, fixed-order EDI rule group established and administered by the United Nations ECE for governments, cargo owners and logistics companies.
 - 7 International trade product category code, including the 6-digit code determined by the World Customs Organization, based on the International Convention on the Harmonized Commodity Description and Coding System (Harmonized System convention). Application of this code determines the amount of customs duties.