

**Dissemination of Information and Provision
of Services to Provincial Industries**



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By

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from the original in Thai**

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TO PROVINCIAL INDUSTRIES**

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EXECUTIVE SUMMARY

The purpose of this study is to shed light on the characteristics and problems in the dissemination of information and other services to provincial industries. The aim is to search for efficient and effective means of delivering the services, which are intended to support and develop industrial entrepreneurs. The study gives special attention to regional industries and the relevant needs and behavior of entrepreneurs; it should benefit regional industrial development, which will in turn affect national development.

In this study, the analysis is divided into two sections: (1) the study of the function of different governmental and non-governmental departments that deal with information services, in order to understand the forms of activities and service network; and (2) the study of the demand for information and the forms of service requested by regional industrial entrepreneurs. The latter section includes evaluation of departments that offer service and consultation. The results of the analysis can be summed up as follows: the departments dealing with information distribution and service have a rather complete array of information needed for the entrepreneurs' operations. Nevertheless, the level of service and penetration among regional industrialists is not very high, since service is concentrated within the region's main province. The services of non-governmental departments, however, are restricted to members and usually focus on specific information and services. This makes it hard for entrepreneurs to understand the roles and limitations of the services of all departments. Even if they do understand, there is still the problem of reaching these departments, especially due to the complicated procedures involved and the time lost in cases where there is no such department near the operation's site.

The demand for services among regional industrial entrepreneurs can be summed up as follows: entrepreneurs do not see the importance of using official information for their operations, as they are satisfied with their present source of informal information e.g. information from business colleagues, news from the mass media. Moreover, these people

usually run rather small operations based on experience and self-dependence. In addition, most entrepreneurs do not wish to have contact with governmental offices unless necessary or do not know where to seek services, while others are not aware of the benefits and services they will receive. There are some who know about the available services but are not interested because they consider the procedures for getting information far too complicated and feel that they may not receive cooperation. Furthermore, the service units are located too far away.

According to the analysis of procedures for information distribution and services in regional industries, the recommendation can be classified as short-term and long-term.

The short-term solution involves establishing a committee responsible for services to enhance cooperation among relevant departments, in order to eliminate overlapping tasks. By doing so, services can be more widely distributed. Furthermore, it is necessary to make entrepreneurs aware of the importance of services and the benefits of implementing the information in their operations through service units and mass media. Information guide should be distributed to entrepreneurs so that they learn about different information service units and are informed about the roles and services given.

In the long term there should be regional industrial information service centers with networks throughout the country to enable entrepreneurs to have access to information. After considering the different departments, it can be concluded that the appropriate organizations are the Provincial Industry Offices and the Provincial Chambers of Commerce with regional industrial information service centers and the Thai Chamber of Commerce acting as coordinators for the development of information in a way that suits the problems and needs of industrialists.

CHAPTER 1

INTRODUCTION

1.1 GENERAL INTRODUCTION

Most rural industries are medium- and small-scale enterprises that play significant role in the national economy; they create job opportunities, and production value, as well as earning foreign exchange. Industrial development is a continuous process that relies on several factors, such as financial and economic conditions, technology, the market situation, public utilities, labor and information. The government realizes the importance of these industries, as can be seen from the past national social and economic development plans, which entail policy guidelines for development of medium and small industries.

The problem of information in the rural industrial sector is an issue not previously studied systematically. Though it is well known that the government has assisted rural industry to some extent -- for example, credit extension via Small Industry Finance Organization, the establishment of Small Industry Credit Guarantee Fund and Industrial Finance Corporation of Thailand -- the aid is still limited. Aside from financial aid, improvement of public utilities and skill development, another important factor is the provision of information about management, economic data, market conditions and technology. Currently there are several such data service centers, both private and public.

1.2 OBJECTIVES OF THE STUDY

This study aims at understanding various forms of information distribution problems in order to find an efficient and effective means of providing information on economic conditions, the market situation, and management strategies as well as on the development of new technologies for the rural industrial sector.

The main objectives may be enumerated as follows:

1. To study the agencies in charge of distributing information to rural industry, specifically the form of information transfer and the means of rendering such services.
2. To study the information needs of rural industry, including types and forms of required services.
3. To study the problems concerning information services and to give suggestions on:
 - 3.1 The type of information and the form of information services that correspond to the needs of rural industrial sector.
 - 3.2 Guidelines for providing services to related agencies.
 - 3.3 Coordination of related agencies.

1.3 MEANS AND SCOPE OF STUDY

Sources of data are both primary and secondary and may be classified into three groups; namely, information services, rural industry and experts.

Information services group This refers to agencies that play a vital role in providing services to rural industries, both private and public. There are ten public agencies: the Industrial Development Center, Thailand Productivity Center, and other agencies under the responsibility of Department of Industrial Promotion, Thai Industrial Standards Institute, Provincial Industrial Offices, Provincial Commercial Offices, Department of Export Promotion, Thailand Institute of Scientific and Technological Research, Technology Transfer Center, the Department of Science Service.

Private agencies under this study are the Small Industries Association, Federation of Thai Industries, Thai Chamber of Commerce,

Technology Promotion Association (Thai-Japan), and the Institute for Management Education for Thailand Foundation.

Rural Industry Group Sources of data come from a questionnaire survey of 1000 industries. Eight hundred and eighty of the 1,000 industries are rural industries.

Expert and Related Agencies Group This group consists of experts, academic journalists, government workers, businessmen or people who have knowledge about and interest in such cases. It will study about the opinion on the importance of information distribution to rural industries, including of problems and obstructions.

CHAPTER 2

ROLE, DUTY AND ACTIVITIES OF AGENCIES THAT DISSEMINATE INFORMATION AND PROVIDE INFORMATION SERVICES TO RURAL INDUSTRIES

2.1 AGENCIES THAT DISSEMINATE INFORMATION AND PROVIDE INFORMATION SERVICES TO RURAL INDUSTRIES

There are several agencies that distribute information and provide information services to rural industry, both directly and indirectly, but this study will involve only directly related agencies, both private and public, that play an important role.

2.2 PUBLIC AGENCIES RELATED TO INFORMATION DISTRIBUTION AND INFORMATION SERVICES TO RURAL INDUSTRIES

In the past, the government did not emphasize different aspects of services for industry. The main role of government offices was to control industrial business by enforcing rules and regulations. However, during the past 4-5 years, the policies have been changed, and public agencies have played a more significant role, as can be seen from the improvement of government contact services, which are no longer limited to medium-scale industry or small and rural industry alone, but also involve several ministries, namely, the Ministry of Industry, Ministry of Commerce, and the Ministry of Sciences, Technology and Energy.

The Ministry of Industry's most important service center is the Department of Industrial Promotion, which is currently divided into five divisions, one office, and five centers. Related agencies are the Industrial Development Center and Industrial Productivity Division, Industrial Service Division, Rural Industrial Promotion Center, and the Rural Industry Information Service Center. There are also other offices, such as the Thai Industrial Standards Institute and Provincial Industrial Office. The Ministry of Commerce also takes charge of several

agencies--namely, the Provincial Commercial Office and Department of Export Promotion. The Ministry of Science Technology and Energy is in charge of the following agencies: the Thailand Institute of Scientific and Technology Research and Technology Transfer Center.

In addition, there are other public agencies in charge of several forms of distribution such as brochures, leaflets, training sessions and seminars. However, their role and the extent of their involvement are not clear.

2.2.1 Industrial Development Center, Department of Industrial Promotion

This center was set up to be the core coordinator between entrepreneurs and other agencies regarding investment. Its main objectives are to be responsible for investment, especially in small industry and rural industry, by means of providing training for investors and advising certain investors to set up and organize successful projects and factories. The agency also tries to persuade industries to invest in information services and gives guidance on how to solve management problems. Their services include advice and suggestions on investment project development, investment coordination, development of entrepreneurial skills and development of an investment information library.

The Industrial Development Center is divided into five divisions; namely, the Investment Consultation Service, Investment Coordination Division, Entrepreneur Development Division, Project Development Work and the Local Industrial Development Division. From January to August, 1989, the Industrial Development Center undertook the following work.

1. Six academic seminars offering investment advice to 400 participants, and five training sessions for investors, with 145 participants.

2. Project development for 30 new projects. Two hundred projects are under assistance.
3. Investment coordination through collection of data related to 20 investing companies.
4. Information services are classified into general data and specific data; 1,205 persons applied for general data and another 114 for specific data.

Aside from public service, the Industrial Development Center has done public relations activities such as press conferences, press pamphlets, publications, booklets and seminars sponsored together with other associations.

It can be seen that this office is very important to the development of industry, especially rural industry, which still lacks expertise in analyzing and developing information and data--e.g., on market conditions, finance, techniques--for making decisions about projects. Unfortunately, its role is still limited to services provided to few investors.

2.2.2 Industrial Productivity Division (Productivity Center of Thailand)

This division aims to increase the productivity of industry and agriculture and improve the production capacity of all branches. The office supports the promotion of project performance and tries to upgrade production continuously, systematically and economically. Its main duty is to provide in-house and off-site training, set up seminars, provide consultation, render information services, set up a library and loan teaching aids. Seminars and training involve five sections: training services and foreign relations, guidance, technical management, industrial engineering, and a small industry promotion project.

The Industrial Productivity Division deals mostly with training and seminars. Below are the result of five years operation:

	Financial Year				
	1985	1986	1987	1988	1989
	Number of courses/ students	Number of courses/ students	Number of courses/ students	Number of courses/ students	Number of courses/ students
1.In-house training	81/2124	97/2714	101/2908	116/3164	115/3322
2.Off-site training	32/1299	53/2182	27/987	26/2099	37/1401
3.Rural seminar and training	23/1054	23/1271	30/1912	29/1351	29/1273
Total	136/4468	173/616	158/5807	171/6614	181/5996

The work of the Industrial Productivity Division has been beneficial to industry investors. Who have attended effective courses on various subjects, About 20% of all training courses held in the Kingdom are held in the provinces.

In order to develop rural industry, the Industrial Productivity Division should put more emphasis on rendering service to rural industries, since the rural group hardly have the opportunity to learn new things, compared to industries located in Bangkok and its periphery.

2.2.3 Other units under the responsibility of the Industrial Promotion Department, Ministry of Industry

The Industrial Promotion Department is in charge of rural services, such as Northern, Northeastern and Southern Industrial Centers, and another two centers soon to be opened in the East and the West. The center provides technical assistance to small-scale industries, such as academic consultation, design and testing of products, packaging techniques, and management and factory administration. It puts emphasis on local industry, but the budget and personnel are limited, and the services it provides can not be extensive.

The Industrial Service Division also provides technical and academic assistance to small-scale industry such as training and advice on modern production techniques, design and testing, packaging techniques and factory management. Activities involve training in accordance with industry's needs reports on industrial technique, technical guidance, and dissemination of technical reports. Each year there are about 5,000 participants in the training program.

Rural Industry Information Service Center provides two types of information connecting rural entrepreneurs and outside groups: information concerning current business or business to be negotiated in the future. The basic role of the center is to provide technical information, teach management, techniques supply documents related to each type of industry and act upon entrepreneur's requests about marketing information and technology, finance and other information. The objective is to help entrepreneurs make better decisions.

2.2.4 Thai Industrial Standards Institute, Ministry of Industry

This agency was established under industrial product standard act B.E. 2511 (1968) as a department attached to the Ministry of Industry, in order to help industry reduce costs and produce reliable products that are safe for consumers. The main function is to determine and certify product quality with a label, test products and represent Thailand in International Standard Meeting (ISO) (and FAO/WHO (codex)).

This agency is very important for the development of goods that meet locally and internationally recognized standards. It is divided into four divisions and offices: Technical and Foreign Relations Division, Standardization Division, Certification Division, Standardization Promotion Division and the Office of National Codex Alimentarius Committee.

Most of the work deals with determination of the principles, terms and conditions of industrial products as stipulated by the Royal Decree, export regulations and approval of a methodology for standard label line

and its cancellation. In addition, it sets up seminars and training programs and provides documents to public media. During 1987, there were 25 lecture sessions, 19,137 copies of circulated documents and a number of press releases, though these were rather limited in central regions.

One problem facing rural industry is producing quality products that are up to standard. There are two categories of problem: products that don't meet standards and products that are not recognized by any standard. The latter category affects consumer recognition and distribution of the product. This may result from the fact that manufacturers do not learn about the agencies involved in setting product standards or do not know who to contact about the rules and regulations of prescribed standards. In order to resolve this problem and upgrade product quality, it is necessary to inform producers of the stages, procedures and regulations governing product certification and standards.

2.2.5 Provincial Industrial Office, Ministry of Industry

This agency was set up to represent the Ministry in developing and promoting all types and sizes of industry in the region and giving advice to the governor on policy formulation and planning, controlling the observance of the act and advising entrepreneurs. It also coordinates with provincial offices and does public relations work for the ministry and its department. This agency also follows up on the results of its operations. As for general service, it provides training, sets up seminars and holds demonstration meetings, in addition to supplying statistics and information related to provincial industry.

The Provincial Industrial Office is classified into four sections: General Services, Legal, Development and Promotion of Industry, and Survey and Follow-up. At present, it has branches in every province, with the head-office located in Bangkok acting as coordinator.

Currently, the Provincial Industrial Office get more involved in cooperation with the private business in order to develop local resources and know - how effectively.

However, the Provincial Industrial Office is well aware of the acquainted with rural entrepreneurs and understand their problems and needs. It is also knowledgeable about the local economies and, therefore, can provide suitable information.

2.2.6 Industrial Economics and Planning Division, Office of the Permanent Secretary for Industry

This division is responsible for planning and formulating collective policies, in conformity with the National Economic Plan, in the area of industrial development, industrial surveys and project follow-up.

Work done by this agency is classified into six parts; namely, survey and analysis of the industrial economy, statistics, study and analysis of industrial techniques, policy development, evaluation and reporting, foreign relations and holding meetings. The division divides the structure of the work into different sections: General Management, Industrial Policy, Information Service, Industrial Planning, and Coordination and Evaluation. It also sets up regional industrial economy centers in the north, south and the northeast.

The division's most outstanding work has been a research project on investment opportunity for ready-made rubber during 1986-1988, aimed at increasing the utilization of rubber. Fifteen types of utilization had been analyzed including rubber motorcycle tires, bicycle rubber, rubber shoe soles, rubber tile, rubber glue, condoms, gloves, sponges, medical kits, hose and tape. After three years of research, the southern industrial economy center, in cooperation with the Council of Industry of Thailand, held seminars which concluded that the rubber industry is highly feasible, but that there is a shortage of technicians and a number of technical problems as well as high tax scale for equipment and

machinery. This project is in line with the government's policy of dispersing industry to regions outside of Bangkok. Job creation, income distribution, and an increase in the value agricultural projects all contribute to decrease of the country's deficit.

Furthermore, this division has the following plans and projects.

1. Development of industrial information This project has received help from experts from Belgium for three years (1988-1990) in order to build up a more efficient and systematic data system what can be fully integrated with industrial production and marketing. The information will be used for industrial policy formulation and to serve the needs of entrepreneurs. The target group is industrial factories.

During 1988 the project recruited temporary employees, installed computers and telephones and purchased teaching aids. It also set up a monograph and a codes of factory names and 39 industrial types. It studied the basic condition of 91 industries so that the specialists can work out indices and the industrial income of the nation.

2. Industrial productivity increase project The aims at improving the quality of the personnel and work of the industrial economy division in relation to National Development Plan of the country. It prepared a report on planning and policy formulation, with the help of UNDP/UNIDO for a one-year (budget year 1989).

The project results in policy formulation and efficient planning and coordination for future action.

2.2.7 Provincial Commercial Office, Office of the Permanent Secretary for the Ministry of Commerce

The agency was set up to represent the Ministry of Commerce in rural areas and act as economic consultant to provincial governors. It is under the responsibility of the ministry and divides its work into four parts: survey, analysis, research and planning of the province's

marketing plan. The agency is a center for the collection and distribution of commercial information and also encourages farmers to grow crops demanded by the market. The Provincial Commercial Office is divided into three main sections: Commerce Promotion and Economic Solutions, Commerce Control, and General Affairs. At present, it has branch offices in all provinces.

The Provincial Commercial Office disseminates marketing information to farmers, sets up development and self-defense villages, reports and provides economic data and information about the price of goods to the state agency. The promotion work deals with protecting consumers and solving economic problems such as setting up a central market and buying agricultural products. The responsibilities of the office are focused on commerce, especially agriculture. Some of the task involves information supplying to rural industry, such as information on trade and economic conditions. Such information is vital for any industrial undertaking and gives impetus to more investment.

2.2.8 Department of Export Promotion, Ministry of Commerce

The department is primarily set up to promote exports and support producers and exporters. It supplies information concerning marketing and import rules of foreign countries and disseminate that products. Its main activities include sending trade delegations abroad and inviting counterparts to visit Thailand; holding trade fairs locally and internationally, setting up commerce centers abroad; providing trade information; do public relations work and distributing brochures; making individual appointments with importers; and providing training on export procedures and problems.

The Commercial Relations Department is divided into three sections and one office: the Trade Division, Thai Goods P.R. Division, Commerce Development Department (Export Service Center) and the Office of the Secretariat.

Result of work in 1986 consisted of sending 25 trade delegations abroad, bringing 41 delegations to visit Thailand, holding 17 trade fairs in Thailand -- 8 in Bangkok and 9 upcountry -- and another 18 abroad. Trade fairs are held at least once every 6 months. The department is responsible for public relations work, gathering commercial information, providing export training sessions and practical seminars, setting up commerce offices abroad, promoting full-time export services and handling export problems.

All aspects of the work benefit exporters and are useful for the introduction of products, both locally and abroad. Since the department is set up in Bangkok, rural entrepreneurs have less access to its services.

2.2.9 Thailand Institute of Scientific and Technological Research, Ministry of Science, Technology and Energy

This institute is primarily set up to do research and provide technical and scientific services for development of the national economy and appropriate utilization of natural resources, with the goal of improving economic conditions, the environment, public health and welfare and supporting productivity. It also trains scientists and technicians and provides testing and other scientific services.

The institute is divided into six divisions, one office and two groups: Committee and Legalization, public relations Training, Technological Economic Division, Foreign Relations, Project Coordination, the Service Office, Service Group and the Research and Development Group. In 1987 it oversaw 15 research and development projects, rendered services to 1,908 applicants and certified export items such as gas tanks, bicycles and steel pipe.

This agency is responsible for promoting new industries and developing industrial products.

2.2.10 Technology Transfer Center, Office of the Permanent Secretary Ministry of Science, Technology and Energy

This center aims at expediting technological development in Thailand through full-line transfer locally and internationally. It has three main functions:

1. Suggesting policies for transferring technology to the government and setting rules, plans and priorities as well as analyzing, evaluating and selecting technology for normal development; it also follows up and evaluates the import of such technology.
2. Promoting technological transfer through consultation, seminars and training, as well as providing services on transfer of information on source of purchase of technology, import condition, and VDO programs.
3. Promoting development of technology by setting up and managing current funds for research and development and improving the use of machinery, materials and equipments that conserves energy and the environment through reductions in the import tariff.

This center's main responsibilities are promotion of the transfer of technological know-how into Thailand (from institutes to users), assisting the government in studying and formulating such policies, and giving guidance to private sector.

The work is divided into three main sections: General Affairs, Study of Technological Status, Promotion of the Transfer of Technology.

2.2.11 Department of Science Services, Ministry of Science, Technology and Energy.

This department is primarily set up to be a central field work center and to provide services regarding analyzing, testing comparing and adjusting scientific equipments for public and private agencies, and doing research on utilizing natural resources and industrial and agricultural by-products so as to control and certify the quality of industrial and food products, to provide practical training and scientific information.

The Science Department divides has seven divisions and one office: Research, Applied Chemistry Research, Chemistry, Physics and Engineering, Bio-sciences, Science and Technology Information Office of the Secretariat. The main work is the analysis and testing of raw materials, and study and experiments for 15 projects. Two of the 15 projects involved certification of domestic products, the rest entailed training of scientists, providing information about technologies and disseminating knowledge of scientific techniques.

The work done by the Department points out that there are still many things which can be beneficial action to be taken, such as: analysis and testing, research, certification of product quality. The Science and Technology Information Division, which has largest library on industry and patents and provides references and index cards on standard information is also under the supervision of the department.

2.3 PRIVATE AGENCIES DEALING WITH DISTRIBUTION OF INFORMATION AND INFORMATION SERVICES TO RURAL INDUSTRIES

These private agencies in the rural sector are non-profit foundations, councils, associations, and commercial business enterprises such as banks, trusts, information-processing companies and training companies. This study involves only the non-profit agencies in rural areas.

2.3.1 Small Industries Association

This association was set up by the private sector, at the initiative of entrepreneurs from small industry and it has received the financial support of small industrial business offices. It aims to collect statistics, collect documents and opinions from small industrialists, exchange technical information, and trade news as well as doing research on trade and small enterprise, setting forth agreements and regulations for members, and promoting health and athletic activities. It also facilitates the industry in terms of finance, upgrading of products, research, cooperation with the government, and acts as arbitrator among association members or with outsiders. It can provide social welfare for members as long as it is not against section 12, under association act B.E.2509 (1966).

The roles and duty of the association revolve round providing information and guidance for members' problems. Its structure consists of a chairman, a first and second deputy chairmen, treasurer, registrar and general affairs personnel, as well as local and international public relations officers.

Though the Small Industries Association aims primarily at developing and promoting small industry, its operation is still very limited. During the past year, it held only one industrial export fair.

2.3.2 The Federation of Thai Industries

Originally set up as an association, it was later upgraded to the level of federation under the Federation of Thai Industries Act. It aims to be the true center of all types of industrialists, so that members can exchange opinions and ideas related to industry, research, training and production.

The Federation's role revolves around upgrading product standards to the international level in order to be able to compete in the world

market and do research for the government for long and short-term industrial use. The Federation also acts as mediator between private agencies and the government to seek just and equitable treatment locally and internationally and gives guidance to the industrial sector in terms of marketing, local and international trade exhibitions, trade data and information. In addition, it holds seminars and workshops for members and employees at all levels.

The management structure consists of 25 industrial groups, 16 trade sub-committees and nine sections of international management. Besides its head office in Bangkok, the Federation of Thai Industries has opened eight branches upcountry in Khon Kaen, Chiang Mai, Nakhon Sawan, Pathum Thani, Songkhla, Samut Prakan, Udon Thani and Rayong. It now has a total of 1,600 members.

Its work comes in many forms: services, meetings, seminars, provision of funds, solution of many problems, services to members, and foreign relations in terms of business and foreign trade with other Asian countries. It also involves dissemination of business news, promotion of investment, travel with government delegations, foreign trade fairs, cooperation with the government and co-ordination with three institutes. Most of the work deals with amendment of the laws, regulations, and solution of impediments and industrial problems such as production costs. Regional work involves training, seminars, and factory tours, which are not frequent. Other work includes publication of literature, television programs, certification of documents such as certificates of origin, and certificates of membership.

As a whole, the council has benefited the industry, members and entrepreneurs--both directly and indirectly--though benefit rendered to regional industry is still limited; the council revolves round the cities and has few regional members.

2.3.3 The Thai Chamber of Commerce

Founded in 1933 with the support of the government under Chamber of Commerce Act, B.E.2509 (1966), it aims at promoting enterprises in terms of trade, industry, agriculture, finance and acting as advisor to the government. Its local and international duties and functions deal with certification of trade documents such as certificate of goods' original sources, dissemination of information and provision of trade services.

The Thai Chamber of Commerce is divided into 19 sections, which include Field Work, Foreign Relations, Academic and Technical Work, and Promotion and Development. It is located in Bangkok and plays a significant role in coordinating and developing Provincial Chambers of Commerce, an organization recognized by the law.

A Provincial Chamber of Commerce is now set up in every province. The chambers have formed into regional zones for better coordination. Each Provincial Chamber of Commerce recruits its own members, whose numbers vary according to the size of the province and industry as well as the enthusiasm of the directors and the result of the cooperative efforts.

Local Work of the Thai Chamber of Commerce

Its local work is as follows:

Certifying foreign trade documents (97, 463 copies), technical assistance in terms of data collection, publishing trade journals and magazines for members free of charge. Several people asked for information services (651 applicants). The chamber also provides business consultation to Thai businessmen (101 persons) and foreign businessmen (199 persons). It provides funding for training executive secretaries, printing handbooks for management of rural businesses, supporting provincial businesses in accordance with USAID project, and rendering assistance to rural chambers of commerces in the form of seminars, information and joint activities.

Most importantly, it helps to solve economic problems faced by the Provincial Chambers of Commerce, holds national conventions, cooperates with public agencies to promote local economies and provides trade information. The chambers participated in many meetings and seminars held by the Thai Trade Council and the institute's three private enterprises.

Foreign Relations Work of the Thai Chamber of Commerce

The most outstanding has been the ASEAN CCI Meeting, welcoming parties for trade representatives, resolution of 26 dispute cases, carrying out the U.S. government aid project, holding two seminars on development and strengthening of trade information services.

The Chamber of Commerce's work is relatively similar to that of the Federation of Thai Industries. The only difference is that the Chamber of Commerce put emphasis on providing information on economic and business conditions to commercial groups. Its location in Bangkok makes it very convenient for businessmen in the central area to use its services, compared to businessmen in rural areas. However, the Provincial Chambers of Commerce are now set up in all provinces, and, if they are correctly and seriously developed, they will bring great benefit to the business communities as a source of commercial, industrial and agricultural information. Their advice, guidance and bargaining power do carry weight.

2.3.4 Technology Promotion Association (Thai-Japan)

This association is set up to receive aid with no strings attached from the foreign trade and Industry Ministry and Japanese private agencies through the Thai-Japanese Economic Assistance Association, with the objective of promoting and supporting technological demand and progress and public information, providing training and holding seminars on technology, compiling, translating and publishing technical books and documents on technology, lending technical books, teaching

language, launching magazines, and cooperating with other associations with similar objectives, which must be related to politics.

The role and duty of the Technology Promotion Association (Thai-Japan) are classified into 11 projects: Language, Technical Industry Promotion, Publications, Technological Information Center, Seminars, Industrial Measurement Tools, Technological Energy, Quality Control Computer, and Maintenance Service.

The association is divided into four sub-committees: General Management, School, Publication and Information Center and Seminars and Training.

Below are some of the results of different projects done by the association in 1987:

1. Teaching the Japanese language to 127 classes, Thai to 20 classes, and opening special courses, a summer course on Japanese language, 3 courses on Japanese business, and courses for 17 groups. Altogether, there were 147 courses and 4,515 students.
2. The technical industry support project printed 2,000 copies each of different 10 technical text-books; it also reprinted nine titles, numbering 2,000 copies each.
3. It printed five technology journals and four A-C magazines, numbering 2,000 copies each.
4. The technology information center provided research assistance for 518 issues, guidance on 93 subjects and 11 exhibitions, reprinted 12 books, published 4 technology newsletters, three lectures/seminars, with 341 attended.
5. It held twenty-five training and seminar sessions, with 1,511 participants.

6. It conducted thirty-six training sessions on industrial measurement tools, with 1,511 participants.
7. The comparative measurement tool center provided service to 59 companies and agencies; 379 tools were sent for inspection.
8. Twenty-five courses on energy conservation were held with 964 participants.
9. Twenty-four quality control were held courses were held, with 1,956 participants.
10. Thirty-eight computer courses were held, with 1,058 participants.

The association's operation has been very beneficial to industrial development and technological promotion, providing information to a great number of people. Since the association is located in Bangkok, the beneficiaries are located in Bangkok and neighboring provinces.

2.3.5 Institute for Management Education for Thailand Foundation

This agency is a joint organization of the government and technical section of the foundation in B.E. 2525 (1982). It is non-profit and tax-exempt. The initial funds came from the U.S. organization for international development, aimed at upgrading the management skills quality of individual businessman, promoting business and organization efficiency, fostering cooperation between state and private agencies in national development, and developing related management studies and business in Thailand.

This foundation's duties revolve round technical training on specific, modern management techniques and provision guidance on business. The foundation also asked state educational institutes to handle field-work study. The institute consists of an administration development institute and offices at Chulalongkorn University, Thammasat

University, Kasetsat University, Chiang Mai University, Khon Kaen University and Prince of Songkhla University.

This foundation divides its work among four committees on Projects, Public Relations Finance and Finding and Assessment. During the past year, about 1,000 businessmen were provided service.

2.4 SUMMARY OF INFORMATION SERVICES PROVIDED BY EACH RELEVANT AGENCY TO REGIONAL INDUSTRIES

Study of the agencies that provide information to regional industries classifies the services that they provide into 14 main types.

1. Dissemination of several types of information such as on general information on the economy, industrial conditions, marketing, production, technology and other aspects. Information is provided in various forms: documents, leaflets, journals, mass media and provided directly at the office.
2. Seminars, training sessions and meetings on various management courses and specific subjects.
3. Guidance and advice on management as well as the solution of problems.
4. Analysis and testing of products as well as establishment of standard requirements and issuance of certificates.
5. Certification, including product origin and membership.
6. Local and international exhibitions and fairs.
7. Sending trade missions inspection tours--locally and internationally.
8. Tariff reduction applications.

9. Lending borrow books & audio-visuals.
10. Procuring and coordinating of capital.
11. Project development.
12. Research and development.
13. Transfer and sale of technology.
14. Funding.

As a whole, we find that almost all agencies provide information and data in various forms such as training sessions and seminars as well as offering guidance at the office or outside. However, most of the work is performed in Bangkok and the central plains rather than in rural areas.

The findings indicate that state agencies which provide the most extensive service are: the Industrial Promotion Department and the Ministry of Industry. The private agency that gives the most extensive service is the Association of Technology Promotion (Thai-Japan), but most of these services are given in the central plains. As for other agencies, services are not well distributed, and some of them are provided only for members.

Each agency concentrates on specific tasks and services and it is difficult for the public to recognize each agency's special research work and expertise. There are also some problems related to access to and understanding of its scope of activities.

2.5 INFORMATION AND SERVICES PROVIDED BY RELEVANT AGENCIES TO INDUSTRIAL ENTREPRENEURS AT EACH STAGE OF BUSINESS OPERATION

In order that entrepreneurs may receive benefits from 15 agencies, the types of information and services may be classified into three stages:-

1. Establishment of factory
2. During Operation
3. Expansion

During each stage operation, entrepreneurs require the following types of services and information.

Pre-Setting of Factory

<u>Types of information and</u>	<u>Agencies that provide service</u>
<u>regional services</u>	

- | | |
|---|---|
| - Market information, such as demand, market size, and competition. | - Industrial Productivity Division |
| - Production information, such as sources of raw materials and their prices, information on machinery and tools, production procedures, technology and production techniques. | - Industrial Development Center |
| - Information on sources of funds. | - Industrial Promotion Center |
| - Product information, product standards | - Provincial Commercial Office |
| - Forms and procedures for setting up a factory | - Provincial Industrial Office |
| - Information on investment guidelines and joint ventures, including list of potential joint venture partners. | - Thai Chamber of Commerce |
| | - Federation of Thai Industries |
| | - Technology Transfer Center |
| | - Thailand Institute of Scientific and Technological Research |
| | - Department of Science Services |
| | - Board of Investment |
| | - IFCT and others financial institutions |
| | - ISU |
| | - Industrial Economic Division |

During Operations

<u>Types of information and regional services</u>	<u>Agencies that provide service</u>
<ul style="list-style-type: none">- Information on management concepts and techniques, such as marketing management, financial management, accounting, production management and personnel management.- Consulting services and solutions to business problems.- Product development information, development procedures and processes.- Current economic conditions and trends as well as other information on the business environment.	<ul style="list-style-type: none">- Industrial Productivity Division- Small Industries Association- Technology Promotion Association (Thai-Japan)- Thai Industrial Standards Institute- IMET- Industrial Promotion Center- Federation of Thai Industries- Department of Export Promotion- ISU- Thai Chamber of Commerce- Provincial Chambers of Commerce

Expansion

<u>Types of information and regional services</u>	<u>Agencies that provide service</u>
<ul style="list-style-type: none">- Strategies for business growth- Information on domestic and international markets- Information on potential joint venture partners and joint venture procedures- New product information and product development.	<ul style="list-style-type: none">- Industrial Productivity Division- Industrial Development Center- Thai Chamber of Commerce- Technology Transfer Center- Industrial Promotion Center- Department of Export Promotion- Technology Promotion Association (Thai-Japan)- Bank of Thailand- Federation of Thai Industries

2.6 DISTRIBUTION OF INFORMATION AND INFORMATION SERVICES TO REGIONAL INDUSTRIES

Although the overall information services rendered by different agencies, suits the industrial demand, there are many agencies and most of them are located in Bangkok. The difficulty for rural industrialists is that they do not know which service each agency offers. In addition, travel time, stages of offers and bureaucratic inconvenience the regional industrial sector. Most importantly, there is not one coordinating center where industrialists can obtain information.

The problem of distribution of information and information services may be summed up as follows:

Services are redundant and limited, and only a small amount of the information provided is used in rural areas. Training is often conducted among the same industrial group in the same area, especially in cities. Information services are limited since they does not cover a large area. It is more convenient and cheaper for urban industry to obtain information due to their proximity to the relevant agencies.

There is a shortage of study on the real information needs of rural industry and rural investors. Most of the information is general and not in-depth, or is not improved upon to suit changing needs. Some of the information is in foreign languages or in technical jargon and cannot be understood by investors. In some cases, information collected by an agency is very useful but the distribution is still limited. Investors hardly realize that there is information on subjects they need to find out. There is no facility for easy access to the information.

Most importantly, the lack of publicity by agencies of their services means that investors do not realize that the information is available. Agencies simply wait for investors to apply for use of information, instead of providing them with guidance.

We may sum up the problem of distribution of information to provincial industries as follows:

Budget restrictions limit the expansion of services and causes research to be too general and not specific enough. There is no coordination between the agencies, thereby resulting in repetition of work. No study has been made on the real information of industries needs, and thus the information collected is too basic. Service is usually provided only to members.

CHAPTER 3

DEMAND FOR INFORMATION AND INFORMATION SERVICES BY RURAL INDUSTRY

This chapter will analyze available data and the results of the questionnaires about the information needs of rural industry. It will study national industries in terms of the problems faced by each region consisting of Bangkok, the rural central, the north-east, the north and the south.

3.1 MAIN PROBLEMS FACED BY INVESTORS

The objective of the study is to understand the main problems faced by investors. The study deals with two issues:

3.1.1 Investors' problems during business operation

3.1.2 Main problems on management

3.1.1 Investors' Problems During Business Operation

This section will point out various problems constantly faced by the investors, including marketing, production, personnel and labor, raw materials, laws and taxes, technology, information and data, funding, and rules and regulations.

Table 3.1 indicates the main problems faced by the investors, summarized here:

1. Marketing (20%)	6. Regulations (8.6%)
2. Raw Materials (17%)	7. Production (6.4%)
3. Law & Taxes (14.9%)	8. Technology (3.7%)
4. Investment (11.6%)	9. Information and Data (2.4%)
5. Personnel & Labor (9.3%)	

If we analyze the data by region, the first five problems faced by industrial entrepreneurs, in order of decreasing priority, can be collected as follows:-

Bangkok

1. Marketing (18.6%)
2. Law & Taxes (16.1%)
3. Raw Materials (14.6%)
4. Personnel & Labor (10.6%)
5. Regulations (10.6%)

Rural Central

1. Marketing (22%)
2. Law & Taxes (19.1%)
3. Raw Materials (12.7%)
4. Regulations (9%)
5. Personnel & Labor (8.5%)

Northeastern Regions

1. Marketing (18.6%)
2. Raw Materials (18%)
3. Investment (17.2%)
4. Law & Taxes (13.7%)
5. Personnel & Labor (9.6%)

Northern Regions

1. Marketing (24%)
2. Raw Materials (19.3%)
3. Law & Taxes (15.4%)
4. Investment (10.7%)
5. Regulations (9.8%)

Southern Regions

1. Raw Materials (18.8%)
2. Marketing (16%)
3. Regulations (12.9%)
4. Law & Taxes (11.1%)
5. Personnel and Labor (10.6%)

From the above information, it can be seen that the primary problems faced by industrial entrepreneurs in any region of the country

are marketing, raw materials, law and taxes, capital investment, and Personnel and Labor.

3.1.2 Main Problems of Management

This part emphasizes problems faced by investors in the area of management and administration. Inefficiency affects businesses by reducing the returns. This problem can be solved with the help of concerned agencies through the following means: training, seminars, and support documents. When problems are understood, services can be effective and respond directly to the target groups' need.

The main management problems encountered by industrialists all over the country involve: marketing, accounting, finance, production, and personnel. In terms of priorities, the main problems faced by investors (24.3%) are marketing management, financial management, production management, personnel management, and accounting management (16.2%, 13.8%, 11.6%, and 9.1% respectively)

From Table 3.2, the management problems of industrial entrepreneurs can be considered by region as follows:

Bangkok Major problems faced by most industrial entrepreneurs (29.3%) was that of marketing management, followed by problems in financial management, production management, and personnel management (12.1% each), while accounting management problems affect business administrative least (8.1%)

Rural Central Most industrial entrepreneurs (18.2%) faced the primary problem of marketing management, followed by management problems in finance, production, personnel, and accounting (9.3% , 8.9%, 8.1% and 5.3% respectively).

Northeast Industrial entrepreneurs ranked their top problems as follows: marketing management and financial management (21.4% and 20.7%

respectively), followed by problems in production management, accounting management and personnel management (13.6%, 12.9% and 7.9% respectively)

Northern Region Industrial entrepreneurs prioritized their problems as follows: marketing management, financial management, production management, personnel management and accounting management (19.3%, 17.3%, 14.0%, and 11.1% respectively)

Southern Region Industrial entrepreneurs prioritized their problems as follow: market management, financial management, production management, personnel management and accounting management (19.3%, 16.6%, 15.1% and 9.4% respectively)

From the above data, it can be seen that marketing management is the most important problem facing industrialists in all regions. Due to the fact that competition is becoming more serious, industrial entrepreneurs must be alert and follow market movements. Thus, marketing management is becoming the most important and interesting part of the business for industrial entrepreneurs.

3.2 DEMAND FOR INFORMATION

The study on the demand for information aims to find out how much information industries need at different levels and how they prioritize their needs. Information is classified into three groups:

- 3.2.1 Information on the economy and marketing
- 3.2.2 Information on administration and management
- 3.2.3 Information on production and technology

3.2.1 Information on Economy and Marketing

This type of information is useful for decision-making and management. This section look sat needs of the industrial investors for

information on the economy and marketing. The questionnaire classifies the needs into three levels: very strong, moderate, and none.

3.2.1.1 Needs of Industrial Investors Across the Country for Information on the Economy and Marketing

Table 3.3 finds that, on average, general information is hardly needed since investors can obtain the information on their own or do not realize its importance.

The information most in demand involves:

- prices of raw materials,
- sources of raw materials,
- special privileges,
- prices of goods produced,
- domestic market for goods produced,
- sources of funds and credit, and
- laws and regulations.

The type of information in moderate demand is prioritized as follows:

- economic environment in specific industries,
- general economic environment,
- laws and regulations,
- prices of goods produced,
- special privileges,
- domestic market for goods produced,
- sources of funds and credit, and
- prices of raw materials.

3.2.1.2 Needs of Bangkok Industrial Investors

Table 3.4 show that, on average, Bangkok investors still hardly need information on the economy and marketing. However, out of sampled groups (28.5%), 14.1% have a for strong need for the information, whereas 14.4% have just a moderate need.

Needs are prioritized as follows:

- prices of Raw Materials,
- special privileges,
- sources of raw materials, and
- domestic market for goods produced.

As for information in moderate demand, it is prioritized as follows:

- general economic environment,
- laws and regulations,
- economic environment in specific industries,
- prices of goods produced, and
- special privileges.

3.2.1.3 Need of Rural Central Industrial Investors

The data in Table 3.5 indicate that, overall, rural central industrial investors hardly need such information. However, 27.8% do need such information whereas: 10.8% have strong needs for the information, and another 21.6% have moderate need.

The following may be classified in terms of priorities of needs:

- special privileges,
- prices of raw materials,
- sources of raw materials,

- prices of goods produced, and
- domestic market for goods produced.

As for the group with a moderate need for information, their needs are prioritized as follows:

- general economic environment,
- economic environment in specific industries,
- prices of goods produced,
- prices of raw materials,
- sources of raw materials,
- laws and regulations,
- special privileges, and
- sources of funds and credit

3.2.1.4 Needs of Northeastern Industrial Investors'

The data in Table 3.6 indicate that most Northeastern industrial investors hardly need information. However, of the 25.6% who need such data, 13.4% have strong needs and another 12.2% have moderate needs.

Their needs may be prioritized as follows:

- prices of raw materials,
- sources of raw materials,
- sources of funds and credit, and
- special privileges.

As for the group with a moderate need for data, their priorities are as follows:

- laws and regulations,
- general economic environment,
- domestic market for goods produced,
- special privileges,
- trade fairs and exhibitions,
- prices of goods produced,

- economic environment in specific industries, and
- sources of funds and credit.

3.2.1.5 Needs of Northern Industrial Investor

The data in Table 3.7 indicate that most the average Northern industrial investors hardly need such information. Of the 42.8% who do need such information, 19.6% have strong needs and another 23.2% have moderate needs.

Their needs may be prioritized as follows:

- prices of raw materials,
- sources of raw materials,
- special privileges,
- prices of good produced,
- laws and regulations, and
- sources of funds and credit.

As for the group with a moderate need for data, their priorities are as follows:

- prices of good produced,
- general economic environment,
- laws and regulations,
- prices of raw materials,
- economic environment in specific industries,
- special privileges,
- domestic market for goods produced, and
- sources of funds and credit.

3.2.1.6 Needs of Southern Investors

The data in Table 3.8 indicate that most Southern industrial investors hardly need such information. Of the 38.3% who do need such

information, 16.7% have strong needs and another 21.6% have moderate needs.

Their needs may be prioritized as follows:

- prices of raw materials,
- sources of raw materials,
- special privileges, and
- price of goods produced.

Those whose needs are moderate require the following information:

- laws and regulations,
- general economic environment,
- prices of goods produced,
- sources of funds and credit,
- special privileges,
- domestic market for goods produced, and
- economic environment in specific industries.

3.2.2 Data on Administration and Management

This section examines the need for information on administration and management, which may be classified into categories of marketing, personnel, accounting, planning, taxation, stock-in-trade, labor law, productivity development, cost reduction, and machinery maintenance, as well as project analysis and management. Such needs are also classified into three levels, strong, moderate and none.

3.2.2.1 Needs of Industrialists Across the Nation

The data in Table 3.9 indicate that the overall need for such information is minimal, due to the fact that small-scale investors do not realize its importance. This is because most enterprises belong to one person and the management is based on past experience. The

businesses are neither big nor complex. However, 9.9% of the sample group classifies their needs as strong, with the following priorities:

- productivity development and cost reduction,
- machinery maintenance,
- tax planning, and
- marketing management.

Another 18.0% of sampled group has moderate need for such data, prioritized as follows:

- financial management,
- tax planning,
- machinery maintenance,
- labor law and regulation, and
- marketing management.

It can be seen that the sampled groups with strong and moderate demand place emphasis on machinery maintenance, tax planning and marketing management, while emphasis on information requirement for personnel management, accounting management, planning and stock is rather minimal.

3.2.2.2 Needs of Bangkok Industrialists

Table 3.10 indicates that most Bangkok industrialists do not demand such information. However, of the 22.2% of the sample group needs that information, 8.9% have strong needs whereas 13.3% have moderate needs.

The strong demand for such data consists of:

- productivity development and cost reduction,
- marketing management,
- tax planning, and
- machinery maintenance.

The moderate demand consists of:

- productivity development and cost reduction,
- marketing management,
- tax planning, and
- machinery maintenance.

It can be seen that the sampled group with strong and moderate demand place emphasis on machinery maintenance, tax planning and marketing management, while emphasis on the information needs concerning personnel management, accounting management, planning and stock are rather minimal.

3.2.2.3 Needs of Rural Central Industrialists

Table 3.11 indicates that most rural central industrialists do not demand such information. However, about 20.5% of the sample group needs that information; 7.8% have strong needs, whereas 12.7% have moderate needs.

The strong demand for such data consists of:

- productivity development and cost reduction,
- tax planning,
- market management, and
- machinery maintenance.

The moderate demand consists of:

- productivity development and cost reduction,
- tax planning,
- marketing management,
- machinery maintenance, and
- labor law and regulation.

3.2.2.4 Needs of Northeastern Industrialists

Table 3.12 indicates that most Northeastern industrialists do not demand such information. However about 22.7% of the sample group needs such data; 10.0% have strong needs, whereas 11.7% have moderate needs.

The strong demand for such data consists of:

- productivity development and cost reduction,
- machinery maintenance,
- tax planning, and
- market management.

The moderate demand consists of:

- personnel management,
- marketing management,
- labor law and regulation, and
- machinery maintenance.

3.2.2.5 Needs of Northern Industrialists

Table 3.13 indicates that most Northern industrialists do not demand such information. However, about 36.4% of the sample group needs this type of information; 9.3% have a strong demand, whereas 27.1% have a moderate demand.

The strong demand for such information consists of:

- machinery maintenance,
- tax planning, and
- productivity development and cost reduction.

The moderate demand consists of:

- marketing management,
- labor law and regulation,

- machinery maintenance,
- productivity development and cost reduction, and
- inventory management.

3.2.2.6 Needs of Southern Industrialists

Table 3.14 indicates that most Southern industrialists do not demand such information. However, about 36.9% of the sample group needs this type of information; 16.1% have a strong demand, whereas 20.8% have a moderate demand.

The strong demand for such data consists of:

- productivity development and cost reduction,
- machinery maintenance,
- marketing management, and
- tax planning.

The moderate demand consists of:

- tax planning,
- labor law and regulation,
- machinery maintenance, and
- financial management.

3.2.3 Information on Production and Technology

This part of study involves the demand for information on production technology, which can be classified into various categories such as patented goods, findings, research, new products, new techniques, packaging and industrial design, catalogues of tools and equipments, product standards, testing, measurement and control techniques, computer and energy-saving techniques, applications of new technology, technology sources and technology transfer. Demands are classified into three levels: strong, moderate and none.

3.2.3.1 Demand of Investors Across the Country

Table 3.15 indicates that most industrialists across the country (71.1%) do not demand this type of information, since such information is very technical, specific and difficult for investors to understand. Besides, most production does not require high technology.

However, information in demand by 10.9% of the sampled groups includes:

- new technique of production,
- new technology,
- energy saving technique, and
- machinery and tool catalogue.

15.2% of the sample group have a moderate demand for the following information:

- machinery and tool catalogues,
- energy-saving techniques,
- new technique of production, and
- new technology.

3.2.3.2 Needs of Bangkok Industrialists

Table 3.16 indicates that most Bangkok industrialists are hardly interested in production technology. Of the 26.3% of the sampled groups who are interested and have the need for such data, 15.4% have a strong demand, whereas another 10.9% have a moderate needs.

The priorities of those whose needs are strong consist of:

- new techniques of production,
- new technology,

- machinery and tool catalogue, and
- energy-saving techniques.

Priorities of those whose needs are moderate involve:

- energy-saving techniques,
- new technology,
- packaging, and
- information on new products.

3.2.3.3 Needs of Industrial Investors in the Rural Central Area

Table 3.17 indicates that most industrialists in the rural central area are hardly interested in such information. However, of 20.9% of the sampled groups who are interested, 8.5% strong needs, whereas another 12.4% have moderate needs.

In terms of priorities, those with strong needs require information on:

- new techniques of production,
- new technology,
- energy-saving techniques,
- catalogues of tools and machinery, and
- information on new products.

Priorities of those whose needs are moderate involve:

- energy-saving techniques,
- machinery and tool catalogues,
- new technique of productions, and
- new technology.

3.2.3.4 Needs of Industrial Investors in the Northeast

Table 3.18 indicates that most industrialists in the Northeast are hardly interested in such information. However, of the 23.3% of the sampled groups who are, 11% have strong needs, whereas another 12.1% have moderate needs.

In terms of priorities, those with strong needs require information on:

- new techniques of production,
- energy saving technique,
- new technology,
- machinery and tool catalogue, and
- information on new products.

Priorities of those whose needs are moderate involve:

- energy-saving techniques,
- machinery and tool catalogues,
- product standardization and testing,
- information on new products,
- sources of technology and point of contact,
- new techniques of production,
- measurement and control technique,
- technology transfer and absorption,
- research and development results, and
- new technology.

3.2.3.5 Needs of Industrial Investors in the North

Table 3.19 indicates that most industrialists in the North are hardly interested in such information. However, of the 29.2% of the sample groups who are, 10.5% have a strong needs, whereas another 18.7% have moderate needs.

In terms of priorities, those with strong needs require information on:

- new techniques of production,
- new technology,
- energy-saving techniques, and
- machinery and tool catalogue.

The priorities of those whose needs are moderate involve:

- machinery and tool catalogues,
- energy saving techniques, and
- new technology.

3.2.3.6 Needs of Industrial Investors in the South

Table 3.20 indicates that most industrialists in the south are hardly interested in such information. However, of 35.6% of the sampled groups who are, 13.4% have strong needs, whereas another 22.2% have moderate needs.

In terms of priorities, those with strong needs require information on:

- new technology of productions,
- energy saving techniques, and
- new technology.

The priorities of those whose needs are moderate involve:

- machinery and tool catalogues,
- energy-saving techniques,
- sources of technology and points of contact,
- product standardization and testing,
- new technology, and
- technology transfer and absorption.

3.3 FORMS OF INFORMATION AND SERVICES NEEDED

Study of the forms of data and services needed by the investors aims at understanding the types of data and the features of services that are useful for the decision-making process. Information support that is in line with the industrialists' demand will benefit the country's economy as a whole.

3.3.1 Forms of Information Required By the Industrialists

This study will classify forms of information into categories: journals, text-books, hand-books, research papers and these, catalogues of products, machinery and industrial standard documents, documents about industrial circles, list of the names of experts, documents of seminars, training, exhibitions, fairs, video-tapes and technical slides.

Requirement for such information may be classified into three levels: strong, moderate and none.

3.3.1.1 Needs for Various Forms of Information By Industrialists Across the Nation

Table 3.21 indicates that most industrialists across the country hardly need data, since they are small-scale investors and they think such information should better benefit large-scale industry.

However, of the 24.6% of sampled groups who need technical documents and information, 9.2% have strong needs, whereas only 15.4% have moderate needs.

The priorities of industrialists with strong needs are:

- machinery and tool catalogues,
- specialized academic journals, and
- product catalogues.

The priorities of industrialists with moderate needs are:

- specialized academic journals,
- industrial news,
- machinery and tool catalogues,
- product catalogues,
- industrial standard documentation and regulations, and
- training and seminar schedules.

3.3.1.2 Forms of Information Needed By Industrialists in Bangkok

Table 3.22 indicates that most Bangkok industrialists hardly need any type of information. However, of 21.3% of the sampled groups who do, 11.7% have strong needs, whereas 9.6% have moderate needs.

The priorities of industrialists with strong needs are:

- machinery and tools catalogues, and
- product catalogues.

The priorities industrialists with of moderate needs are:

- domestic trade fairs and exhibition schedules,
- product catalogues,
- industrial news,
- texts,
- industrial standard documentation and regulation, and
- international trade fairs and exhibition schedules.

3.3.1.3 Forms of Information Required By Industrialists in the Rural Central Area

Table 3.23 indicates that most industrialists in the rural central area hardly require any forms of information. Only 18.9% of the sampled group are interested in the information.

The priorities of those with a strong demand involve:

- machinery and tools catalogues,
- product catalogues, and
- specialized academic journals.

The priorities of those with moderate needs are:

- product catalogues,
- training and seminar schedules,
- domestic trade fair and exhibition schedules,
- machinery and tools catalogues, and
- specialized academic journals.

3.3.1.4 Forms of Data Required By Industrialists in the Northeast

Table 3.24 indicates that most industrialists in the northeast require hardly any form of data. However, of 23.4% of the sample groups that do, 9.2% have strong needs, whereas 14.2% have moderate needs.

The priorities industrialists with strong needs are:

- specialized academic journals,
- machinery and tools catalogues,
- texts, and
- product catalogues.

The priorities of Northeastern moderate needs industrialists with are:

- machinery and tools catalogues,
- texts,
- specialized academic journals,
- industrial standard documentation and regulations,
- training and seminar schedules, and
- domestic trade fair and exhibition schedules.

3.3.1.5 Forms of Data Required By Industrialists in the North

Table 3.25 indicates that most industrialists in the North require hardly any forms of information. However, of the 25.5% of the sample groups that do, 8.1% have strong needs whereas 17.4% have moderate needs.

The priorities of Northern industrialists with strong needs are:

- machinery and tools catalogues,
- specialized academic journals,
- product catalogues, and
- industrial news.

The priorities of northern industrialists with moderate needs are:

- industrial news,
- specialized academic journals,
- machinery and tools catalogues,
- industrial standard documentation and regulations, and
- product catalogues.

3.3.1.6 Forms of Information Required By Industrialists in the South

Table 3.26 indicates that most industrialists in the South require hardly any forms of information. However, of 32.5% of the sample groups who do, 10.6% have strong needs, whereas 21.7% have moderate needs.

The priorities of Southern industrialists with strong needs are:

- specialized academic journals,
- catalogues,
- industrial news, and
- industrial standard documentation and regulations.

The priorities of Southern industrialists with moderate needs are:

- machinery and tools catalogues,
- specialized academic journals,
- industrial standard documentation and regulations,
- texts,
- training and seminar schedules,
- handbooks, manuals, and
- industrial news.

3.3.2 Various Forms of Services Needed By Industrialists

This section discusses the various forms of service needed by industrialists, such as advice, discussion, fairs, exhibitions, foreign and local inspection tours, meetings, technical seminars, workshops, training sessions and meetings with industrialists.

Again, the levels of need are classified as strong, moderate or none.

3.3.2.1 Various Forms of Service Needed By Industrialists All Over the Country

Table 3.27 indicates that there is hardly any need for service among sample groups of industrialists -- whether it be advice, exhibitions, fairs, local and international visits and tours, technical seminars, workshops, training sessions or meetings with other industrialists.

However, 25.6% of the sampled groups need these various forms of service. 8.8% of them have strong needs, whereas 16.8% have moderate needs.

The priorities of those with strong needs are:

- consultation,
- meetings with industrialists,
- local visits and tours, and
- training.

The priorities of those with moderate needs are:

- meetings with industrialists,
- consultation,
- training,
- local visits and tours,
- trade fairs and exhibitions,
- workshop and seminars, and
- academic seminars and meetings.

It can be seen the priorities of those with moderate needs for each type of services are at about the same level.

3.3.2.2 Various Forms of Services Needed By Industrialists in Bangkok

Table 3.28 indicates that most industrialists in Bangkok hardly need the above services. However, 30.9% of the sampled groups need various forms of services: 15.4% have strong needs whereas another 15.5% have moderate needs.

The priorities of industrialists strong needs for services are:

- meetings with industrialist,
- international visits and tours,
- local visits and Tours.

The priorities of industrialists with moderate needs are:

- meetings with industrialist,
- consultation,
- local Visits and tours, and
- trade fairs and exhibitions.

3.3.2.3 Services Needed By Industrialists in the Rural Central

Table 3.29 indicates that most of the sample groups do not need the above-mentioned services. However, 20.8% of the sampled persons need such services; 9.4% have strong needs, whereas 11.4% have moderate needs.

The priorities of industrialists with strong needs are:

- Consultation,
- meetings with industrialist,
- local visits and tours, and
- trade fairs and exhibitions.

The priorities of industrialists with moderate needs are:

- consultation,
- training,
- meetings with industrialists.

3.3.2.4 Various forms of Services Needed By Northeastern Industrialists

Table 3.30 indicates that most industrialists in the Northeast hardly need the above services. However, 25.3% of the sampled groups need various forms of services; 10.9% have strong needs, whereas another 14.4% have moderate needs.

The priorities of industrialists with strong needs for services are:

- consultation,
- international visits and tours, and
- meetings with industrialists.

Moderate needs of the industrialists in terms of priorities are as follows:

- meetings with industrialists,
- local visits and tours,
- trade fairs and exhibitions,
- workshops and seminars,
- academic seminars and meetings,
- training,
- consultation, and
- international visits and tours.

3.3.2.5 Various Forms of Services Needed By Industrialists in the North

Table 3.31 indicates that most industrialists in the North hardly need the above services. However, 29.4% of the sampled groups need various forms of services: 6.4% have strong needs, whereas another 23.0% have moderate needs.

The priorities of industrialists with strong needs are:

- consultation,
- industrialist meetings,
- training,
- local visits and tours,
- trade fairs and exhibitions,
- international visits and tours, and
- workshops and seminars.

The priorities of industrialists with moderate needs are:

- meetings with industrialists,
- consultation, and
- training.

3.3.2.6 Services Needed By Industrialists in the South

Table 3.32 indicates that most industrialists in the South hardly need the above services. However, 33.6% of the sampled groups need various forms of services; 10.4% have strong needs, whereas another 23.2% have moderate needs.

The priorities of industrialists with strong needs are:

- consultation,
- meetings with industrialists, and
- training.

Moderate needs of the industrialists in terms of priorities are as follow:

- Consultation,
- Training, and
- meetings with industrialists,

3.4 SOURCES OF VITAL INFORMATION FOR MODERN-DAY BUSINESS

This section discusses sources of information that industrialists can use for decision-making. It aims to describe the information sources currently used by industrialists, their level of satisfaction and complaints, so as to develop the information and make use of other information sources.

The section is divided into three parts:

- 3.4.1 Sources of information currently used by industrialists,
- 3.4.2 Satisfaction with the available information, and
- 3.4.3 The problem of obtaining information.

3.4.1 Sources of Vital Information for Current Business

This part will treat the sources of information used for decision-making by industrial investors. The sources consist of public, private, international and other information shown in Table 3.33.

Table 3.33 indicates that industrialists throughout the country mostly gain information from peer groups (33.2%), through conversation and the exchange of ideas and opinions. 16.9% gain information from mass media as such television, radio, newspapers and magazines.

It should be noted that information sources belonging to government agencies, private agencies or international organizations are hardly used (5.2%, 2.6%, and 3.6% respectively).

Bangkok area: Most industrialists (30.1%) gain vital information from peer groups. Sources of information next in importance are the mass media (18.8%).

Rural Central: Most industrialists (33.9%) gain information for decision-making from peer groups, whereas 17.1% use the mass media.

Northeast: Most industrialists (28.7%) gain information from peer group, followed by mass media, and visits and tours (12.4% and 10.2% respectively).

North: Most industrialists (36.9%) obtain data from peer groups and only 18.6% gain from mass media.

South: Most industrialists (35.2%) gain information from peer groups; 18.5% rely on the mass media.

Most industrialists across the land obtain information from friends and mass media or data obtained without any research or study.

Other information sources -- whether they came from public, private or international sources, marketing research, or training and seminars, hardly interest the industrialists, even though such sources can give better and more correct information.

3.4.2 Satisfaction With the Available Information

This section discusses industrialists' satisfaction with the information available from various sources throughout the country. The data in Table 3.34 indicate that most industrialists throughout the country (84.9%) are satisfied with information obtained from their own sources; 12.3% are not satisfied.

If we consider the data by region, we can summarize that industrialists in each region are satisfied with the data obtained from their own sources:

Bangkok	satisfactory	84.0%	not satisfactory	10.6%
Rural Central	"	90.8%	"	7.2%
Northeast	"	78.6%	"	17.2%
North	"	86.8%	"	10.7%
South	"	83.8%	"	14.7%

3.4.3 Problems with Information Obtained

The data in Table 3.35 indicate that most industrialists throughout the country (81.1%) have no problems with the information obtained from various sources; 12.3% have some problems with the information.

If we consider the data by region, we can summarize that most industrialists in each region do not have problems with the information obtained:

Bangkok	no problems	89.2%	with problems	5.3%
Rural Central	"	87.9%	"	9.6%
Northeast	"	71.6%	"	18.6%
North	"	80.7%	"	10.8%
South	"	80.1%	"	13.8%

3.5 SOURCES OF CURRENT ADMINISTRATION AND MANAGEMENT SYSTEM

This section deals with the sources of current administration and management systems used by industrial investors, including experience, transfer of learning from experts or business specialists, technical documents, seminars, training or consultation with close friends, and past work experience.

Table 3.36 indicates that most administration and management methods are based on past experience (49.5%) and not on technical knowledge or the advice of experts. The management is basically a trial-and-error method and based upon business successor and previous job experience (14.4% and 11.4% respectively). Technical learning from seminars, workshops, advice from experts or professionals, and consultation with partners, employees or family members is rarely used.

Basically the same conclusions can be drawn by regions:

Bangkok: Most industrialists manage through experiences (46.9%) and through business successor and previous job (13.6% and 10.8% respectively).

Rural Central: Most industrial investors base their management methods on experiences (50.3%) and on business successor and previous job (15.2% and 10.2% respectively)

Northeast: Most industrial investors base their management methods on experiences (50.8%) and on business successor and previous job (17.5% and 10.9% respectively).

North: Most industrial investors base their management methods on experiences (48.8%) and on business successor and consultation with partnership, family members, and staffs (14.5% and 11.0% respectively).

South: Most industrialists base their management methods on experience (49.4%), on previous jobs and on business successor (14.1% and 10.6% respectively).

3.6 SOURCES OF INFORMATION ON PRODUCTION TECHNOLOGY

This section discusses sources of information on production technology currently used by industrialists. The information comes from many sources: self-study, manufacturers, machine salespersons, the public sector, relevant institutions, friends, partners, and other

sources. The study dealt with sources of production technology used by industrialists all over the country.

Table 3.37 indicates that most industrialists obtain information on production technology from self study (34.2%), followed by the producers of machinery/salesman, peer groups and previous job experience (15.7%, 13.8%, and 10.4% respectively). It should be noted that these sources of information on production technology come from close circle and are obtained directly, without research. Most industrialists do not place emphasis on acquiring technical know-how. Only very few entrepreneurs use information on production technology obtained from the government, the private sector, relevant associations and international sources.

In terms of regions, the results are mostly the same:

Bangkok: Most industrialists gain information from self study (29.9%), whereas the rest learn from the producers of machinery/salesman and from previous job experience (17.2% and 11.1% respectively).

Rural Central: Most industrial investors obtain information on production technology from self study (41.0%); others learn from the producers of machinery/salesman, previous job experience, and peer groups (14.8%, 10.5% and 9.3% respectively).

Northeast: Most industrial investors obtain their information from self study (37.8%); others learn from the producers of machinery/salesman and peer groups (15.0% and 14.8% respectively).

North: Most industrial investors gain information on production technology from self study (33.4%); others learn from peer groups and the producers of machinery/salesman (18.9% and 16.6% respectively).

South: Most industrial investors learn from self study (28.4%), followed by the producers of machinery/salesman peer groups and previous job experience (15.5%, 13.9% and 11.5% respectively).

3.7 FAMILIARITY AND USE OF SERVICES FROM VARIOUS AGENCIES

This section deals with the familiarity and use of services provided by various agencies in terms of the following aspects:

- 3.7.1 Familiarity with information-providing agencies,
- 3.7.2 Use of agencies and satisfaction, and
- 3.7.3 Reasons for not using services.

3.7.1 Familiarity With Information Providing Agencies

3.7.1.1 Familiarity Among Industrial Investors All Over the Country

Table 3.38 indicates that most investors sampled across the country hardly know that public and private agencies provide services. Only 36.9% of the sampled investors know these agencies.

The reason is that these agencies have not introduced themselves to the public; also, their work is limited and does not draw the attention of most industrialists. Most of their offices are located in Bangkok, and there are few branches upcountry.

The best-known agencies are the Provincial Industrial Office, the Provincial Commercial Office, and the Provincial Chambers of Commerce which have branches all over the country and within easy reach of industrial investors.

3.7.1.2 Familiarity Among Industrial Investors in Bangkok

Table 3.39 indicates that most the sampled investors know very little about these public and private agencies. However, 45.1% of the sample know about these agencies.

The best known agencies are the Provincial Industrial Office, Department of Industrial Promotion, Provincial Commercial Office, Department of Export Promotion, Provincial Chambers of Commerce, Industrial Finance Corporation of Thailand, and the Thai Industrial Standards Institute.

Agencies still not well-known among industrialists in Bangkok are the Institute for Management Education for Thailand Foundation, the small industries credit guarantee funds, Small Industrial Business Office, Technology Transfer Center, Productivity Center of Thailand, Department of Science Service, the Small Industries Association, the Institute of Scientific Research, Economic Industry Development Center, Export Service Division and The National Institute of Skill Development.

3.7.1.3 Familiarity Among Industrialists in the Rural Central Area

Table 3.40 indicates that most sampled industrialists in the rural central area hardly know about information-providing public and private agencies that provide information, whereas the rest (36.3%) know them.

Agencies that are better known among industrialists in the rural central area are: the Provincial Industrial Office, Provincial Commercial Office, and Provincial Chamber of Commerce; in contrast, other agencies are hardly known and their services not used.

3.7.1.4 Familiarity Among Industrialists in the Northeast

Table 3.41 indicates that most sampled industrialists in the Northeast hardly know about information-providing public and private agencies; only (31.5%) are aware of them.

Agencies that are better know among industrialists in the Northeast are: the Provincial Commercial Office, the Provincial Industrial Office,

are the Provincial Chamber of commerce; other agencies are hardly known or used.

3.7.1.5 Familiarity Among Industrialists in the North

Table 3.42 indicates that most sampled industrialists in the North hardly know about the existing information-providing public and private agencies; only 37.9% are aware of them.

Agencies that are better known among industrialists in the North are the Provincial Industrial Office, the Provincial Commercial Office, the Provincial Chamber of Commerce, and the Department of Industrial Promotion; other agencies are hardly known or used.

3.7.1.6 Familiarity Among Industrialists in the South

Table 3.43 indicates that most sampled industrialists in the South hardly know about information-providing public and private agencies; 40.2% know about them.

Agencies that are better known among industrialists in the South are: Provincial Industrial Office, the Provincial Commercial Office, the Provincial Chamber of Commerce and the Department of Industrial Promotion; other agencies are hardly known or used.

3.7.2 Use of and Satisfaction with the Agencies' Services

This section deals with use of agencies' services by industrial investors who know about the agencies.

Information used in this section heading is based only on the answers received from the questionnaires, since it was found that those who do not know the agencies never use their services.

3.7.2.1 Use and Satisfaction Among Industrialists Across the Country

Table 3.44 indicates that most of the sampled industrialists who know these agencies as mentioned in 37.1, 63.6% never use their services only 33.6% used the services.

More than half of the industrial investors who know there agencies have never once used their services. Therefore, it may be concluded that entrepreneurs are generally not interested in using the agencies' services, except for services provided by the Provincial Industrial Office and the Provincial Commercial Office.

However, there are two agencies that are well-known among industrial investors, who often use their services: namely, the Provincial Industrial Office and the Provincial Commercial Office. The officers of these agencies are located in various provinces and are easily accessible and directly useful.

It is found from questionnaires that most (86.1%) are satisfied with the service. Only a small number (8.2%) are not satisfied. This could be due to some minor deficiencies in terms of service.

It may be seen that those who use the services offered by these agencies are most satisfied with the result. The problem is that most entrepreneurs have never tried using the information and do not know which types of services are available. It is necessary for these agencies to engage in more active public relations and encourage the industries to use their information.

3.7.2.2 Use and Satisfaction Among Industrial Entrepreneurs in Bangkok

Table 3.45 indicates that most of the sampled entrepreneurs in Bangkok who know of the agencies' services never use such services (74.4%) only 23.2% have ever used the services.

It should be noted that the services of only two offices' are used: the Provincial Industrial Office and the Provincial Commercial Office. Other well-known agencies are hardly used by investors: the Department of Industrial Promotion, the Department of Commercial Relations, the Provincial Chamber of Commerce, the Industrial Finance Corporation of Thailand and the Office of Industrial Standards.

As for investors who do not use the services (Table 50), most of the sample persons (65.3%) could not provide clear answers, while some (29.6%) do not need to use such services.

However, most of those who have used the services (83.8%) are satisfied with the services, whereas those who are not satisfied account for only 12.2%.

3.7.2.3 Use and Satisfaction Among the Rural Central Industrialists

Table 3.46 indicates that most of the sampled (71.4%) never use the services; only 24.9% used the services.

The agencies whose services are used the most are the Provincial Industrial Office and Provincial Commercial Office; hardly used are the services of the Chamber of Commerce, though this organization is well known to rural central entrepreneurs. The reason (Table 3.50) is that half of the respondents (49.7%) do not need the agencies' services, whereas another group (39.7%) is not sure of their reasons for not using the service.

However, most of the groups that had used the service (86.2%) are satisfied, whereas only a small number (7.3%) are not satisfied.

3.7.2.4 Use and Satisfaction Among Northeastern Industrialists

Table 3.47 indicates that most Northeastern industrialists (68.5%) have never used the services; only certain groups (26.7%) have used such services.

The agencies most used by Northeastern industrialists are: the Provincial Industrial Office and the Provincial Commercial Office; the services of the Provincial Chamber of Commerce is not used, though they know about this agency. Table 3.50 indicates that more than half of the sampled group (56.6%) do not need the service whereas some groups (21.2%) do not know about the agencies, the location and the types of services. Of the sample, 15.1% state that they have no officer to contact these agencies.

However, the majority who use such agencies (87.4%) are satisfied with the services, whereas a minority (7.5%) are not satisfied.

3.7.2.5 Use and Satisfaction Among Northern Industrialists

Table 3.48 indicates that most Northern industrialists (75.9%) have never used the services; only certain groups (22.2%) have ever used the services.

The agencies most used by Northern industrialists are: the Provincial Industrial Office, the Provincial Commercial Office and the Department of Industrial Promotion; not many use the services of Provincial Chamber of Commerce, though this agency is well-known.

When asked why they do not use the services, more than half of the sampled group (52.6%) said they do not need the services, whereas some (10.7%) stated that they have no officer to contact these agencies (see Table 3.48).

However, the majority (86.4%) are satisfied with the services, whereas a minority (8.0%) are not satisfied.

3.7.2.6 Use and Satisfaction Among Southern Industrialists

Table 3.49 indicates that most Southern industrialists (76.3%) have never used the services; only certain groups (21.3%) have never used such services.

The agencies used most by Southern industrialists are: the Provincial Industrial Office, and the Provincial Commercial Office; not many use the services of the Provincial Chamber of Commerce and the Department of Industrial Promotion, though these agencies are well-known. When asked the reason for not using the services (table 3.50), the majority of sampled group (57.9%) is not sure for their reason, whereas some (28.1%) do not need the services.

However, the majority (87.0%) are satisfied with the services, whereas a minority (9.2%) are not satisfied.

3.7.3 Reasons that Industrialists do not Use Available Services

Table 3.50 shows that some industrialist even though aware of agencies that provide services but never use them. The following section deals with the reasons for not using available services.

The finding indicates that the main reason but not using these services is the attitudes of industrialist towards these services. The majority of industrialists who do not utilize services available think that they have no need for such services and some feel that the services available do not match the needs. The main issue here is that industrialists do not find information important for their business operations. Therefore, it is essential for the service providers to create and stimulate needs for information arrangement industrialists and also find ways of improving the efficiency in information dissemination. The real needs of industrialists should be uncovered and studied in depth in order to come up with information and services that really suit industrialists needs.

3.8 MEDIA HABITS

This section deals with the media habits of industrialists. The aim of the study is to identify the main medias that provide up to date information and used as sources of information by industrialists on a regular basis. The types of mass media are classified into three categories i.e. print materials, radio and television.

3.8.1 Newspapers Read Regularly

This section deals with the types of newspapers read regularly by entrepreneurs. We shall consider two types: daily papers and business papers. The popularity of these papers is classified into three levels.

Preliminary data (Table No. 3.51 and 3.52) show that the newspapers most accepted by industrial entrepreneurs are Thai Rat (41.6%), Daily News (20.4%), Tan Settakij (8.0%), Prachachat Turakij (6.8%) and Matichon (6.5%).

The popularity of these papers by region is as follows (in order of popularity):

Bangkok	: Thai Rat, Daily News, Prachachat Turakij, Tan Settakij
Rural Central	: Thai Rat, Daily News, Prachachat Turakij Tan Settakij
North-east	: Thai Rat, Daily news, Tan Settakij, Prachachat Turakij and Matichon.
North	: Thai Rat, Daily News, Matichon, Tan Settakij
South	: Thai Rat, Daily news, Tan Settakij, Matichon

3.8.2 Popular Radio Programs

This section concerns the times at which industrial entrepreneurs listen to radio programs regularly; the time may be classified into five periods:- 04.00-08.00 hr., 08.00-12.00 hr., 12.00-16.00 hr., 16.00-20.00 hr. and 20.00-24.00 hr.

Preliminary study ranks the popular programs among the industrial investors as follows:

1. 04.00-08.00 hr. (35.5%)
2. 16.00-20.00 hr. (18.0%)
3. 12.00-16.00 hr. (16.9%)
4. 08.00-12.00 hr. (15.1%)
5. 20.00-24.00 hr. (14.5%)

Industrialists in all regions prefer to listen to programs during 04.00-08.00 hr.

3.8.3 Popular TV. Programs

This section concerns the time of day during which industrialists regularly watch TV. programs, the regional popularity during weekdays and weekends, and which channels are preferred.

Preliminary study (Table 3.54-3.55) demonstrates that most popular programs during weekdays are:

1. 19.30-21.00 hr. (65.1%)
2. 21.00-22.00 hr. (21.4%)
3. 22.00-24.00 hr. (10.4%)
4. 16.00-19.30 hr. (3.1%)

Most industrialists in all regions prefer the same period for watching programs.

As for weekday programs, the period 08.00-16.00 hr. is the same as weekends in terms of TV. viewing pattern.

The most popular channels program viewed regularly are: (Table 3.56) channel 7 (36.9%), channel 9 (20.1%), channel 3 (11.1%), and channel 5 (7.5%).

Popularity by region:

Bangkok	: Channel 9, Channel 7, Channel 3, Channel 5 and Channel 11
Central Plains	: Channel 9, Channel 7, Channel 3, Channel 5 and Channel 11
Northeast	: Channel 7, Channel 9, Channel 3, Channel 5 and Channel 11
North	: Channel 7, Channel 9, Channel 3, Channel 5 and Channel 11
South	: Channel 7, Channel 5, Channel 11, Channel 9 and Channel 3

3.9 SUMMARY OF THE STUDY

- The two most important problems faced by industrialists; Namely, business operations and management---may be summed up as follows:

- marketing
- raw materials
- laws and taxation
- sources of funds
- personnel and labor

These problems are faced by industrialists in all regions, and the most severe is marketing management. Next come financial problems and production and personnel management.

Economic and marketing information, and information on management, production, and technology are not seen as significant issues by the industrialists. The answers from the questionnaires demonstrate that they have little need for this information, however, those who need the information have the following preferences:

- Economic and marketing information: Information on prices of raw materials, sources, benefits, price of goods, local market, funding sources and government regulations.

- Information on management: Information on productivity, cost reduction, maintenance of machinery, planning, taxation and marketing management.

- Production technology data: New production techniques, new technologies, energy-saving techniques, catalogues on machinery and information on new products.

The forms of information and information services needed are mostly the same as for other information: most industrialists do not find such information important for their operation. What they do need are: catalogues on machines, specific technical journals, product catalogues, industrial newsletters, industrial standard documents, regulations and text books. The services that they prefer comprise advice on the solution of problems, meetings with industrialists, local study tours, training, study tours abroad and trade exhibitions.

There are two sources of information; namely, external sources and business sources.

External Sources

Personal Sources

- Business-related persons, sellers or manufacturer of machines and tools. Supplier clients, sub-contractors, persons not related to business friends, colleagues, public, officers, private agencies' officers, experts.

Impersonal Sources

- Data from mass media, participation in seminars, study tours, foreign information sources, journals and other publication.

Internal source

Personal Sources

- Experience, heritage, research on one's own, partnership, family, employees.

Impersonal Sources

- Marketing research, internal reporting and internal information

Sources of current information may be divided into three parts; sources used by industrialists, their satisfaction, and the problem of the information sources. In general, most of the information is obtained from friends and colleagues, mass media and study tours. Most of them are satisfied with existing information sources and have no problem with such sources.

The findings concerning the source of management systems indicate that they are based upon past experience, inheritance and experience gained before undertaking current business.

As for the sources of production technology, most industrialists gain from their own research, manufacturers or sellers of machines and tools, friends and colleagues, as well as jobs done before undertaking this business.

More than half of the industrialists who answered the questionnaire hardly know about these public and private agencies. The best known agencies are: the Provincial Industrial Office, the Provincial Commercial Office, the Thai Chamber of Commerce, which are spread across the country. The findings indicate that most investors do not need the information, though a number can not provide a clear reason why and some never use the service because they do not know these agencies.

The mass media popular among investors are: Thai Rat, Daily News, Tan Settakij Prachachat Turakij and Matichon. The peak listening time is from 4.00-8.00 hr. and FM. is more popular than A.M. The most popular TV. programs are between 19.00-21.00 hr., and most viewers prefer channel 7, channel 9 and channel 3 and 5 respectively.

Table 3.1
Problems Encountered in the Operation

Nature of Problems	Greater Bangkok		Rural Central		Northeast		North		South		Whole Kingdom	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
Marketing	37	18.6	86	22.2	68	18.6	103	24.0	68	16.0	362	20.0
Raw Materials	29	14.6	49	12.7	66	18.0	83	19.3	80	18.8	307	17.0
Law and Taxes	32	16.1	74	19.1	50	13.7	66	15.4	47	11.1	269	14.9
Investment	14	7.0	32	8.3	63	17.2	46	10.7	55	12.9	210	11.6
Personnel	21	10.6	32	8.3	35	9.6	35	8.2	45	10.6	168	9.3
Regulations	21	10.6	35	9.0	28	7.7	42	9.8	29	6.8	155	8.6
Production	12	6.0	26	6.7	25	6.8	28	6.5	24	5.6	115	6.4
Technology	11	5.5	6	1.6	14	3.8	12	2.8	23	5.4	66	3.7
Information and Data	6	3.0	7	1.8	5	1.4	9	2.1	16	3.8	43	2.4
Others			4	1.0	10	2.7	3	0.7	12	2.8	29	1.6
No Problems	10	5.0	2	0.5	2	0.5	1	0.2	21	4.9	36	2.0
No Answer	6	3.0	34	8.8			1	0.2	5	1.2	46	2.5
Total	199	100.0	387	100.0	366	100.0	429	100.0	425	100.0	1806	100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.2
Problems Encountered in the Management

Nature of Problems	Greater Bangkok		Rural Central		Northeast		North		South		Whole Kingdom	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
Marketing Management	29	29.3	45	18.2	30	21.4	72	29.8	52	24.5	228	24.3
Financial Management	12	12.1	23	9.3	29	20.7	47	19.4	41	19.3	152	16.2
Production Management	12	12.1	22	8.9	19	13.6	42	17.4	35	16.5	130	13.8
Personnel Management	12	12.1	20	8.1	11	7.9	34	14.0	32	15.1	109	11.6
Accounting Management	8	8.1	13	5.3	18	12.9	27	11.2	20	9.4	86	9.1
Others			3	1.2	4	2.9			3	1.4	10	1.1
No Problems	11	11.1	9	3.6	5	3.6			13	6.1	38	4.0
No Answer	15	15.2	112	45.3	24	17.1	20	8.3	16	7.5	187	19.9
Total	99	100.0	247	100.0	140	100.0	242	100.0	212	100.0	940	100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.3
Entrepreneurial Demand for Economic and Marketing Information
Whole Kingdom

Type of Information	Level of Need											
	Most		Medium		No need		No Reply		Unsure		Total	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
Prices of Raw Materials	300	30.5	204	20.8	467	47.5	1	0.1	11	1.1	983	100.0
Sources of Raw Materials	272	27.8	181	18.5	511	52.3			13	1.3	977	100.0
Special Privileges	243	24.9	215	22.0	506	51.8			12	1.2	976	100.0
Price of Goods Produced	177	18.0	245	24.9	546	55.6			14	1.4	982	100.0
Domestic Market for Goods Produced	156	16.0	214	21.9	596	60.9			12	1.2	978	100.0
Sources of Funds and Credit	151	15.5	212	21.7	603	61.7			11	1.1	977	100.0
Laws and Regulations	127	13.0	256	26.1	583	59.5			14	1.4	980	100.0
Economic Environment in Specific Industries	118	12.1	228	23.4	613	62.9			15	1.5	974	100.0
General Economic Environment	115	11.7	260	26.6	593	60.6			11	1.1	979	100.0
International Market for Goods Produced	91	9.3	108	11.1	766	78.4	1	0.1	11	1.1	977	100.0
Importation and Exportation of Goods	90	9.2	96	9.8	777	79.4	1	0.1	15	1.5	979	100.0
Market for Technology	88	9.0	150	15.4	725	74.4			11	1.1	974	100.0
Guideline in Doing Export Businesses	86	8.8	116	11.9	761	77.8			15	1.5	978	100.0
List of Potential Foreign Customers	78	8.0	87	8.9	796	81.6			15	1.5	976	100.0
Exhibition and Trade Fairs	58	5.9	166	17.0	743	75.9			12	1.2	979	100.0
Prospects for Joint Venture	55	5.6	96	9.8	815	83.3			12	1.2	978	100.0
Others	4	5.6	3	4.2	42	58.3	20	27.8	3	4.2	72	100.0
Average	13.6		17.3		66.0		7.0		1.5		100.0	

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.4
Entrepreneurial Demand for Economic and Marketing Information
Greater Bangkok

Type of Information	Level of Need											
	Most		Medium		No need		No Reply		Unsure		Total	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
Prices of Raw Materials	36	31.9	16	14.2	60	53.1			1	0.9	113	100.0
Special Privileges	34	29.8	21	18.4	58	50.9			1	0.9	114	100.0
Sources of Raw Materials	33	29.7	18	16.2	59	53.2			1	0.9	111	100.0
Domestic Market for Goods Produced	25	22.3	19	17.0	67	59.8			1	0.9	112	100.0
International Market for Goods Produced	16	14.2	7	6.2	89	78.8			1	0.9	113	100.0
List of Potential Foreign Customers	14	12.4	8	7.1	90	79.6			1	0.9	113	100.0
Importation and Exportation of Goods	12	10.6	9	8.0	90	79.6	1	0.9	1	0.9	113	100.0
Price of Goods Produced	11	9.6	23	20.2	79	69.3			1	0.9	114	100.0
Economic Environment in Specific Industries	10	9.0	23	20.7	77	69.4			1	0.9	111	100.0
Guideline in Doing Export Businesses	10	8.9	11	9.8	90	80.4			1	0.9	112	100.0
Laws and Regulations	9	8.0	24	21.2	79	69.9			1	0.9	113	100.0
Sources of Funds and Credit	9	8.0	17	15.0	86	76.1			1	0.9	113	100.0
Market for Technology	9	8.0	12	10.6	91	80.5			1	0.9	113	100.0
Exhibition and Trade Fairs	8	7.0	17	14.9	88	77.2			1	0.9	114	100.0
General Economic Environment	6	5.3	26	23.0	80	70.8			1	0.9	113	100.0
Prospects for Joint Venture	5	4.4	8	7.1	99	87.6			1	0.9	113	100.0
Others	1	20.0			3	60.0			1	20.0	5	100.0
Average		14.1		14.4		70.4		0.9		2.0		100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.5
Entrepreneurial Demand for Economic and Marketing Information
Rural Central

Type of Information	Level of Need											
	Most		Medium		No need		No Reply		Unsure		Total	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
Special Privileges	52	24.4	42	19.7	116	54.5			3	1.4	213	100.0
Prices of Raw Materials	48	22.2	49	22.7	116	53.7			3	1.4	216	100.0
Sources of Raw Materials	41	19.1	45	20.9	126	58.6			3	1.4	215	100.0
Price of Goods Produced	30	13.9	49	22.7	134	62.0			3	1.4	216	100.0
Domestic Market for Goods Produced	26	12.1	44	20.5	141	65.6			4	1.9	215	100.0
Economic Environment in Specific Industries	23	10.7	56	26.0	133	61.9			3	1.4	215	100.0
General Economic Environment	22	10.2	57	26.4	134	62.0			3	1.4	216	100.0
Laws and Regulations	20	9.3	45	20.9	146	67.9			4	1.9	215	100.0
Sources of Funds and Credit	19	8.8	42	19.5	152	70.7			2	0.9	215	100.0
Importation and Exportation of Goods	18	8.4	18	8.4	176	81.9			3	1.4	215	100.0
List of Potential Foreign Customers	18	8.4	20	9.3	174	80.9			3	1.4	215	100.0
Guideline in Doing Export Businesses	17	7.9	20	9.3	174	81.3			3	1.4	214	100.0
Market for Technology	15	7.0	27	12.6	170	79.4			2	0.9	214	100.0
International Market for Goods Produced	14	6.5	24	11.1	173	80.1	1	0.5	4	1.9	216	100.0
Prospects for Joint Venture	11	5.1	17	7.9	183	85.5			3	1.4	214	100.0
Exhibition and Trade Fairs	11	5.1	30	14.0	172	80.0			2	0.9	215	100.0
Others	1	5.3			10	52.6	8	42.1			19	100.0
Average		10.8		17.0		69.3		21.3		1.4		100.0

Source: Rural Industries and Employment Project Survey, TORI, 1989.

Table 3.6
Entrepreneurial Demand for Economic and Marketing Information
Northeast

Type of Information	Level of Need											
	Most		Medium		No need		No Reply		Unsure		Total	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
Prices of Raw Materials	65	29.8	27	12.4	124	56.9			2	0.9	218	100.0
Sources of Raw Materials	63	28.9	27	12.4	126	57.8			2	0.9	218	100.0
Sources of Funds and Credit	51	23.5	29	13.4	134	61.8			3	1.4	217	100.0
Special Privileges	45	20.6	32	14.7	139	63.8			2	0.9	218	100.0
Price of Goods Produced	39	17.9	30	13.8	146	67.0			3	1.4	218	100.0
Domestic Market for Goods Produced	37	17.0	33	15.1	146	67.0			2	0.9	218	100.0
Economic Environment in Specific Industries	26	12.0	29	13.4	159	73.3			3	1.4	217	100.0
Laws and Regulations	25	11.5	38	17.5	152	70.0			2	0.9	217	100.0
General Economic Environment	22	10.1	33	15.2	160	73.7			2	0.9	217	100.0
Market for Technology	20	9.4	26	12.2	167	78.4					213	100.0
Importation and Exportation of Goods	18	8.3	21	9.6	177	81.2			2	0.9	218	100.0
International Market for Goods Produced	18	8.3	24	11.0	174	79.8			2	0.9	218	100.0
Guideline in Doing Export Businesses	18	8.3	23	10.6	175	80.3			2	0.9	218	100.0
Prospects for Joint Venture	16	7.3	18	8.3	182	83.5			2	0.9	218	100.0
List of Potential Foreign Customers	15	6.9	15	6.9	184	85.2			2	0.9	216	100.0
Exhibition and Trade Fairs	11	5.1	32	14.7	172	79.3			2	0.9	217	100.0
Others	1	3.2	2	6.5	16	51.6	12	38.7			31	100.0
Average		13.4		12.2		71.2		38.7		1.0		100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.7
Entrepreneurial Demand for Economic and Marketing Information
North

Type of Information	Level of Need									
	Most		Medium		No need		Unsure		Total	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
Prices of Raw Materials	68	31.5	70	32.4	77	35.6	1	0.5	216	100.0
Sources of Raw Materials	66	30.6	52	24.1	93	43.1	5	2.3	216	100.0
Special Privileges	53	24.5	64	29.6	95	44.0	4	1.9	216	100.0
Price of Goods Produced	43	19.9	82	38.0	88	40.7	3	1.4	216	100.0
Laws and Regulations	39	18.1	76	35.2	98	45.4	3	1.4	216	100.0
Sources of Funds and Credit	37	17.1	63	29.2	113	52.3	3	1.4	216	100.0
General Economic Environment	33	15.3	77	35.6	104	48.1	2	0.9	216	100.0
Domestic Market for Goods Produced	29	13.4	63	29.2	122	56.5	2	0.9	216	100.0
Economic Environment in Specific Industries	25	11.6	65	30.1	121	56.0	5	2.3	216	100.0
International Market for Goods Produced	20	9.3	28	13.0	164	75.9	4	1.9	216	100.0
Importation and Exportation of Goods	20	9.3	21	9.7	170	78.7	5	2.3	216	100.0
Guideline in Doing Export Businesses	18	8.3	29	13.4	164	75.9	5	2.3	216	100.0
Exhibition and Trade Fairs	14	6.5	37	17.1	160	74.1	5	2.3	216	100.0
List of Potential Foreign Customers	13	6.0	18	8.4	179	83.3	5	2.3	215	100.0
Market for Technology	13	6.0	37	17.1	162	75.0	4	1.9	216	100.0
Prospects for Joint Venture	12	5.6	20	9.3	181	83.8	3	1.4	216	100.0
Others	1	100.0							1	100.0
Average		19.6		23.2		60.5		1.7		100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.8
Entrepreneurial Demand for Economic and Marketing Information
South

Type of Information	Level of Need											
	Most		Medium		No need		No Reply		Unsure		Total	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
Prices of Raw Materials	83	37.7	42	19.1	90	40.9	1	0.5	4	1.8	220	100.0
Sources of Raw Materials	69	31.8	39	18.0	107	49.3			2	0.9	217	100.0
Special Privileges	59	27.4	56	26.0	98	45.6			2	0.9	215	100.0
Price of Goods Produced	54	24.8	61	28.0	99	45.4			4	1.8	218	100.0
Domestic Market for Goods Produced	39	18.0	55	25.3	120	55.3			3	1.4	217	100.0
Sources of Funds and Credit	35	16.2	61	28.2	118	54.6			2	0.9	216	100.0
Economic Environment in Specific Industries	34	15.8	55	25.6	123	57.2			3	1.4	215	100.0
Laws and Regulations	34	15.5	73	33.3	108	49.3			4	1.8	219	100.0
General Economic Environment	32	14.7	67	30.9	115	53.0			3	1.4	217	100.0
Market for Technology	31	14.4	48	22.2	135	62.5			2	0.9	216	100.0
International Market for Goods Produced	23	10.7	25	11.7	166	77.6				0.0	214	100.0
Guideline in Doing Export Businesses	23	10.6	33	15.1	158	72.5			4	1.8	218	100.0
Importation and Exportation of Goods	22	10.1	27	12.4	164	75.6			4	1.8	217	100.0
List of Potential Foreign Customers	18	8.3	26	12.0	169	77.9			4	1.8	217	100.0
Exhibition and Trade Fairs	14	6.5	50	23.0	151	69.6			2	0.9	217	100.0
Prospects for Joint Venture	11	5.1	33	15.2	170	78.3			3	1.4	217	100.0
Others	1	5.9	1	5.9	13	76.5			2	11.8	17	100.0
Average		16.7		21.6		60.3		0.5		1.3		100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.9
Entrepreneurial Demand for Administrative and Management Information
Whole Kingdom

Type of Information	Level of Need											
	Most		Medium		No need		No Reply		Unsure		Total	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
Productivity Development/ Cost Reduction	199	20.4	183	18.7	585	59.9			10	1.0	977	100.0
Machinery Maintenance	145	14.9	207	21.2	613	62.9			10	1.0	975	100.0
Tax Planning	135	13.8	209	21.3	627	63.9			10	1.0	981	100.0
Marketing Management	131	13.4	201	20.5	639	65.1			10	1.0	981	100.0
System Development and Planning	97	9.9	155	15.8	714	73.0	1	0.1	11	1.1	978	100.0
Accounting Management	86	8.8	157	16.0	726	74.1			11	1.1	980	100.0
Project Analysis and Management	80	8.3	139	14.5	740	77.1			1	0.1	960	100.0
Personnel Management	78	8.0	164	16.7	728	74.3			10	1.0	980	100.0
Financial Management	87	7.6	333	29.2	712	62.3			10	0.9	1142	100.0
Labor Law and Regulation	70	7.2	205	21.0	691	70.7			12	1.2	978	100.0
Inventory Management	55	5.6	162	16.5	751	76.7			11	1.1	979	100.0
Others	1	1.0	4	3.9	58	56.9	39	38.2			102	100.0
Average		9.9		18.0		68.1		19.2		1.0		100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.10
Entrepreneurial Demand for Administrative and Management Information
Greater Bangkok

Type of Information	Level of Need									
	Most		Medium		No need		Unsure		Total	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
Productivity Development/ Cost Reduction	19	16.8	22	19.5	71	62.8	1	0.9	113	100.0
Marketing Management	17	14.9	18	15.8	78	68.4	1	0.9	114	100.0
Tax Planning	15	13.2	14	12.3	84	73.7	1	0.9	114	100.0
Machinery Maintenance	12	10.7	22	19.6	77	68.8	1	0.9	112	100.0
Accounting Management	9	8.0	11	9.7	92	81.4	1	0.9	113	100.0
Project Analysis and Management	8	7.1	13	11.6	89	79.5	2	1.8	112	100.0
Personnel Management	8	7.1	13	11.5	91	80.5	1	0.9	113	100.0
System Development and Planning	7	6.1	10	8.8	96	84.2	1	0.9	114	100.0
Financial Management	6	5.3	13	11.4	94	82.5	1	0.9	114	100.0
Labor Law and Regulation	5	4.5	17	15.2	88	78.6	2	1.8	112	100.0
Inventory Management	4	3.5	12	10.6	96	85.0	1	0.9	113	100.0
Others	1	10.0			4	40.0	5	50.0	10	100.0
Average		8.9		13.3		73.8		5.1		100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.11
Entrepreneurial Demand for Administrative and Management Information
Rural Central

Type of Information	Level of Need											
	Most		Medium		No need		No Reply		Unsure		Total	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
Productivity Development/ Cost Reduction	31	14.5	39	18.2	141	65.9			3	1.4	214	100.0
Tax Planning	29	13.4	38	17.6	147	68.1			2	0.9	216	100.0
Marketing Management	21	9.7	36	16.7	157	72.7			2	0.9	216	100.0
Machinery Maintenance	19	8.9	34	15.9	158	73.8			3	1.4	214	100.0
System Development and Planning	14	6.5	23	10.7	175	81.4	1	0.5	2	0.9	215	100.0
Financial Management	14	6.5	23	10.6	177	81.9			2	0.9	216	100.0
Project Analysis and Management	12	5.6	22	10.3	177	82.7			3	1.4	214	100.0
Inventory Management	12	5.6	25	11.6	176	81.5			3	1.4	216	100.0
Personnel Management	12	5.6	26	12.0	176	81.5			2	0.9	216	100.0
Accounting Management	12	5.6	25	11.6	177	81.9			2	0.9	216	100.0
Labor Law and Regulation	8	3.7	31	14.4	174	80.6			3	1.4	216	100.0
Others			1	2.7	14	37.8	22	59.5			37	100.0
Average		7.8		12.7		74.2		30.0		1.1		100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.12
Entrepreneurial Demand for Administrative and Management Information
Northeast

Type of Information	Level of Need											
	Most		Medium		No need		No Reply		Unsure		Total	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
Productivity Development/ Cost Reduction	47	21.6	23	10.6	146	67.0			2	0.9	218	100.0
Machinery Maintenance	35	16.1	30	13.8	149	68.7			3	1.4	217	100.0
Tax Planning	27	12.4	25	11.5	163	74.8			3	1.4	218	100.0
Marketing Management	26	11.9	32	14.7	157	72.0			3	1.4	218	100.0
Financial Management	21	9.6	25	11.5	169	77.5			3	1.4	218	100.0
Project Analysis and Management	20	9.2	24	11.1	170	78.3			3	1.4	217	100.0
Labor Law and Regulation	20	9.2	32	14.7	163	74.8			3	1.4	218	100.0
System Development and Planning	20	9.2	26	11.9	169	77.5			3	1.4	218	100.0
Accounting Management	19	8.7	25	11.5	171	78.4			3	1.4	218	100.0
Inventory Management	16	7.3	25	11.5	174	79.8			3	1.4	218	100.0
Personnel Management	13	6.0	34	15.6	168	77.1			3	1.4	218	100.0
Others			1	2.4	24	58.5	16	39.0			41	100.0
Average		11.0		11.7		73.7		39.0		1.2		100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.13
Entrepreneurial Demand for Administrative and Management Information
North

Type of Information	Level of Need									
	Most		Medium		No need		Unsure		Total	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
Machinery Maintenance	33	15.3	65	30.1	117	54.2	1	0.5	216	100.0
Tax Planning	31	14.4	73	33.8	111	51.4	1	0.5	216	100.0
Productivity Development/ Cost Reduction	31	14.4	64	29.6	119	55.1	2	0.9	216	100.0
Marketing Management	23	10.6	69	31.9	123	56.9	1	0.5	216	100.0
Financial Management	20	9.3	57	26.4	138	63.9	1	0.5	216	100.0
Accounting Management	19	8.8	51	23.6	144	66.7	2	0.9	216	100.0
System Development and Planning	18	8.3	56	25.9	140	64.8	2	0.9	216	100.0
Personnel Management	14	6.5	47	21.8	154	71.3	1	0.5	216	100.0
Project Analysis and Management	13	6.0	32	14.8	168	77.8	3	1.4	216	100.0
Labor Law and Regulation	11	5.1	69	31.9	135	62.5	1	0.5	216	100.0
Inventory Management	8	3.7	62	28.7	145	67.1	1	0.5	216	100.0
Average		9.3		27.1		62.9		0.7		100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.14
Entrepreneurial Demand for Administrative and Management Information
South

Type of Information	Level of Need											
	Most		Medium		No need		No Reply		Unsure		Total	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
Productivity Development/ Cost Reduction	71	32.9	35	16.2	108	50.0			2	0.9	216	100.0
Machinery Maintenance	46	21.3	56	25.9	112	51.9			2	0.9	216	100.0
Marketing Management	44	20.3	46	21.2	124	57.1			3	1.4	217	100.0
System Development and Planning	38	17.7	40	18.6	134	62.3			3	1.4	215	100.0
Tax Planning	33	15.2	59	27.2	122	56.2			3	1.4	217	100.0
Personnel Management	31	14.3	44	20.3	139	64.1			3	1.4	217	100.0
Project Analysis and Management	27	12.6	48	22.4	136	63.6			3	1.4	214	100.0
Accounting Management	27	12.4	45	20.7	142	65.4			3	1.4	217	100.0
Financial Management	26	12.0	53	24.5	134	62.0			3	1.4	216	100.0
Labor Law and Regulation	26	12.0	57	26.3	131	60.4			3	1.4	217	100.0
Inventory Management	15	6.9	38	17.6	160	74.1			3	1.4	216	100.0
Others			2	8.7	17	73.9	4	17.4			23	100.0
Average		16.1		20.8		61.7		17.4		1.3		100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.15
Entrepreneurial Demand for Information on Production Technology
Whole Kingdom

Type of Information	Level of Need											
	Most		Medium		No need		No Reply		Unsure		Total	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
New Technique of Production	231	23.8	181	18.6	548	56.4			11	1.1	971	100.0
New Technology	185	18.9	173	17.7	612	62.4			10	1.0	980	100.0
Energy Saving Technique	169	17.3	203	20.7	596	60.9			11	1.1	979	100.0
Machinery and Tool Catalogue	148	15.1	204	20.8	617	63.0			11	1.1	980	100.0
Information on New Products	136	13.9	152	15.6	675	69.2			12	1.2	975	100.0
Technology Transfer and Absorption	119	12.2	155	15.9	687	70.7			11	1.1	972	100.0
Sources of Technology and Point of Contact	112	11.5	165	16.9	686	70.3			13	1.3	976	100.0
Product Standardization and Testing	83	8.5	156	16.0	726	74.3			12	1.2	977	100.0
Computerization and Computer Application	77	7.8	136	13.9	754	76.9			14	1.4	981	100.0
Measurement and Control Technique	73	7.5	147	15.0	744	76.2	1	0.1	12	1.2	977	100.0
Packaging	72	7.4	115	11.8	779	79.7			11	1.1	977	100.0
Research and Development Result	70	7.2	139	14.2	756	77.4			12	1.2	977	100.0
Industrial Design	68	6.9	140	14.3	759	77.5			12	1.2	979	100.0
List of Patent Products	44	4.5	119	12.2	802	82.0			13	1.3	978	100.0
Others	1	1.4	3	4.3	40	58.0	25	36.2			69	100.0
Average		10.9		15.2		70.3		18.2		1.1		100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.16
Entrepreneurial Demand for Information on Production Technology
Greater Bangkok

Type of Information	Level of Need											
	Most		Medium		No need		No Reply		Unsure		Total	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
New Technique of Production	33	28.9	15	13.2	65	57.0			1	0.9	114	100.0
New Technology	32	28.1	13	11.4	68	59.6			1	0.9	114	100.0
Machinery and Tool Catalogue	26	22.8	13	11.4	74	64.9			1	0.9	114	100.0
Energy Saving Technique	23	20.2	20	17.5	70	61.4			1	0.9	114	100.0
Technology Transfer and Absorption	18	16.1	9	8.0	84	75.0			1	0.9	112	100.0
Sources of Technology and Point of Contact	18	15.9	10	8.8	84	74.3			1	0.9	113	100.0
Information on New Products	18	15.9	14	12.4	80	70.8			1	0.9	113	100.0
Computerization and Computer Application	17	14.9	11	9.6	85	74.6			1	0.9	114	100.0
Product Standardization and Testing	13	11.5	12	10.6	87	77.0			1	0.9	113	100.0
Measurement and Control Technique	12	10.6	10	8.8	90	79.6			1	0.9	113	100.0
Research and Development Result	11	9.7	11	9.7	90	79.6			1	0.9	113	100.0
Packaging	8	7.1	15	13.4	88	78.6			1	0.9	112	100.0
Industrial Design	8	7.0	13	11.4	92	80.7			1	0.9	114	100.0
List of Patent Products	7	6.3	7	6.3	97	86.6			1	0.9	112	100.0
Others					3	42.9		4	57.1		7	100.0
Average		15.4		10.9		70.8		57.1		0.9		100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.17
Entrepreneurial Demand for Information on Production Technology
Rural Central

Type of Information	Level of Need											
	Most		Medium		No need		No Reply		Unsure		Total	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
New Technique of Production	38	17.7	32	14.9	141	65.6			4	1.9	215	100.0
New Technology	32	14.9	31	14.4	150	69.8			2	0.9	215	100.0
Energy Saving Technique	25	11.6	38	17.7	149	69.3			3	1.4	215	100.0
Machinery and Tool Catalogue	24	11.1	34	15.7	156	72.2			2	0.9	216	100.0
Information on New Products	23	10.6	21	9.7	168	77.8			4	1.9	216	100.0
Technology Transfer and Absorption	20	9.4	27	12.7	163	76.9			2	0.9	212	100.0
Sources of Technology and Point of Contact	20	9.3	28	13.1	163	76.2			3	1.4	214	100.0
Industrial Design	12	5.6	22	10.2	179	82.9			3	1.4	216	100.0
Computerization and Computer Application	12	5.6	28	13.0	173	80.1			3	1.4	216	100.0
Research and Development Result	12	5.6	27	12.5	173	80.1			4	1.9	216	100.0
Product Standardization and Testing	11	5.1	25	11.7	175	81.8			3	1.4	214	100.0
Measurement and Control Technique	10	4.7	28	13.0	173	80.5	1	0.5	3	1.4	215	100.0
Packaging	9	4.2	27	12.5	176	81.5			4	1.9	216	100.0
List of Patent Products	8	3.7	22	10.2	182	84.3			4	1.9	216	100.0
Others			1	4.0	14	56.0	10	40.0			25	100.0
Average		8.5		12.4		75.6		20.2		1.5		100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.18
Entrepreneurial Demand for Information on Production Technology
Northeast

Type of Information	Level of Need											
	Most		Medium		No need		No Reply		Unsure		Total	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
New Technique of Production	56	26.8	30	14.4	121	57.9			2	1.0	209	100.0
Energy Saving Technique	42	19.4	35	16.1	138	63.6			2	0.9	217	100.0
New Technology	39	17.9	28	12.8	149	68.3			2	0.9	218	100.0
Machinery and Tool Catalogue	35	16.1	32	14.7	148	68.2			2	0.9	217	100.0
Information on New Products	32	14.7	31	14.3	152	70.0			2	0.9	217	100.0
Technology Transfer and Absorption	25	11.6	29	13.4	160	74.1			2	0.9	216	100.0
Sources of Technology and Point of Contact	23	10.6	31	14.3	161	74.2			2	0.9	217	100.0
Packaging	17	7.8	10	4.6	188	86.6			2	0.9	217	100.0
Measurement and Control Technique	16	7.4	30	13.9	167	77.3			3	1.4	216	100.0
Product Standardization and Testing	16	7.4	32	14.7	167	77.0			2	0.9	217	100.0
Industrial Design	16	7.4	22	10.1	177	81.6			2	0.9	217	100.0
Computerization and Computer Application	15	6.9	25	11.5	175	80.3			3	1.4	218	100.0
Research and Development Result	10	4.6	28	13.0	176	81.5			2	0.9	216	100.0
List of Patent Products	9	4.1	21	9.7	184	84.8			3	1.4	217	100.0
Others			1	4.3	15	65.2	7	30.4			23	100.0
Average		11.6		12.1		74.0		30.4		1.0		100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.19
Entrepreneurial Demand for Information on Production Technology
North

Type of Information	Level of Need									
	Most		Medium		No need		Unsure		Total	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
New Technique of Production	44	20.4	57	26.4	113	52.3	2	0.9	216	100.0
New Technology	37	17.1	49	22.7	128	59.3	2	0.9	216	100.0
Energy Saving Technique	32	14.8	54	25.0	128	59.3	2	0.9	216	100.0
Machinery and Tool Catalogue	30	13.9	60	27.8	124	57.4	2	0.9	216	100.0
Information on New Products	26	12.1	40	18.7	146	68.2	2	0.9	214	100.0
Technology Transfer and Absorption	23	10.6	40	18.5	150	69.4	3	1.4	216	100.0
Sources of Technology and Point of Contact	21	9.7	42	19.4	150	69.4	3	1.4	216	100.0
Industrial Design	18	8.3	39	18.1	157	72.7	2	0.9	216	100.0
Product Standardization and Testing	17	7.9	34	15.7	162	75.0	3	1.4	216	100.0
Computerization and Computer Application	17	7.9	31	14.4	165	76.4	3	1.4	216	100.0
Measurement and Control Technique	16	7.4	36	16.7	162	75.0	2	0.9	216	100.0
Packaging	16	7.4	28	13.0	170	78.7	2	0.9	216	100.0
Research and Development Result	11	5.1	29	13.4	173	80.1	3	1.4	216	100.0
List of Patent Products	9	4.2	27	12.5	178	82.4	2	0.9	216	100.0
Average		10.5		18.7		69.7		1.1		100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.20
Entrepreneurial Demand for Information on Production Technology
South

Type of Information	Level of Need											
	Most		Medium		No need		No Reply		Unsure		Total	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
New Technique of Production	60	27.6	47	21.7	108	49.8			2	0.9	217	100.0
Energy Saving Technique	47	21.7	56	25.8	111	51.2			3	1.4	217	100.0
New Technology	45	20.7	52	24.0	117	53.9			3	1.4	217	100.0
Information on New Products	37	17.1	46	21.3	129	59.7	1	0.5	3	1.4	216	100.0
Technology Transfer and Absorption	33	15.3	50	23.1	130	60.2			3	1.4	216	100.0
Machinery and Tool Catalogue	33	15.2	65	30.0	115	53.0			4	1.8	217	100.0
Sources of Technology and Point of Contact	30	13.9	54	25.0	128	59.3			4	1.9	216	100.0
Research and Development Result	26	12.0	44	20.4	144	66.7			2	0.9	216	100.0
Product Standardization and Testing	26	12.0	53	24.4	135	62.2			3	1.4	217	100.0
Packaging	22	10.2	35	16.2	157	72.7			2	0.9	216	100.0
Measurement and Control Technique	19	8.8	43	19.8	152	70.0			3	1.4	217	100.0
Computerization and Computer Application	16	7.4	41	18.9	156	71.9			4	1.8	217	100.0
Industrial Design	14	6.5	44	20.4	154	71.3			4	1.9	216	100.0
List of Patent Products	11	5.1	42	19.4	161	74.2			3	1.4	217	100.0
Others	1	7.7			8	61.5	4	30.8			13	100.0
Average		13.4		22.2		62.5		15.6		1.4		100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.21
Entrepreneurial Demand for Information in Various Media
Whole Kingdom

Type of Information	Level of Need											
	Most		Medium		No need		No Reply		Unsure		Total	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
Machinery and Tools Catalogues	157	16.0	183	18.7	626	63.9			14	1.4	980	100.0
Specialized Academic Journals	151	15.4	184	18.8	631	64.3	1	0.1	14	1.4	981	100.0
Product Catalogues	137	14.0	172	17.6	657	67.1			13	1.3	979	100.0
Industrial News	109	11.1	183	18.7	672	68.7			14	1.4	978	100.0
Manuals and Handbooks	108	11.0	158	16.1	701	71.5			14	1.4	981	100.0
Texts	100	10.2	159	16.2	706	72.1			14	1.4	979	100.0
Industrial Standard Documentation and Regulation	89	9.1	171	17.5	701	71.8	1	0.1	15	1.5	977	100.0
Domestic Trade Fair & Exhibition Schedules	75	7.7	157	16.1	732	74.9			13	1.3	977	100.0
Training and Seminar Schedules	66	6.8	169	17.4	725	74.4			14	1.4	974	100.0
Academic Video Tapes and Slides	61	6.7	107	11.8	719	79.5			17	1.9	904	100.0
Lists of Experts	57	5.8	123	12.6	782	80.1			14	1.4	976	100.0
International Trade Fair and Exhibition Schedules	54	5.5	114	11.7	791	81.1			16	1.6	975	100.0
Directory of Factories and Buyer's Guides	50	5.1	115	11.8	798	81.7			14	1.4	977	100.0
Research Reports and Thesis	38	3.9	109	11.2	816	83.6			13	1.3	976	100.0
Average		9.2		15.4		73.9		0.1		1.5		100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.22
Entrepreneurial Demand for Information in Various Media
Greater Bangkok

Type of Information	Level of Need											
	Most		Medium		No need		No Reply		Unsure		Total	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
Machinery and Tools Catalogues	29	25.4	9	7.9	74	64.9			2	1.8	114	100.0
Product Catalogues	28	24.6	14	12.3	71	62.3			1	0.9	114	100.0
Manuals and Handbooks	20	17.5	8	7.0	85	74.6			1	0.9	114	100.0
Specialized Academic Journals	18	15.7	11	9.6	84	73.0	1	0.9	1	0.9	115	100.0
Domestic Trade Fair & Exhibition Schedules	13	11.5	15	13.3	84	74.3			1	0.9	113	100.0
Industrial News	12	10.6	13	11.5	87	77.0			1	0.9	113	100.0
Texts	12	10.5	12	10.5	89	78.1			1	0.9	114	100.0
Directory of Factories and Buyer's Guides	11	9.8	8	7.1	92	82.1			1	0.9	112	100.0
Industrial Standard Documentation and Regulation	10	8.9	12	10.7	89	79.5			1	0.9	112	100.0
International Trade Fair and Exhibition Schedules	10	8.8	12	10.6	90	79.6			1	0.9	113	100.0
Training and Seminar Schedules	8	7.1	9	8.0	94	83.9			1	0.9	112	100.0
Lists of Experts	6	5.4	9	8.0	96	85.7			1	0.9	112	100.0
Research Reports and Thesis	5	4.5	10	9.0	95	85.6			1	0.9	111	100.0
Academic Video Tapes and Slides	4	3.8	9	8.6	91	86.7			1	1.0	105	100.0
Average		11.7		9.6		77.7		0.9		1.0	1574	100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.23
Entrepreneurial Demand for Information in Various Media
Rural Central

Type of Information	Level of Need									
	Most		Medium		No need		Unsure		Total	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
Machinery and Tools Catalogues	31	14.4	29	13.5	153	71.2	2	0.9	215	100.0
Product Catalogues	29	13.4	30	13.9	154	71.3	3	1.4	216	100.0
Specialized Academic Journals	22	10.2	27	12.6	163	75.8	3	1.4	215	100.0
Industrial News	18	8.4	27	12.6	167	77.7	3	1.4	215	100.0
Industrial Standard Documentation and Regulation	18	8.4	21	9.8	172	80.0	4	1.9	215	100.0
Manuals and Handbooks	18	8.3	24	11.1	171	79.2	3	1.4	216	100.0
Texts	17	7.9	21	9.8	174	80.9	3	1.4	215	100.0
Training and Seminar Schedules	15	7.0	29	13.5	169	78.6	2	0.9	215	100.0
Domestic Trade Fair & Exhibition Schedules	12	5.6	29	13.5	172	80.0	2	0.9	215	100.0
Lists of Experts	12	5.6	22	10.2	178	82.8	3	1.4	215	100.0
International Trade Fair and Exhibition Schedules	11	5.1	21	9.7	181	83.8	3	1.4	216	100.0
Directory of Factories and Buyer's Guides	9	4.2	19	8.8	185	85.6	3	1.4	216	100.0
Academic Video Tapes and Slides	7	4.0	21	11.9	145	82.4	3	1.7	176	100.0
Research Reports and Thesis	2	0.9	23	10.6	188	87.0	3	1.4	216	100.0
Average		7.4		11.5		79.7		1.3		100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.24
Entrepreneurial Demand for Information in Various Media
Northeast

Type of Information	Level of Need											
	Most		Medium		No need		No Reply		Unsure		Total	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
Specialized Academic Journals	44	20.2	34	15.6	136	62.4			4	1.8	218	100.0
Machinery and Tools Catalogues	33	15.1	36	16.5	145	66.5			4	1.8	218	100.0
Texts	32	14.7	35	16.1	147	67.4			4	1.8	218	100.0
Product Catalogues	31	14.3	32	14.7	151	69.6			3	1.4	217	100.0
Academic Video Tapes and Slides	24	12.0	21	10.5	151	75.5			4	2.0	200	100.0
Manuals and Handbooks	26	11.9	31	14.2	157	72.0			4	1.8	218	100.0
Industrial News	23	10.6	32	14.7	158	72.8			4	1.8	217	100.0
Domestic Trade Fair & Exhibition Schedules	13	6.0	33	15.2	168	77.4			3	1.4	217	100.0
Industrial Standard Documentation and Regulation	11	5.1	33	15.2	168	77.4	1	0.5	4	1.8	217	100.0
Lists of Experts	10	4.6	24	11.1	180	82.9			3	1.4	217	100.0
Training and Seminar Schedules	9	4.2	33	15.3	169	78.6			4	1.9	215	100.0
Directory of Factories and Buyer's Guides	9	4.1	32	14.7	174	79.8			3	1.4	218	100.0
Research Reports and Thesis	8	3.7	28	13.0	177	81.9			3	1.4	216	100.0
International Trade Fair and Exhibition Schedules	5	2.3	26	12.1	181	84.2			3	1.4	215	100.0
Average		9.2		14.2		74.9		0.5		1.7		100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.25
Entrepreneurial Demand for Information in Various Media
North

Type of Information	Level of Need									
	Most		Medium		No need		Unsure		Total	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
Machinery and Tools Catalogues	31	14.4	49	22.7	134	62.0	2	0.9	216	100.0
Specialized Academic Journals	30	13.9	54	25.0	130	60.2	2	0.9	216	100.0
Product Catalogues	27	12.5	48	22.2	139	64.4	2	0.9	216	100.0
Industrial News	24	11.1	58	26.9	132	61.1	2	0.9	216	100.0
Manuals and Handbooks	22	10.2	42	19.4	150	69.4	2	0.9	216	100.0
Industrial Standard Documentation and Regulation	19	8.8	49	22.7	146	67.6	2	0.9	216	100.0
Texts	18	8.3	36	16.7	160	74.1	2	0.9	216	100.0
Domestic Trade Fair & Exhibition Schedules	16	7.4	36	16.7	162	75.0	2	0.9	216	100.0
International Trade Fair Exhibition Schedules	14	6.5	22	10.2	176	81.5	4	1.9	216	100.0
Training and Seminar Schedules	11	5.1	43	19.9	160	74.1	2	0.9	216	100.0
Academic Video Tapes and Slides	9	4.2	18	8.3	187	86.6	2	0.9	216	100.0
Lists of Experts	9	4.2	29	13.4	175	81.0	3	1.4	216	100.0
Research Reports and Thesis	8	3.7	17	7.9	189	87.5	2	0.9	216	100.0
Directory of Factories and Buyer's Guides	8	3.7	24	11.1	182	84.3	2	0.9	216	100.0
Average		8.1		17.4		73.5		1.0		100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.26
Entrepreneurial Demand for Information in Various Media
South

Type of Information	Level of Need									
	Most		Medium		No need		Unsure		Total	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
Specialized Academic Journals	37	17.1	58	26.7	118	54.4	4	1.8	217	100.0
Machinery and Tools Catalogues	33	15.2	60	27.6	120	55.3	4	1.8	217	100.0
Industrial News	32	14.7	53	24.4	128	59.0	4	1.8	217	100.0
Industrial Standard Documentation and and Regulation	31	14.3	56	25.8	126	58.1	4	1.8	217	100.0
Training and Seminar Schedules	23	10.6	55	25.5	133	61.6	5	2.3	216	100.0
Product Catalogues	22	10.2	48	22.2	142	65.7	4	1.9	216	100.0
Manuals and Handbooks	22	10.1	53	24.4	138	63.6	4	1.8	217	100.0
Texts	21	9.7	55	25.5	136	63.0	4	1.9	216	100.0
Domestic Trade Fair & Exhibition Schedules	21	9.7	44	20.4	146	67.6	5	2.3	216	100.0
Lists of Experts	20	9.3	39	18.1	153	70.8	4	1.9	216	100.0
Academic Video Tapes and Slides	17	8.2	38	18.4	145	70.0	7	3.4	207	100.0
Research Reports and Thesis	15	6.9	31	14.3	167	77.0	4	1.8	217	100.0
International Trade Fair and Exhibition Schedules	14	6.5	33	15.3	163	75.8	5	2.3	215	100.0
Directory of Factories and Buyer's Guides	13	6.0	32	14.9	165	76.7	5	2.3	215	100.0
Average	10.6		21.7		65.6		2.1		100.0	

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.27
Form of Services Demanded
Whole Kingdom

Form of Services	Level of Need											
	Most		Medium		No need		No Reply		Unsure		Total	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
Consultation	124	12.7	233	23.8	606	62.0			15	1.5	978	100.0
Industrialist meetings	119	12.2	235	24.2	608	62.6			10	1.0	972	100.0
Visits and Tours: Local	114	11.6	177	18.1	674	68.8			14	1.4	979	100.0
Training	99	10.1	202	20.6	664	67.8			15	1.5	980	100.0
Trade Fairs and Exhibitions	80	8.2	171	17.5	714	73.0			13	1.3	978	100.0
Visits and Tours: International	80	8.2	126	12.9	760	77.6			14	1.4	980	100.0
Academic Seminars and Meetings	71	7.3	155	15.9	736	75.4			14	1.4	976	100.0
Workshop Seminars	71	7.3	166	17.0	726	74.2			15	1.5	978	100.0
Others	2	1.9	1	0.9	55	51.9	42	39.6	6	5.7	106	100.0
Average		8.8		16.8		68.1		39.6		1.9		100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.28
Form of Services Demanded
Greater Bangkok

Form of Services	Level of Need											
	Most		Medium		No need		No Reply		Unsure		Total	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
Industrialist meetings	20	46.5	21	48.8	1	2.3			1	2.3	43	100.0
Visits and Tours: International	22	19.3	10	8.8	81	71.1			1	0.9	114	100.0
Visits and Tours: Local	19	16.7	17	14.9	77	67.5			1	0.9	114	100.0
Trade Fairs and Exhibitions	15	13.0	16	13.9	83	72.2			1	0.9	115	100.0
Training	8	8.6	12	12.9	72	77.4			1	1.1	93	100.0
Academic Seminars and Meetings	8	7.0	13	11.4	92	80.7			1	0.9	114	100.0
Consultation	8	7.0	20	17.5	85	74.6			1	0.9	114	100.0
Workshop Seminars	6	5.3	13	11.4	94	82.5			1	0.9	114	100.0
Others							7	87.5	1	12.5	8	100.0
Average		15.4		15.5		58.7		87.5		2.4		100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.29
Form of Services Demanded
Rural Central

Form of Services	Level of Need											
	Most		Medium		No need		No Reply		Unsure		Total	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
Consultation	28	13.0	37	17.2	148	68.8			2	0.9	215	100.0
Industrialist meetings	22	10.2	32	14.8	160	74.1			2	0.9	216	100.0
Visits and Tours: Local	21	9.7	27	12.5	166	76.9			2	0.9	216	100.0
Training	21	9.7	34	15.7	159	73.6			2	0.9	216	100.0
Trade Fairs and Exhibitions	20	9.3	27	12.5	167	77.3			2	0.9	216	100.0
Academic Seminars and Meetings	18	8.4	21	9.8	174	80.9			2	0.9	215	100.0
Visits and Tours: International	17	7.9	19	8.8	177	81.9			3	1.4	216	100.0
Workshop Seminars	16	7.4	24	11.1	174	80.6			2	0.9	216	100.0
Others					23	ERR	17	ERR			ERR	ERR
Average		9.4		11.4		ERR		ERR		1.0		100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.30
Form of Services Demanded
Northeast

Form of Services	Level of Need											
	Most		Medium		No need		No Reply		Unsure		Total	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
Consultation	37	17.0	33	15.1	144	66.1			4	1.8	218	100.0
Visits and Tours: Local	36	16.6	37	17.1	140	64.5			4	1.8	217	100.0
Industrialist meetings	30	13.8	41	18.9	140	64.5	5	2.3	1	0.5	217	100.0
Training	26	12.0	34	15.7	152	70.0			5	2.3	217	100.0
Trade Fairs and Exhibitions	18	8.3	36	16.7	158	73.1			4	1.9	216	100.0
Workshop Seminars	18	8.3	36	16.5	159	72.9			5	2.3	218	100.0
Academic Seminars and Meetings	14	6.5	34	15.7	164	75.6			5	2.3	217	100.0
Visits and Tours: International	11	5.0	31	14.2	171	78.4			5	2.3	218	100.0
Others					6	17.1	27	77.1	2	5.7	35	100.0
Average		10.9		14.4		64.7		39.7		2.3		100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.31
Form of Services Demanded
North

Form of Services	Level of Need									
	Most		Medium		No need		Unsure		Total	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
Consultation	19	8.8	65	30.2	128	59.5	3	1.4	215	100.0
Industrialist meetings	17	7.9	80	37.0	117	54.2	2	0.9	216	100.0
Training	15	6.9	58	26.9	140	64.8	3	1.4	216	100.0
Visits and Tours: Local	14	6.5	49	22.7	150	69.4	3	1.4	216	100.0
Trade Fairs and Exhibitions	13	6.0	39	18.1	162	75.0	2	0.9	216	100.0
Visits and Tours: International	12	5.6	30	13.9	173	80.1	1	0.5	216	100.0
Workshop Seminars	12	5.5	37	17.1	165	76.0	3	1.4	217	100.0
Academic Seminars and Meetings	9	4.2	40	18.5	165	76.4	2	0.9	216	100.0
Average		6.4		23.0		69.4		1.1		100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.32
Form of Services Demanded
South

Form of Services	Level of Need											
	Most		Medium		No need		No Reply		Unsure		Total	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
Consultation	32	14.8	78	36.1	101	46.8			5	2.3	216	100.0
Industrialist meetings	30	14.0	61	28.5	119	55.6			4	1.9	214	100.0
Training	29	13.4	64	29.6	119	55.1			4	1.9	216	100.0
Visits and Tours: Local	24	11.1	47	21.8	141	65.3			4	1.9	216	100.0
Academic Seminars and Meetings	22	10.2	48	22.3	141	65.6			4	1.9	215	100.0
Workshop Seminars	19	8.9	56	26.2	135	63.1			4	1.9	214	100.0
Visits and Tours: International	18	8.3	36	16.7	158	73.1			4	1.9	216	100.0
Trade Fairs and Exhibitions	14	6.5	53	24.7	144	67.0			4	1.9	215	100.0
Others	2	6.1	1	3.0	15	45.5	11	33.3	4	12.1	33	100.0
Average		10.4		23.2		59.7		33.3		3.1		100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.33
Sources of Information of Entrepreneur

Important Sources of Information	Greater Bangkok		Rural Central		Northeast		North		South		Whole Kingdom	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
Peer Groups	72	30.1	125	33.9	118	28.7	155	36.9	135	35.2	605	33.2
Mass Media	45	18.8	63	17.1	51	12.4	78	18.6	71	18.5	308	16.9
Meetings, Training, and Seminars	11	4.6	22	6.0	31	7.5	32	7.6	32	8.4	128	7.0
Visits and Tours	11	4.6	15	4.1	42	10.2	27	6.4	26	6.8	121	6.6
Government Organizations	11	4.6	17	4.6	20	4.9	30	7.1	16	4.2	94	5.2
Market Research Studies	12	5.0	15	4.1	16	3.9	13	3.1	18	4.7	74	4.1
Foreign Organizations	17	7.1	17	4.6	6	1.5	15	3.6	13	3.4	68	3.7
Private Organizations	8	3.3	9	2.4	10	2.4	10	2.4	10	2.6	47	2.6
Others	29	12.1	59	16.0	96	23.4	48	11.4	46	12.0	278	15.3
No Problems	11	4.6	10	2.7	8	1.9	1	0.2	4	1.0	34	1.9
No Answer	12	5.0	17	4.6	13	3.2	11	2.6	12	3.1	65	3.6
Total	239	100.0	369	100.0	411	100.0	420	100.0	383	100.0	1822	100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.34
Satisfaction in the Information Obtained

Region	Is the Information Obtained Satisfactory?									
	Yes	%	No	%	No Answer	%	Unsure	%	Total	%
Greater Bangkok	95	11.6	12	10.1			6	23.1	113	11.7
Rural Central	188	23.0	15	12.6			4	15.4	207	21.5
North East	169	20.6	37	31.1	1	100.0	8	30.8	215	22.3
North	185	22.6	23	19.3			5	19.2	213	22.1
South	182	22.2	32	26.9			3	11.5	217	22.5
Whole Kingdom	819	100.0	119	100.0	1	100.0	26	100.0	965	100.0
Percent	84.9		12.3		0.1		2.7		100.0	

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.35
Questionability of Information

Region	Is Information Obtained Questionable?									
	No	%	Yes	%	No Answer	%	Unsure	%	Total	%
Greater Bangkok	100	12.8	6	5.0			6	9.8	112	11.6
Rural Central	183	23.4	20	16.8	1	50.0	4	6.6	208	21.6
North East	154	19.7	40	33.6	1	50.0	20	32.8	215	22.3
North	172	22.0	23	19.3			18	29.5	213	22.1
South	174	22.2	30	25.2			13	21.3	217	22.5
Whole Kingdom	783	100.0	119	100.0	2	100.0	61	100.0	965	100.0
Percent	81.1		12.3		0.2		6.3		100.0	

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.36
Origin of Administrative and Managerial System

Origin of Admin- and Management	Greater Bangkok		Rural Central		Northeast		North		South		Whole Kingdom	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
Experiences	100	46.9	182	50.3	186	50.8	178	48.8	168	49.4	814	49.5
Business Success	29	13.6	55	15.2	64	17.5	53	14.5	36	10.6	237	14.4
Previous Job	23	10.8	37	10.2	40	10.9	40	11.0	48	14.1	188	11.4
Consultation with Partnership, Family Member	8	3.8	19	5.2	25	6.8	43	11.8	30	8.8	125	7.6
Training, Seminar	13	6.1	23	6.4	20	5.5	28	7.7	25	7.4	109	6.6
Texts and Professional	18	8.5	17	4.7	12	3.3	12	3.3	6	1.8	65	3.9
Experts/Consultants	12	5.6	9	2.5	3	0.8	2	0.5	9	2.6	35	2.1
Others	4	1.9	6	1.7	4	1.1	1	0.3	2	0.6	17	1.0
No Answer	4	1.9	7	1.9	12	3.3	6	1.6	12	3.5	41	2.5
Unsure	2	0.9	7	1.9		0.0	2	0.5	4	1.2	15	0.9
Total	213	100	362	100	366	100	365	100	340	100	1646	100

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.37
Source of Production Technology

Sources of Information on Production Technology	Greater Bangkok		Rural Central		Northeast		North		South		Whole Kingdom	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
Self Study	73	29.9	164	41.0	176	37.8	159	33.4	141	28.4	713	34.2
Producers of Machinery/Salesman	42	17.2	59	14.8	70	15.0	79	16.6	77	15.5	327	15.7
Peer Groups	23	9.4	37	9.3	69	14.8	90	18.9	69	13.9	288	13.8
Previous Job	27	11.1	42	10.5	39	8.4	52	10.9	57	11.5	217	10.4
Texts and Academic Journals	14	5.7	16	4.0	20	4.3	24	5.0	33	6.6	107	5.1
Subcontractor	7	2.9	8	2.0	21	4.5	10	2.1	22	4.4	68	3.3
Mass Media	4	1.6	12	3.0	12	2.6	17	3.6	22	4.4	67	3.2
Parent Company	10	4.1	6	1.5	5	1.1	7	1.5	14	2.8	42	2.0
Relevant Associations	8	3.3	5	1.3	7	1.5	7	1.5	11	2.2	38	1.8
Transfer of Technology Agreement	5	2.0	7	1.8	2	0.4	4	0.8	4	0.8	22	1.1
Foreign Joint Venture	4	1.6	3	0.8	3	0.6	3	0.6	3	0.6	16	0.8
Private Organizations	1	0.4			4	0.9	2	0.4	4	0.8	11	0.5
Government Organizations	2	0.8	2	0.5	3	0.6			3	0.6	10	0.5
Local Joint Venture	2	0.8			1	0.2	1	0.2	3	0.6	7	0.3
Others	10	4.1	16	4.0	27	5.8	14	2.9	16	3.2	83	4.0
No Answer	4	1.6	7	1.8	7	1.5	1	0.2	3	0.6	22	1.1
Unsure	8	3.3	16	4.0			6	1.3	15	3.0	45	2.2
Total	244	100.0	400	100.0	466	100.0	476	100.0	497	100.0	2083	100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.38
Awareness of Organizations Providing Information
Whole Kingdom

Organization	Known		Unknown		No reply		Unsure		Total	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
Provincial Office for Industry	947	95.9	32	3.2			8	0.8	987	100.0
Provincial Office for Commerce	792	80.8	182	18.6		0.0	6	0.6	980	100.0
The Thai Chamber of Commerce	633	64.5	341	34.8			7	0.7	981	100.0
Dept of Industrial Promotion	479	49.3	486	50.0	1	0.1	6	0.6	972	100.0
Industrial Finance Corp of Thailand	446	45.6	522	53.4			10	1.0	978	100.0
The National Institute of Skill Development	428	43.5	546	55.5			9	0.9	983	100.0
Dept of Export Promotion	418	43.2	530	54.8	2	0.2	18	1.9	968	100.0
Office of the Board of Investment	347	35.4	624	63.7			9	0.9	980	100.0
Small Industries Credit Guarantee Funds	301	29.2	657	63.8	1	0.1	71	6.9	1030	100.0
Export Service Division	275	28.1	695	70.9			10	1.0	980	100.0
Thai Industrial Standards Institute	242	27.6	623	71.1			11	1.3	876	100.0
The Small Industries Association	265	27.0	704	71.8			11	1.1	980	100.0
The Federation of Thai Industries	262	26.7	698	71.0	1	0.1	22	2.2	983	100.0
Thailand Institute of Scientific and Technology Research (TISTR)	253	25.9	714	73.1			10	1.0	977	100.0
Industrial Development Center	230	23.7	726	74.7	1	0.1	15	1.5	972	100.0
Small Industries Finance Office	227	23.2	739	75.5			13	1.3	979	100.0
Department of Science Service	202	20.6	766	78.1			13	1.3	981	100.0
Industrial Productivity Division	199	20.3	771	78.6	1	0.1	10	1.0	981	100.0
Technology Transfer Center	174	17.8	794	81.1			11	1.1	979	100.0
Institute for Management Education for Thailand Foundation	97	10.0	852	87.7			22	2.3	971	100.0
Average		36.9		61.6		0.1		1.5		100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.39
Awareness of Organizations Providing Information
Greater Bangkok

Organization	Known		Unknown		Unsure		Total	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
Provincial Office for Industry	97	85.1	14	12.3	3	2.6	114	100.0
Provincial Office for Commerce	85	74.6	28	24.6	1	0.9	114	100.0
Dept of Industrial Promotion	76	67.3	36	31.9	1	0.9	113	100.0
Dept of Export Promotion	70	61.9	42	37.2	1	0.9	113	100.0
The Thai Chamber of Commerce	67	58.8	46	40.4	1	0.9	114	100.0
Thai Industrial Standards Institute	64	56.6	48	42.5	1	0.9	113	100.0
Industrial Finance Corp of Thailand	61	53.5	52	45.6	1	0.9	114	100.0
The Federation of Thai Industries	56	49.6	56	49.6	1	0.9	113	100.0
The National Institute of Skill Development	56	49.1	57	50.0	1	0.9	114	100.0
Office of the Board of Investment	50	48.5	52	50.5	1	1.0	103	100.0
Export Service Division	54	47.4	59	51.8	1	0.9	114	100.0
Industrial Development Center	41	36.6	70	62.5	1	0.9	112	100.0
Thailand Institute of Scientific and Technology Research (TISTR)	40	35.4	72	63.7	1	0.9	113	100.0
The Small Industries Association	35	30.4	79	68.7	1	0.9	115	100.0
Department of Science Service	34	29.8	79	69.3	1	0.9	114	100.0
Industrial Productivity Division	33	29.2	79	69.9	1	0.9	113	100.0
Technology Transfer Center	31	27.4	81	71.7	1	0.9	113	100.0
Small Industries Finance Office	29	25.7	83	73.5	1	0.9	113	100.0
Small Industries Credit Guarantee Funds	25	22.3	86	76.8	1	0.9	112	100.0
Institute for Management Education for Thailand Foundation	12	10.8	98	88.3	1	0.9	111	100.0
Average		45.0		54.0		1.0		100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.40
Awareness of Organizations Providing Information
Rural Central

Organization	Known		Unknown		No reply		Unsure		Total	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
Provincial Office for Industry	212	98.1	3	1.4			1	0.5	216	100.0
Provincial Office for Commerce	172	78.5	45	20.5			2	0.9	219	100.0
The Thai Chamber of Commerce	132	62.0	80	37.6			1	0.5	213	100.0
Industrial Finance Corp of Thailand	61	53.5	52	45.6			1	0.9	114	100.0
Dept of Industrial Promotion	102	47.7	109	50.9	1	0.5	2	0.9	214	100.0
Dept of Export Promotion	89	42.4	117	55.7	1	0.5	3	1.4	210	100.0
The National Institute of Skill Development	80	37.2	131	60.9			4	1.9	215	100.0
Office of the Board of Investment	75	35.0	136	63.6			3	1.4	214	100.0
Thai Industrial Standards Institute	68	31.8	142	66.4			4	1.9	214	100.0
Export Service Division	60	28.0	151	70.6			3	1.4	214	100.0
The Small Industries Association	59	27.6	152	71.0			3	1.4	214	100.0
Thailand Institute of Scientific and Technology Research (TISTR)	55	25.7	156	72.9			3	1.4	214	100.0
The Federation of Thai Industries	54	25.1	157	73.0	1	0.5	3	1.4	215	100.0
Industrial Productivity Division	47	21.9	164	76.3			4	1.9	215	100.0
Small Industries Credit Guarantee Funds	46	21.8	162	76.8			3	1.4	211	100.0
Small Industries Finance Office	44	20.5	167	77.7			4	1.9	215	100.0
Department of Science Service	42	19.6	168	78.5			4	1.9	214	100.0
Industrial Development Center	41	19.2	168	78.9	1	0.5	3	1.4	213	100.0
Technology Transfer Center	40	18.6	171	79.5			4	1.9	215	100.0
Institute for Management Education for Thailand Foundation	12	10.8	98	88.3			1	0.9	111	100.0
Average		36.3		62.3		0.3		1.4		100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.41
Awareness of Organizations Providing Information
Northeast

Organization	Known		Unknown		No reply		Unsure		Total	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
Provincial Office for Industry	210	96.3	8	3.7				0.0	218	100.0
Provincial Office for Commerce	174	79.8	43	19.7			1	0.5	218	100.0
The Thai Chamber of Commerce	139	64.1	78	35.9				0.0	217	100.0
Industrial Finance Corp of Thailand	107	49.5	108	50.0			1	0.5	216	100.0
The National Institute of Skill Development	79	36.1	139	63.5			1	0.5	219	100.0
Thai Industrial Standards Institute	66	30.6	149	69.0			1	0.5	216	100.0
Dept of Export Promotion	62	29.5	144	68.6	1	0.5	3	1.4	210	100.0
Dept of Industrial Promotion	63	29.3	149	69.3			3	1.4	215	100.0
Office of the Board of Investment	59	27.1	158	72.5			1	0.5	218	100.0
Thailand Institute of Scientific and Technology Research (TISTR)	48	22.3	166	77.2			1	0.5	215	100.0
The Federation of Thai Industries	45	21.0	165	77.1			4	1.9	214	100.0
Small Industries Credit Guarantee Funds	56	20.4	156	56.7	1	0.4	62	22.5	275	100.0
Export Service Division	42	19.4	174	80.2			1	0.5	217	100.0
Small Industries Finance Office	41	19.0	173	80.1			2	0.9	216	100.0
The Small Industries Association	39	17.9	176	80.7			3	1.4	218	100.0
Department of Science Service	38	17.4	178	81.7			2	0.9	218	100.0
Industrial Development Center	37	17.3	174	81.3			3	1.4	214	100.0
Industrial Productivity Division	32	14.7	184	84.4	1	0.5	1	0.5	218	100.0
Technology Transfer Center	23	10.6	192	88.9			1	0.5	216	100.0
Institute for Management Education for Thailand Foundation	17	8.0	192	90.6			3	1.4	212	100.0
Average		31.5		66.6		0.4		1.9		100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.42
Awareness of Organizations Providing Information
North

Organization	Known		Unknown		Unsure		Total	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
Provincial Office for Industry	213	96.8	3	1.4	4	1.8	220	100.0
Provincial Office for Commerce	193	89.4	21	9.7	2	0.9	216	100.0
The Thai Chamber of Commerce	161	74.5	52	24.1	3	1.4	216	100.0
Dept of Industrial Promotion	112	52.8	100	47.2			212	100.0
Dept of Export Promotion	102	47.2	105	48.6	9	4.2	216	100.0
Industrial Finance Corp of Thailand	98	45.4	113	52.3	5	2.3	216	100.0
The National Institute of Skill Development	83	38.4	130	60.2	3	1.4	216	100.0
Small Industries Credit Guarantee Funds	79	36.7	131	60.9	5	2.3	215	100.0
The Small Industries Association	67	31.0	145	67.1	4	1.9	216	100.0
Office of the Board of Investment	67	31.0	145	67.1	4	1.9	216	100.0
Thai Industrial Standards Institute	63	29.2	148	68.5	5	2.3	216	100.0
Export Service Division	57	26.4	154	71.3	5	2.3	216	100.0
Industrial Development Center	56	25.9	152	70.4	8	3.7	216	100.0
Small Industries Finance Office	53	24.5	157	72.7	6	2.8	216	100.0
The Federation of Thai Industries	52	23.4	157	70.7	13	5.9	222	100.0
Thailand Institute of Scientific and Technology Research (TISTR)	48	22.2	164	75.9	4	1.9	216	100.0
Industrial Productivity Division	42	19.4	170	78.7	4	1.9	216	100.0
Department of Science Service	38	17.6	172	79.6	6	2.8	216	100.0
Technology Transfer Center	36	16.7	175	81.0	5	2.3	216	100.0
Institute for Management Education for Thailand Foundation	20	9.3	182	84.7	13	6.0	215	100.0
Average		37.9		59.6		2.6		100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.43
Awareness of Organizations Providing Information
South

Organization	Known		Unknown		Unsure		Total	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
Provincial Office for Industry	215	98.2	4	1.8			219	100.0
Provincial Office for Commerce	172	77.1	45	20.2	6	2.7	223	100.0
The Thai Chamber of Commerce	134	61.2	85	38.8			219	100.0
The National Institute of Skill Development	130	59.4	89	40.6			219	100.0
Dept of Industrial Promotion	126	57.8	92	42.2			218	100.0
Industrial Finance Corp of Thailand	106	48.6	112	51.4			218	100.0
Small Industries Credit Guarantee Funds	95	43.8	122	56.2			217	100.0
Dept of Export Promotion	95	43.4	122	55.7	2	0.9	219	100.0
Office of the Board of Investment	86	39.3	133	60.7			219	100.0
Thai Industrial Standards Institute	73	34.9	136	65.1			209	100.0
The Small Industries Association	66	30.3	152	69.7			218	100.0
Export Service Division	62	28.3	157	71.7			219	100.0
Thailand Institute of Scientific and Technology Research (TISTR)	62	28.3	156	71.2	1	0.5	219	100.0
Small Industries Finance Office	60	27.4	159	72.6			219	100.0
Industrial Development Center	55	25.3	162	74.7			217	100.0
The Federation of Thai Industries	55	25.1	163	74.4	1	0.5	219	100.0
Department of Science Service	50	22.8	169	77.2			219	100.0
Industrial Productivity Division	45	20.5	174	79.5			219	100.0
Technology Transfer Center	44	20.1	175	79.9			219	100.0
Institute for Management Education for Thailand Foundation	24	11.0	194	89.0			218	100.0
Average		40.1		59.6		1.1		100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.44
Use of and Satisfaction in Services Provided by Various Institutions
Whole Kingdom

Organization	Have You Utilized Services Provided by the Organization?						Total
	No	Yes			No indication of service utilization		
		Are the Services Satisfactory?					
		Yes	No	No reply		Total	
Provincial Office for Industry	110	752	63	12	827	10	947
Dept of Industrial Promotion	308	139	12	7	158	13	479
Industrial Development Center	173	44	6		50	7	230
The Federation of Thai Industries	195	50	3	5	58	9	262
Provincial Office for Commerce	280	443	22	28	493	19	792
Dept of Export Promotion	339	53	3	8	64	15	418
The Thai Chamber of Commerce	431	153	18	11	182	20	633
Institute for Management Education for Thailand Foundation	82	10		1	11	4	97
Industrial Finance Corp of Thailand	362	51	13	7	71	13	446
Thai Industrial Standards Institute	141	77	10	9	96	5	242
Industrial Productivity Division	149	33	3	3	39	11	199
Thailand Institute of Scientific and Technology Research (TISTR)	202	38	3	3	44	7	253
Office of the Board of Investment	268	52	10	5	67	12	347
Export Service Division	236	25	2	6	33	6	275
Small Industries Finance Office	203	7	8	4	19	5	227
The National Institute of Skill Development	295	93	12	14	119	14	428
Department of Science Service	158	31	3	5	39	5	202
Technology Transfer Center	156	8	1	4	13	5	174
The Small Industries Association	226	23	2	5	30	9	265
Small Industries Credit Guarantee Funds	277	9	4	2	15	9	301
Total	4591	2091	198	139	2428	198	7217
(%)	63.6	29.0	2.7	1.9	33.6	2.7	100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.45
Use of and Satisfaction in Services Provided by Various Institutions
Greater Bangkok

Organization	Have You Utilized Services Provided by the Organization?						Total
	No	Yes				No indication of service Utilization	
		Are the Services Satisfactory?					
		Yes	No	No reply	Total		
Provincial Office for Industry	9	75	12	1	88		97
Dept of Industrial Promotion	47	23	2	1	26	3	76
Industrial Development Center	36	4			4	1	41
The Federation of Thai Industries	42	13			13	1	56
Provincial Office for Commerce	35	38	6	4	48	2	85
Dept of Export Promotion	53	13	2	1	16	1	70
The Thai Chamber of Commerce	52	10	1	1	12	3	67
Institute for Management Education for Thailand Foundation	11	1			1		12
Industrial Finance Corp of Thailand	51	7	1		8	2	61
Thai Industrial Standards Institute	45	15	3		18	1	64
Industrial Productivity Division	25	6	1		7	1	33
Thailand Institute of Scientific and Technology Research (TISTR)	32	6	1		7	1	40
Office of the Board of Investment	44	13		1	14	2	60
Export Service Division	43	7	1	1	9	2	54
Small Industries Finance Office	27		1	1	2		29
The National Institute of Skill Development	38	12	2	1	15	3	56
Department of Science Service	25	6	2		8	1	34
Technology Transfer Center	29	1	1		2		31
The Small Industries Association	29	3			3	2	34
Small Industries Credit Guarantee Funds	23	1	1		2		25
Total	696	254	37	12	303	26	1025
(%)	67.9	24.8	3.6	1.2	29.6	2.5	100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.46
Use of and Satisfaction in Services Provided by Various Institutions
Rural Central

Organization	Have You Utilized Services Provided by the Organization?						Total
	No	Yes				No indication of service Utilization	
		Are the Services Satisfactory?					
		Yes	No	No reply	Total		
Provincial Office for Industry	15	180	13	3	196	1	212
Dept of Industrial Promotion	65	28	2	3	33	4	102
Industrial Development Center	34	5		1	6	2	42
The Federation of Thai Industries	41	9		1	10	3	54
Provincial Office for Commerce	57	98	4	5	107	4	168
Dept of Export Promotion	74	9		1	10	5	89
The Thai Chamber of Commerce	83	33	8	3	44	5	132
Institute for Management Education for Thailand Foundation	22					2	24
Industrial Finance Corp of Thailand	58	8	2	3	13	3	74
Thai Industrial Standards Institute	43	17	3	3	23	2	68
Industrial Productivity Division	35	9		1	10	2	47
Thailand Institute of Scientific and Technology Research (TISTR)	42	10			10	3	55
Office of the Board of Investment	48	21	3	2	26	1	75
Export Service Division	48	7		3	10	2	60
Small Industries Finance Office	38	2		2	4	2	44
The National Institute of Skill Development	51	20	4	4	28	1	80
Department of Science Service	31	10			10	1	42
Technology Transfer Center	36	2		1	3	1	40
The Small Industries Association	53	3	1		4	2	59
Small Industries Credit Guarantee Funds	41	4			4	1	46
Total	915	475	40	36	551	47	1513
(%)	60.5	31.4	2.6	2.4	36.4	3.1	100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.47
Use of and Satisfaction in Services Provided by Various Institutions
Northeast

Organization	Have You Utilized Services Provided by the Organization?					No indication of service Utilization	Total
	No	Yes			Total		
		Are the Services Satisfactory?					
		Yes	No	No reply			
Provincial Office for Industry	18	173	10	3	186	6	210
Dept of Industrial Promotion	41	17	3	1	21	1	63
Industrial Development Center	24	9	2		11	2	37
The Federation of Thai Industries	32	10	1		11	2	45
Provincial Office for Commerce	61	105		3	108	5	174
Dept of Export Promotion	53	5			5	4	62
The Thai Chamber of Commerce	87	41	3	2	46	6	139
Institute for Management Education for Thailand Foundation	10	4		1	5	2	17
Industrial Finance Corp of Thailand	78	16	6	2	24	5	107
Thai Industrial Standards Institute	42	19	2	2	23	1	66
Industrial Productivity Division	20	7		1	8	4	32
Thailand Institute of Scientific and Technology Research (TISTR)	36	8	1	2	11	1	48
Office of the Board of Investment	47	5	2		7	5	59
Export Service Division	38	2		1	3	1	42
Small Industries Finance Office	34	2	4		6	1	41
The National Institute of Skill Development	51	20		5	25	3	79
Department of Science Service	28	6	1	1	8	2	38
Technology Transfer Center	20	1			1	2	23
The Small Industries Association	31	5		2	7	1	39
Small Industries Credit Guarantee Funds	49	2	4	1	7	1	57
Total	800	457	39	27	523	55	1378
(%)	58.1	33.2	2.8	2.0	38.0	4.0	100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.48
Use of and Satisfaction in Services Provided by Various Institutions
North

Organization	Have You Utilized Services Provided by the Organization?						Total
	No	Yes				No indication of service Utilization	
		Are the Services Satisfactory?					
		Yes	No	No reply	Total		
Provincial Office for Industry	50	147	12	3	162	1	213
Dept of Industrial Promotion	72	35	3	1	39	1	112
Industrial Development Center	38	14	3		17	1	56
The Federation of Thai Industries	37	10	2	2	14	1	52
Provincial Office for Commerce	60	111	5	3	119	5	184
Dept of Export Promotion	79	14	4		18	5	102
The Thai Chamber of Commerce	106	45	2	5	52	3	161
Institute for Management Education for Thailand Foundation	20						20
Industrial Finance Corp of Thailand	90	6	1		7	1	98
Thai Industrial Standards Institute	50	11	1		12	1	63
Industrial Productivity Division	31	7	1	1	9	2	42
Thailand Institute of Scientific and Technology Research (TISTR)	40	8			8		48
Office of the Board of Investment	59	2	2	2	6	2	67
Export Service Division	51	4	1	1	6		57
Small Industries Finance Office	48	2	1	1	4	1	53
The National Institute of Skill Development	69	10		2	12	2	83
Department of Science Service	32	4		2	6		38
Technology Transfer Center	30	3		2	5	1	36
The Small Industries Association	52	10	1	3	14	1	67
Small Industries Credit Guarantee Funds	72	1	2	1	4	3	79
Total	1086	444	41	29	514	31	1631
(%)	66.6	27.2	2.5	1.8	31.5	1.9	100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.49
Use of and Satisfaction in Services Provided by Various Institutions
South

Organization	Have You Utilized Services Provided by the Organization?					No indication of service Utilization	Total
	No	Yes					
		Are the Services Satisfactory?					
		Yes	No	No reply	Total		
		Provincial Office for Industry	18	177	16		
Dept of Industrial Promotion	83	36	2	1	39	4	126
Industrial Development Center	41	12	1		13	1	55
The Federation of Thai Industries	43	8	2		10	2	55
Provincial Office for Commerce	67	91	7	4	102	3	172
Dept of Export Promotion	80	12		1	13	2	95
The Thai Chamber of Commerce	103	24	4		28	3	134
Institute for Management Education for Thailand Foundation	19	5			5		24
Industrial Finance Corp of Thailand	85	14	3	2	19	2	106
Thai Industrial Standards Institute	61	15	1	4	20	2	83
Industrial Productivity Division	38	4	1		5	2	45
Thailand Institute of Scientific and Technology Research (TISTR)	52	6	1	1	8	2	62
Office of the Board of Investment	70	11	3		14	2	86
Export Service Division	56	5			5	1	62
Small Industries Finance Office	56	1	2		3	1	60
The National Institute of Skill Development	86	31	6	2	39	5	130
Department of Science Service	42	5		2	7	1	50
Technology Transfer Center	41	1		1	2	1	44
The Small Industries Association	61	2			2	3	66
Small Industries Credit Guarantee Funds	92	1			1	2	95
Total	1194	461	49	20	530	41	1765
(%)	67.6	26.1	2.8	1.1	30.0	2.3	100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.50
Reasons for not Seeking Information from Organizations

	Greater Bangkok		Rural Central		Northeast		North		South		Whole Kingdom	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
No need	29	29.6	85	49.7	56	56.6	72	52.6	34	28.1	276	44.1
No officers coming to provide services	3	3.1	12	7.0	15	15.2	15	10.9	5	4.1	50	8.0
Unaware of services provided by the organizations			2	1.2	7	7.1	5	3.6	3	2.5	17	2.7
Not knowing where to contact organizations			1	0.6	10	10.1	1	0.7	2	1.7	14	2.2
Unaware of organizations providing services			2	1.2	4	4.0	4	2.9	2	1.7	12	1.9
Others	2	2.0			7	7.1	3	2.2	1	0.8	13	2.1
No reply			1	0.6					4	3.3	5	0.8
Unsure	64	65.3	68	39.8			37	27.0	70	57.9	239	38.2
Total	98	100.0	171	100.0	99	100.0	137	100.0	121	100.0	626	100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.51
Newspapers Regularly Subscribed by Entrepreneurs

Newspaper	Region											
	Greater Bangkok		Rural Central		Northeast		North		South		Whole Kingdom	
	Number of Replies	%	Number of Replies	%	Number of Replie	%	Number of Replie	%	Number of Replie	%	Number of Replie	%
Thai Rat	75	34.7	150	40.1	146	40.2	169	53.8	155	38.5	695	41.6
Daily News	41	19.0	80	21.4	73	20.1	56	17.8	91	22.6	341	20.4
Tan Settakij	17	7.9	24	6.4	33	9.1	23	7.3	36	8.9	133	8.0
Prachachat Turakij	22	10.2	28	7.5	24	6.6	14	4.5	26	6.5	114	6.8
Matichon	8	3.7	16	4.3	24	6.6	27	8.6	33	8.2	108	6.5
Siam Rat	9	4.2	5	1.3	15	4.1	10	3.2	15	3.7	54	3.2
Bangkok Post	10	4.6	4	1.1	5	1.4	1	0.3	8	2.0	28	1.7
Manager	4	1.9	8	2.1	2	0.6	2	0.6	2	0.5	18	1.1
The Nations	5	2.3	2	0.5	1	0.3		0.0	1	0.2	9	0.5
Others	12	5.6	18	4.8	37	10.2	9	2.9	26	6.5	102	6.1
Unsure	13	6.0	39	10.4	3	0.8	3	1.0	10	2.5	68	4.1
Total	216	100.0	374	100.0	363	100.0	314	100.0	403	100.0	1670	100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.52
Newspapers Most Read by Entrepreneurs

Newspaper	Reading Popularity			Total
	Rank 1	Rank 2	Rank 3	
Thai Rat	625	50	20	695
Daily News	77	236	28	341
Tan Settakij	52	40	41	133
Prachachat Turakij	31	55	28	114
Maticchon	27	46	35	108
Siam Rat	15	21	18	54
Bangkok Post	9	13	6	28
Manager	2	9	7	18
The Nation	4	4	1	9
Others	29	41	32	102
Unsure	27	21	20	68
Total	898	536	236	1670

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.53
Radio Listening Hours Regularly Spent by Entrepreneurs

Range of Time		Region											
		Greater Bangkok		Rural Central		Northeast		North		South		Whole Kingdom	
		Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
04.00-08.00	AM	6		13		14		10		1		44	
	FM	9		9		30		22		37		107	
		2		4		5		5				16	
	No Reply							2		2		4	
	Total	17	27.9	26	36.1	49	37.4	39	48.8	40	28.8	171	35.5
08.00-12.00	AM	5		3		1		6		2		17	
	FM	4		4		13		9		17		47	
	Both	3				3		1				7	
	No Reply									2		2	
	Total	12	19.7	7	9.7	17	12.9	16	20.0	21	15.1	73	15.1
12.00-16.00	AM	1		4		5		2		1		13	
	FM	4		5		17		6		27		59	
	Both	3				2		1				6	
	No Reply					1				3		4	
	Total	8	13.1	9	12.5	25	19.1	9	11.3	31	22.3	82	16.9
16.00-20.00	AM	2		7		6		1		4		20	
	FM	10		5		11		6		22		54	
	Both	2		1		5		2				10	
	No Reply			1				1		1		3	
	Total	14	22.9	14	19.4	22	16.8	10	12.5	27	19.4	87	18.0
20.00-24.00	AM	1		6		5				2		14	
	FM	6		8		11		6		16		47	
	Both	3				2						5	
	No Reply			2						2		4	
	Total	10	16.4	16	22.3	18	13.8	6	7.5	20	14.4	70	14.5
Total		61	100.0	72	100.0	131	100.0	80	100.0	139	100.0	483	100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.54
Television Viewing Time Spent Regularly on Weekdays by Entrepreneurs

Range of Time	Region											
	Greater Bangkok		Rural Central		Northeast		North		South		Whole Kingdom	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
16.30 -19.30	1	0.8	4	1.8	10	3.8	6	3.1	11	4.5	32	3.1
19.30 -21.00	71	60.2	134	60.6	185	70.6	125	63.8	165	66.8	680	65.1
21.00 -22.00	30	25.4	56	25.3	51	19.5	48	24.5	38	15.4	223	21.4
22.00 -24.00	16	13.6	27	12.2	16	6.1	17	8.7	33	13.4	109	10.4
Total	118	100.0	221	100.0	262	100.0	196	100.0	247	100.0	1044	100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.55
Television Viewing Time Regularly Spent on Weekends by Entrepreneurs

Range of Time	Region											
	Greater Bangkok		Rural Central		Northeast		North		South		Whole Kingdom	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
08.00 -12.00	5	6.7	1	0.8	25	8.7	11	6.1	14	5.5	56	6.1
12.00 -16.00			1	0.8	29	10.0	13	7.2	18	7.1	61	6.6
16.00 -19.30			5	4.0	14	4.8	10	5.6	31	12.2	60	6.5
19.30 -21.00	44	58.7	68	54.4	159	55.0	94	52.2	135	52.9	500	54.1
21.00 -22.00	17	22.7	34	27.2	43	14.9	35	19.4	29	11.4	158	17.1
22.00 -24.00	9	12.0	16	12.8	19	6.6	17	9.4	28	11.0	89	9.6
Total	75	100.0	125	100.0	289	100.0	180	100.0	255	100.0	924	100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

Table 3.56
Television Channels Regularly Viewed by Entrepreneurs

Television Channel	Region											
	Greater Bangkok		Rural Central		Northeast		North		South		Whole Kingdom	
	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%	Number of Replies	%
Channel 3	26	16.4	46	13.9	46	14.3	34	10.5	8	2.6	160	11.1
Channel 5	4	2.5	8	2.4	28	8.7	20	6.2	48	15.6	108	7.5
Channel 7	30	18.9	75	22.7	136	42.4	134	41.2	158	51.5	533	37.0
Channel 9	43	27.0	106	32.1	57	17.8	71	21.8	12	3.9	289	20.0
Channel 11	2	1.3	6	1.8	11	3.4	12	3.7	22	7.2	53	3.7
Unsure	27	17.0	31	9.4	33	10.3	28	8.6	25	8.1	144	10.0
No Reply	27	17.0	58	17.6	10	3.1	26	8.0	34	11.1	155	10.7
Total	159	100.0	330	100.0	321	100.0	325	100.0	307	100.0	1442	100.0

Source: Rural Industries and Employment Project Survey, TDRI, 1989.

CHAPTER 4

SUMMARY OF INFORMATION DISTRIBUTION ISSUES AND INFORMATION SERVICE FOR REGIONAL INDUSTRY AND RECOMMENDATIONS

This chapter summarizes the main problems related to the distribution of information to industrialists upcountry, so that guidelines and solutions may be applied for promotion and development.

There are basically two aspects to the problems:

4.1 AGENCIES RESPONSIBLE FOR DISTRIBUTING INFORMATION AND PROVIDING INFORMATION SERVICES TO REGIONAL INDUSTRIES

The main issues may be summed up as follows:

- repetitious services;
- limited service;
- lack of study on real needs of regional industries;
- services provided to regional industries are minimal, compared to the central plains
- most of the main offices are located in Bangkok;
- there is hardly any public relations regarding their work;
- agencies often wait for industrialists to apply for the service rather than provide the service first;
- some information is not updated or improved to suit the changing needs of the industrialists;
- the information collection system has no reference system and lacks facilities for reference;
- lack of distribution of information--users do not know where to find such information;
- no coordination among public and private agencies; and
- no agency acts as a service center.

4.2 NEEDS FOR INFORMATION AND INFORMATION SERVICES OF REGIONAL INDUSTRY

We may sum up such needs as follows:

- industrialists do not find it necessary or useful to use such information for decision-making;
- industrialists do not know these agencies;
- industrialists may know the agencies but do not know that they provide these services;
- industrialists know the services but are not interested in obtaining them since they do not find any benefit and think that it may involve red-tape;
- industrialists can obtain their own information and are satisfied with the existing information;
- industrialists do not think that the information can be of use to their business;
- industrialists find that the information does not suit their needs;
- industrialists are too busy;
- industrialists are already satisfied with their situation and condition since their businesses are rather small and based upon experience; and
- industrialists do not contact public agencies unless they find it absolutely necessary--e.g., such as applications for permits and licenses--since most agencies are too bureaucratic and inconsistent or depend on bribery.

4.3 RECOMMENDATIONS

At present, information--whether it be on marketing, technology or management--is still general in nature and is limited and often obsolete. Some regional industrialists may realize, however, that the development of their business, cost reductions and increased profits require updated information.

Therefore, in order to promote and develop regional industry, the government has to support the effective distribution of appropriate and updated information, and to encourage entrepreneurs to realize the importance and benefits of information.

An analysis and summary of the distribution of data and information services to regional industry, leads to the following short-term and long term recommendations.

Short-term Recommendation to Solve Problems and Improve Services

1. There should be coordination between related public and private agencies through the setting up of a committee in charge of providing services to central and regional industries, so as to avoid repetitious service.

The committee shall consists of:

- a representative from the National Economic and Social Development Board,
- a representative from the Office of the Permanent Secretary for Industry,
- a representative from the Department of Industrial Promotion, Ministry of Industry,
- a representative from the Office of the Permanent Secretary for the Ministry of Commerce,
- a representative from the Office of the Permanent Secretary, Ministry of Science, Technology and Energy,
- a representative from the Thai Chamber of Commerce,
- a representation from the Federation of Thai Industries,
- the director of the Rural Industry Information Service Center acting as the secretary.

The committee should focus on cooperation and planning, as well as on the preparation and distribution of information among agencies, and defining nature of services to be provided to regional industries.

2. Industrial investors should be encouraged to realize the value of information for the benefit of their business, through agencies and mass media such as newspaper, TV. and radio. The newspapers most popular among the industrialists are: Thai Rat, Daily News, Tan Settakij, Prachachat Turakij and Matichon. The most popular TV. programs are between 19.30-21.00 hrs., and the most popular channels are 7, 9, 3, 5, respectively. The most popular radio time is in the morning from 4.00-8.00 hrs., and most industrialists prefer FM.

3. Public relations and information services should be increased so that industrialists come to know more about these agencies and at the same time a good, friendly image is created among service applicants, though public relations advertisement and mass media.

4. The scope of services rendered by Rural Industry Information Service Center, an agency of the Department of Industrial Promotion, should be expanded to link with other agencies and act as clearing house through four centers: the head office in Bangkok, the Northern Industrial Promotion Center, the Northeast Industrial Promotion Center and the Southern Industrial Promotion Center. There will be two additional industrial promotion centers in the east and in the west. Since there are too few employees to provide such services, there should be an increase in manpower so as to provide better and more extensively services.

At the same time, agencies should be promoted to do reference work on information sources. Such information should be transmitted to other regional agencies such as the Provincial Industrial Office, the Provincial Commercial Office, the Provincial Chamber of Commerce and the Rural Industry Information Service Center, so that they can give correct recommendation as to information sources. The Rural Industry Information Service Center should also act as an effective clearinghouse and center of information, providing the said services and collecting information on problems and obstacles related to regional industries.

5. Studies should be conducted on problems and information need so that better services could be rendered by concerned organizations. The

findings from the present study indicate that regional industrialists prefer information on raw materials prices, sources of raw materials, local markets, funding sources, and government regulations. As for information concerning administration and management, the needed information is on productivity improvement and reduction of production cost, maintenance of machinery, planning on taxation and marketing management and technology of production. The information should be in the form of catalogues, product brochures, journals and leaflets. Services found useful by industrialists are: consultation in the form of a business clinic to answer doubts and solve problems, arrangement of meetings with fellow industrialists to pave way for future joint ventures, local study tours and exhibitions.

From the study on the nature of problems and hurdles of industrial business in the region, it was found that the main problems faced by provincial industrial entrepreneurs involve marketing, law and taxation, funding sources, personnel and labor.

However, the most important issues require constant and continuous study, since they are related to changes in the level of needs and the environment.

Recommendations for Long-term Solutions

In order to provide information more extensively, the findings suggest that industry information service center should be made available in all provinces.

However, there is no need to set up another government service agency, since it would simply be redundant. The existing agencies should be improved and upgraded, and more cooperation should be sought from relevant public and private agencies. The appropriate agencies are the Provincial Industrial Office and the Provincial Chamber of Commerce.

1. Provincial Industrial Office. Besides being directly related to industry, this office is a point of contact for industrialists and is located throughout all provinces. It is a state agency under the

control of the Ministry of the Industry and can be expanded to accommodate more work and function.

This information service center should be a part of the Provincial Industrial Office and act as center for collecting and transmitting information on various aspects ranging from funding sources, training programs and seminars, testing on products, joint ventures, product standards, certification of products, etc. The center also covers certain other information, such as technical reports, patents, and catalogues on machinery. Service applicants need not contact various agencies on their own. The center simply acts as coordinator between industrialists and other service agencies, giving advice on existing information or collecting more information if requested.

The important roles played by the Information Service Center consist of:

- Collection of information and other necessary information dealing mostly with economic condition, marketing, labor etc. The center should also point out the information's importance and its effect. Most of the information is focused on each province, and the center should act as a clearinghouse.
- Maintaining a list of agencies providing these services and the scope of their operations as well as their output. This list should be constantly updated.
- Collection of data and information on rules, regulations and procedure of industry-related agencies, such as procedure for application of product certification and patents.
- Survey and study of local industrial needs should be conducted to avoid problems and overcome hurdles and to provide guidelines for development.
- Other agencies should be contacted to collect additional information and act on behalf of applicants who apply for

information.

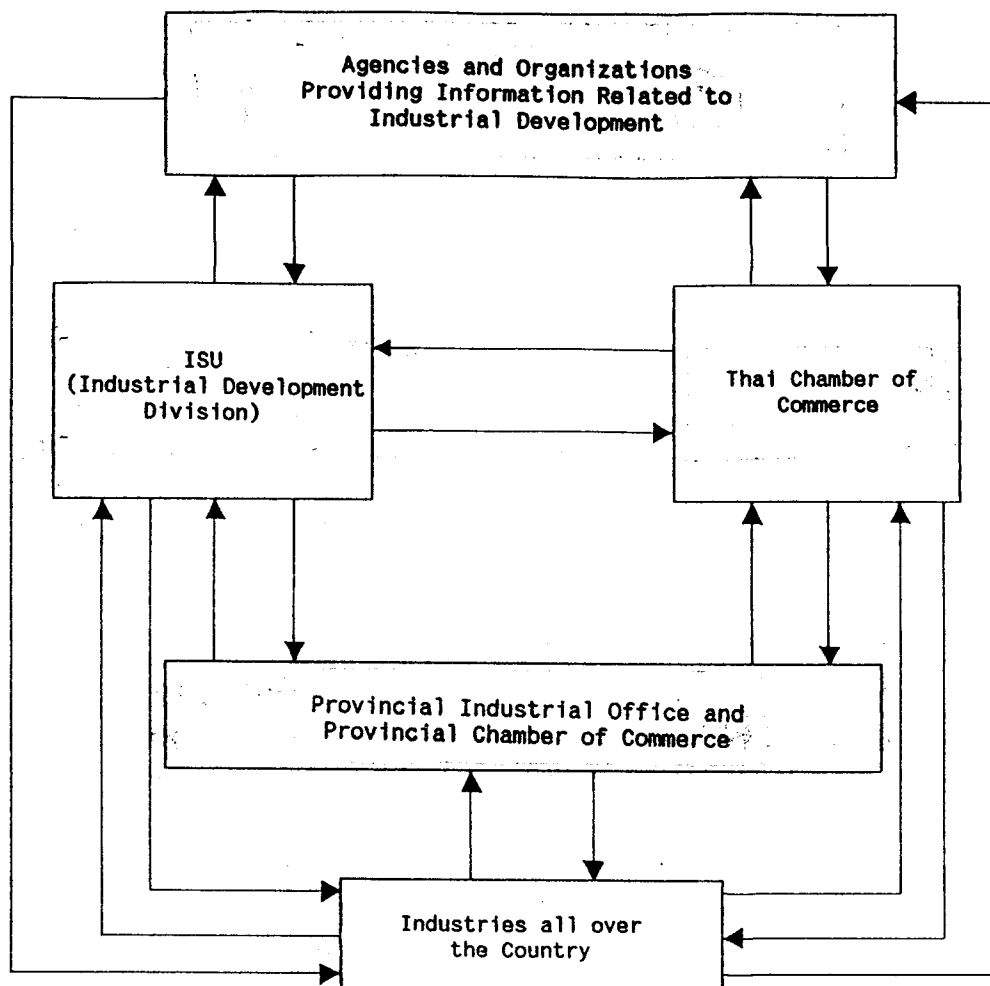
- Encourage rural industries to realize the importance of information gained through mass media, such as TV., newspapers, radio, leaflets, journals, and direct contact with entrepreneurs.
- A center for the transfer of information and services of related agencies should be established.
- Handbooks on investment should be published and provided as a service to industrialists and other agencies.

2. Provincial Chamber of Commerce The Chamber of Commerce has branches located in all provinces. Its structure consists of a president, directors and members. Directors are volunteers and are basically businessmen in the province. Directors are in charge of the chamber's policies, whereas most of the work is performed by the officers of the chamber, who are full-time employees.

The Provincial Chambers of Commerce are the most efficient office for collecting and providing information on business. The provincial chambers should be promoted, since they are known by entrepreneurs and easily accessible.

The promotion should be on long-term basis and should be supported by agencies such as the Thai Chamber of Commerce; foundations and international organizations such as USAID, CIDA, ASIA Foundation, CIPE; and state agencies such as Ministry of Interior, Ministry of Commerce, Bureau of University Affairs and Ministry of Education. The promotion could be begin by studying the work of the Provincial Chambers of Commerce, and through providing training and seminars to the chambers' employees and providing funds for the operations.

The guidelines for development of information distribution and information services on a long-term basis may be summed up as follows:



Agencies close to regional industries, which are located in all provinces, are: the Provincial Industrial Office and the Provincial Chamber of Commerce. Since they are easily accessible they, should play more of a role as a center of information collection. Officers of these agencies should visit entrepreneurs and learn more about their problems.

ISU and the Thai Chamber of Commerce should play a larger role in the development of the industry, and there should be an exchange of information between these two agencies. The data collected should suit the needs of entrepreneurs, and the agencies should act as a match-maker between entrepreneurs and service providers, no matter what group they may belong to. Services should be offered free of charge. Should the

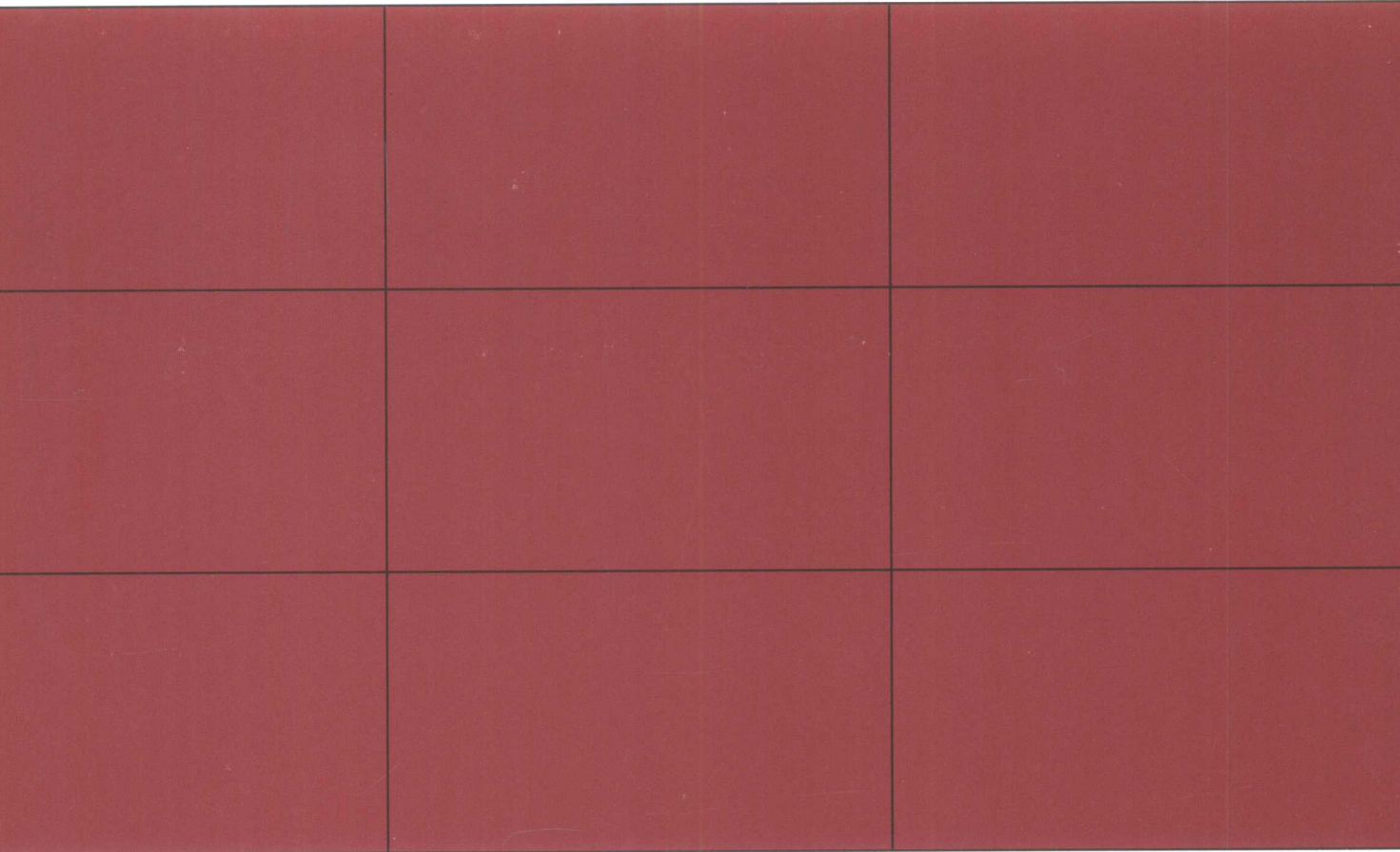
information be specific¹ and cost some money for research, charges should be based upon real cost.

Other industrial service-related agencies should provide index of services for ISU and the Thai Chamber of Commerce and, at the same time, provide services to industrial entrepreneurs directly or through central agencies.

Stages of Development of Data and Information Services Provided to Regional Industries

<u>Stages</u>	<u>Office in charge</u>
1. Set up joint committee to plan for provision of information to the regional industries.	<ul style="list-style-type: none">- Office of the Industrial Under-Secretary- Office of Commercial Under-Secretary- NESDB- Thai Chamber of Commerce- Council of Thai Industry- ISU
2. Cooperate and make agreement with agencies responsible for industrial promotion to support ISU and Thai Chamber of Commerce to become center of information through the Provincial Industrial Office and the Provincial Chamber of Commerce.	<ul style="list-style-type: none">- Joint Committee- Other Public & Private agencies
3. Plan development of system for development and storage of information by ISU and the Thai Chamber of Commerce.	<ul style="list-style-type: none">- ISU- Thai Chamber of Commerce

<u>Stages</u>	<u>Office in charge</u>
4. Contact and Collect information from relevant agencies.	- ISU - Thai Chamber of Commerce
5. Train and develop officers of the Provincial Industrial Office to collect basic information and to understand the stages of contact to collect information needed by the industrialists.	- ISU - Thai Chamber of Commerce - Office of Industrial Under-Secretary - Department of Industrial Promotion - Rural Industrial Information Center - Provincial Industrial Office
6. Develop the Provincial Chamber of Commerce to play better role in promoting business and providing information.	- Thai Chamber of Commerce - Agencies aiding Thai Chamber of Commerce - Provincial Chamber of Commerce
7. Make reference books indexing information sources and collection; distribute them to Provincial Industrial Office, Provincial Chamber of Commerce and other agencies.	- ISU - Local Agencies
8. Encourage entrepreneurs to realize the importance of using information for management, through relevant agencies and mass media, and help entrepreneurs to learn about the scope of services offered by the Provincial Industrial Office and the Provincial Commercial Office.	- Joint Committee - Agencies helping to develop and promote the industries



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