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**THAILAND'S
SMALL INDUSTRIES SERVICE INSTITUTE (SISI)
REVIEW OF
ITS BACKGROUND, ORGANIZATION,
ACTIVITIES, PROBLEMS AND PLANS ✓**

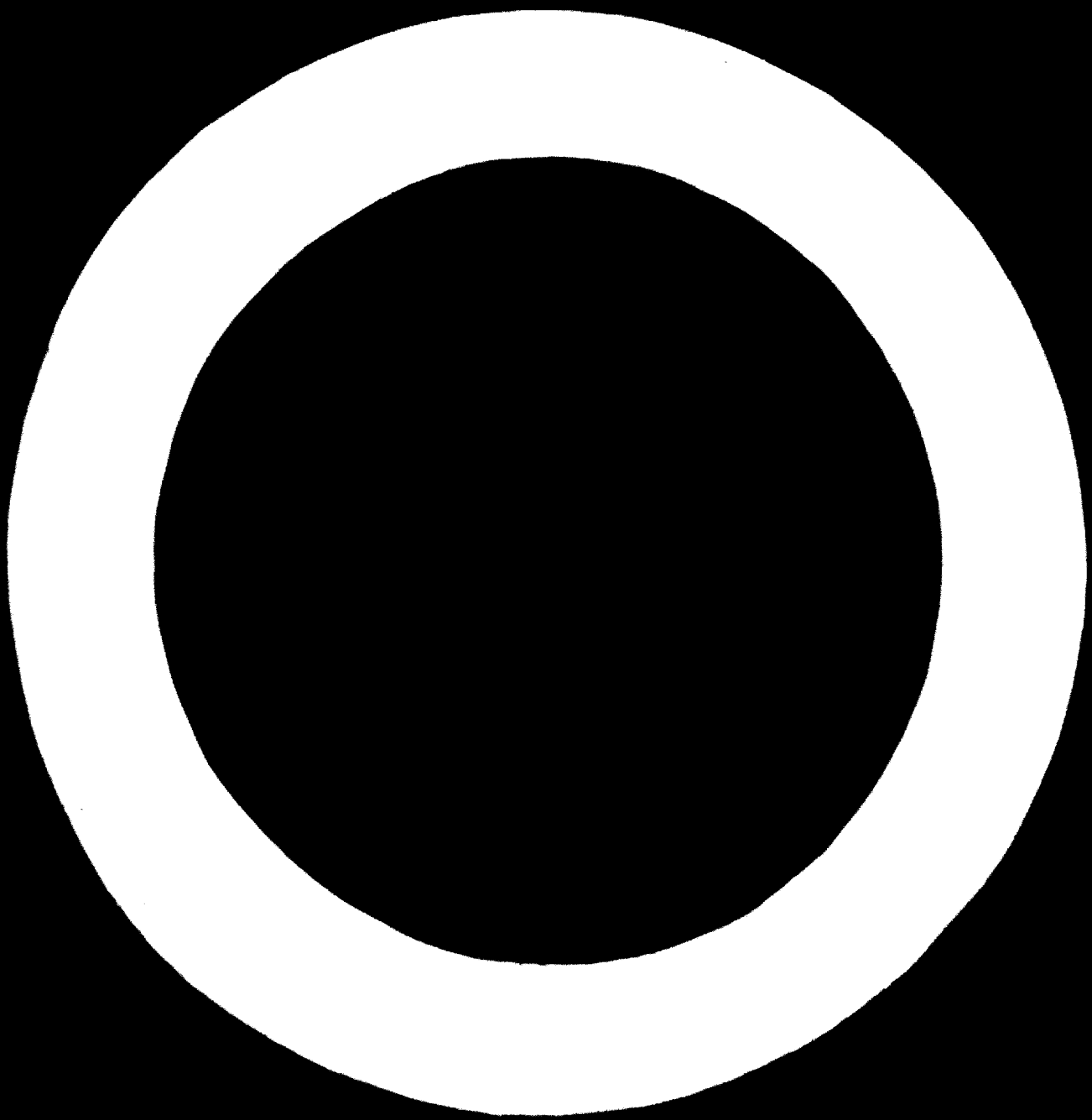
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I DEFINITION AND BACKGROUND

About 97% of the industries in Thailand are small-scale according to the present ruling definition, which stipulates those enterprises, that employ less than two million Baht (approximately US\$100,000) investment, and has no management specialisation. The function of the management is usually performed by one person, who as a rule has no full-time specialised staff at his disposal.

As a result of the recommendations submitted by two UN experts, who studied during the years 1957 to 1962 the possibilities of institutional promotion of small-scale industries in Thailand, the Government, through the Department of Industrial Promotion of the Ministry of Industry, requested the International Labour Organisation (ILO) to provide an expert to assist in devising ways and means to create institutional and organizational arrangements in Thailand for the development of small-scale industries.

The expert submitted in 1963 the results of his study, which strongly recommended the creation of a Small Industries Service Institute in Bangkok, with extension centres in Chiangmai and other places possibly with assistance from the UN Special Fund.

In 1964 the Government decided to establish the Small Industries Service Institute in Bangkok including extension centres in other parts of Thailand and submitted to the UNDP/SF a request for assistance in the establishment of the Small Industries Service Institute in Bangkok, concentrating, as Phase I of the Project, on the light metal and textile industries in the Twin-cities of Bangkok and Thonburi. Subsequent phases of the project would extend SISI services to the rural areas and other branches of industry.

The Governing Council of the United Nations Special Fund approved in January 1965 financial assistance amounting to US\$915,000.00 for the establishment and initial operations of the Institute, by providing for the services of experts, fellowships and machinery and equipment for the Institute's workshops.

The Thai Government's counterpart contribution in terms of personnel, land, building and administration amounted to the equivalent of US\$1,287,315.00, and the cash contribution towards local operating costs amounted to US\$93,300.00.

On 25 March 1966, the Plan of Operation of the Institute was signed by the Minister of Industry, the representatives of the UN Special Fund and the ILO which had been appointed as the executing agency entrusted with the implementation of the project.

In the Plan of Operation which covered the first five years of the joint project provisions were made from the United Nations Special Fund for:

324 Man/Month for Experts

78 Man/Month for Fellowships

US\$124,000.00 for Equipment and Supplies

US\$ 37,400.00 for Miscellaneous Expenditures

II ITS ORGANIZATION

The purpose of the project is to promote the development, modernisation and growth of new and existing small-scale industries, through the provisions of economic studies and market research services, product and process design and testing services, technical and management training and manufacturing services, and extension and advisory services.

The Institute's main organizational structure consists of five divisions:

(a) The Economic Studies and Information Division

This division is undertaking a systematic analysis of the problems confronting new and existing small establishments or groups of establishments; it is carrying out market surveys and studies related to certain industries and products; it is assessing the economic viability of small industries; it is also collecting and disseminating information within the country and from other countries on all aspects of small industry which are of help to entrepreneurs who wish to establish new industries or develop existing ones. A further responsibility is the maintenance of a library of publications, films and audio-visual aids to serve the other divisions of the Institute and the interested community.

(b) The Design and Testing Division

The objective of this division is to co-operate with and support from other SISI divisions in promoting Thailand's industry in the field of industrial design and testing of technical products. The main activities of the division consist of:

1. Design and development of industrial products in the categories of mechanical and technical consumer goods.
2. Design and development of capital goods, machine tools, agricultural implements and transport equipment.
3. Testing of prototypes with regards to function, ergonomics and acceptability by potential customers.

The industrial design activities are incorporated into the overall SISI promotional programmes, thereby supporting and requiring the services of the experts and specialists of other divisions.

(c) The Workshop Division, which can operate its own model ferrous and non-ferrous foundry equipment, including a pattern making shop, is able to operate and to demonstrate in a practical way various foundry techniques.

There exists also a machine shop, a tool room, a welding and forging shop with heat treatment facilities, a sheet metal shop and a fully equipped electroplating shop.

The purpose of the various workshop sections is to provide demonstrations and training for up-grading skills of small industry entrepreneurs, managers, foremen and skilled workers in production techniques and production efficiency.

Keeping training and product development objectives in mind, the workshop makes its equipment facilities and personnel available for actual production or processing of goods being manufactured by the various small industries to the extent necessary and feasible.

(d) The Textile Division, is rendering theoretical and practical training services to technicians and managers of small textile undertakings.

It is also demonstrating either in the shops of the entrepreneurs or in the institutional premises improved methods of production, fabric designs and other modern technologies, applicable in the cotton and silk industries.

The Textile Division is located in the premises of the Fibre Experimental Centre, a modern testing laboratory for all branches of the textile industry.

- (e) The Extension and Training Division in collaboration with all other divisions, is responsible for maintaining constant communication between the Institute and the industry, by seeking and organising the necessary personal contact between the entrepreneur/manager and the Institute's various divisions. It is responsible for maintaining proper channels of follow-up activities after rendering advisory and consulting services in collaboration with the other divisions. The division's own specialized personnel consists of general practitioners and specialists in specific technologies, who are able to instigate the first contact with the entrepreneur/manager, diagnose his problems, and can suggest appropriate remedies and actions for improving productivity and upgrading manufacturing skills.

It is also responsible for co-ordinating, arranging and giving advice in designing training courses and seminars, on all aspects of management and production for small business, for the entrepreneur, the owner/manager, the technicians and the workers, wherever and whenever such training is necessary.

As present, all services rendered by the SISI are free of charge. Only in such cases where material is needed to manufacture prototype-products in SISI Workshop or where direct expenditures are involved for the purchase of specific tools, etc., in connexion with specific consultancy work, the entrepreneur is asked to bear those costs, which he in all cases gladly does.

III SISI ACTIVITIES

The Small Industries Service Institute (SISI) was established as a five year project between the Government of Thailand, the United Nations Development Programme (Special Fund) and the International Labour Organisation. The project was launched in October 1966, and by the beginning of 1969 its workshop buildings and offices had been completed which were officially opened by H.E. the Prime Minister, in August of that year.

Initially concentrating its work on textile and light metal industries in the Bangkok-Thonburi area, as mentioned earlier, the SISI has been giving managerial and technical advice and assistance to the small scale sector of the Thai industry which consists of over 97% of the registered factories in Thailand. The SISI uses the medias of seminars, demonstrations, consultancy and in-plant training. It also has resources of specialists in the fields of general management, economics and marketing, electroplating, extension work and training, foundry technology, industrial design, industrial engineering, textile and tool and die design. ILO experts in each of these fields have been working at SISI.

The most important aspect and greatest achievement at SISI has been the training of the Thai professional officers, four of whom have developed so well as to be appointed chief of operating divisions at SISI. The formal training activity at SISI is summarized as follows:

SISI Training Hours (1 July 1967 to 31 March 1970)

Training	1967 6 months	1968	1969	1970 3 months	Total
Theoretical		3392	2883	827	7102
Extension		3220	3972	687	7879
Workshop		11851	13194	3549	28594
Survey		2662	4649	827	8138
Entrepreneur		370	2777	2223	5370
Appreciation		425	630	233	1288
Preparation		1437	8042	2840	12319
Meetings		276	837	391	1504
Other		3614	9169	2602	15385
TOTAL	1980	27247	46153	14179	89559

Classification of Factories Visited in SISI Extension Work

	1966/67	1968	1969	1970 3 months	Total
Electroplating	32	26	36	8	102
Textile	25	76	112	14	227
Sheet Metal	2	17	32	9	60
Machine Shop	25	21	43	4	93
Foundry	60	17	13	21	111
Plastic	2	12	2	-	16
Machine Tool	-	-	7	2	9
Other	57	-	4	2	63
TOTAL	203	169	249	60	681

Each of the factories in this classification will have been visited a number of times by SISI personnel. For instance, an Automobile Spare Parts Factory, first visited in February 1968, had new dies designed by SISI resulting in the manufacture of new products. Next, this factory was advised by SISI on the selection of new machinery and equipment resulting in increased output, and at the same time a new cost control procedure was introduced. Further advice was given on finishing operations which improved the saleability of its products, and on the use of tool sharpening facilities, giving longer tool life and a better quality product. Recommendations were later made on types and grades of tool steel to be used resulting in a 50% saving in the material cost of tools, and following Tool and Die and Heat Treatment Training Courses at SISI, the factory is now establishing its own Heat Treatment department which will show a substantial cost saving in tool purchase. This type of procedure and timing would be quite typical of many individual factories visited.

Since occupying the new SISI Building in 1969, Seminars and Lecture Courses have been held in the following fields:

1. Textiles
2. Electroplating
3. Aluminium Anodising
4. Tool and Die
5. Heat Treatment
6. Foundry Technology
7. Plant Layout
8. Industrial Management
9. Production Control and Costing
10. Marketing
11. Industrial Design
12. Mechanical Drawing.

To date, some 932 participants have attended 61 lectures and Courses: these being as follows:

	<u>No.</u>	<u>Participants</u>
1969	27	365
1970	34	567
(5 months)		

The standard of lectures and courses held at SISI is universally regarded as high and compares very favourably with the standard of performance of visiting groups using SISI facilities in terms of preparation, subject matter and presentation. The commendably high standard of work in this area is a tribute to the close teamwork which has existed between the ILO expert staff and the Thai National Staff, and to the extreme thoroughness with which the course materials and the personnel have been prepared.

There is, therefore, a firm and lasting foundation being built at SISI Bangkok in terms of facilities, trained personnel and small industry "know-how", which will well fit it for being both the central headquarters for small industry promotion throughout the whole of Thailand, and also the training ground for personnel serving in rural branches of SISI.

IV PROBLEMS

Problems are encountered in its implementation of industrial services programmes. Some are common to all governmental departments but some are peculiar and only found in the organisation of industrial services. Detailed consideration to the problems is depicted in the following:

- (a) Training services. Difficulties are confronted by SISI in rendering training services to small industry. Most of small entrepreneurs find it difficult to leave their businesses for the whole day, and are not certain that the training courses would benefit them. In view of these facts, sometimes it is difficult to get them to attend the courses unless the SISI can convince them of the benefits they could gain. Therefore, SISI extension officers have to visit small factories regularly and persuade them to attend training courses. Moreover, courses are usually designed for the afternoon so that the small entrepreneurs have available time for doing their businesses in the morning.

If the extension officers take some pieces of metalwork done by the SISI Workshop Division and show them to the owners or the managers of small industries, this helps in convincing them that SISI has the necessary skills.

Another problem is faced by the SISI in conducting training classes. The academic background of small entrepreneurs is generally low but they do have many years of practical experience. In order for them

to comprehend the lectures and to read lecture handouts, the training officers have to use very simple words. In addition, more audio-visual aids are required for better illustration and transmission of ideas and concepts to the participants. Moreover, it is found that arrangements for their participation in workshop demonstrations are very helpful.

- (b) Extension services. The managers or owners of small industries nearly always suspect the purpose of the visits of the SISI extension officers. They are doubtful of the extension services offered by the SISI since this type of offer is new or unfamiliar to them. In addition, they are not willing to accept the offer because they are tired of the bureaucratic red tape of government. Moreover, they think they are competent in handling their businesses. All in all, it leads to the question of how to convince them of their needs.

The techniques in use to convince them have already been mentioned in the foregoing part dealing with training services. In addition, it is realized that more publicity is required for better understanding by the small entrepreneurs. As an example, circular letters, mailed to trade associations, are planned.


- (c) Personnel. The salaries paid to the professional staff are very low compared with what may be earned outside the government service. Some of the staff have left to earn three or even four times their Government salary. This situation might be improved if service fees could apply to clients and some of the resulting funds could be distributed to the staff as bonus payments. In addition, some fellowships for training overseas are needed as an incentive for the staff to be retained.

The academic background and practical experiences of the SISI technical staff are limited to the fields of metal working and textile. Extension and training activities should cater for many different industries. However, the broader requirements of technical services prevent the SISI technical staff from carrying out their works more effectively and more thoroughly. Therefore, more fellowships are considered indispensable for the technical staff of SISI to have further training in an industrialised country in other technical fields. In the short term plan, experts are needed to train and supervise the technical staff.

(d) Budget. The progress of the work of SISI has been retarded by the apparent absence of budgets for certain essential items. To illustrate, an excellent large room exists for a library but there is no budgetary provision as yet for stocking it with books and other literature. Also no budgetary provision has been made for printing a monthly journal for distribution to small industrialists and the general public.

V FUTURE PLANS

In connexion with the SISI's second phase development, the objectives of the plan are threefold. The first is to establish central services at SISI Bangkok to control and support expansion of its services to provincial Thailand. The second is to expand existing central services to the wood-working and plastic industries. The third is to establish SISI Branch at Chiangmai in the Northern Region with promotions and service facilities to encourage existing industry and stimulate the growth of new industries based upon the economic characteristics of that region. The SISI Branch in Chiangmai is a part of its overall rural development programme. SISI development projects will follow in the Northeastern and Southern Regions. Part of the forward planning work of the second phase of the SISI project will be surveys and feasibility studies in connexion with the extension into the Northeastern and Southern Regions.





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