

OVERSEAS FIELDWORK REPORT 1993

**An Integrated Development Analysis
on Nakhon Ratchasima, Northeast Thailand
- A Case Study-**



Flower planting for animal feeding at pilot model village (all groups).

Snap with children at rural area of Nakhon Rachasima province after the research (WG- I , IV).



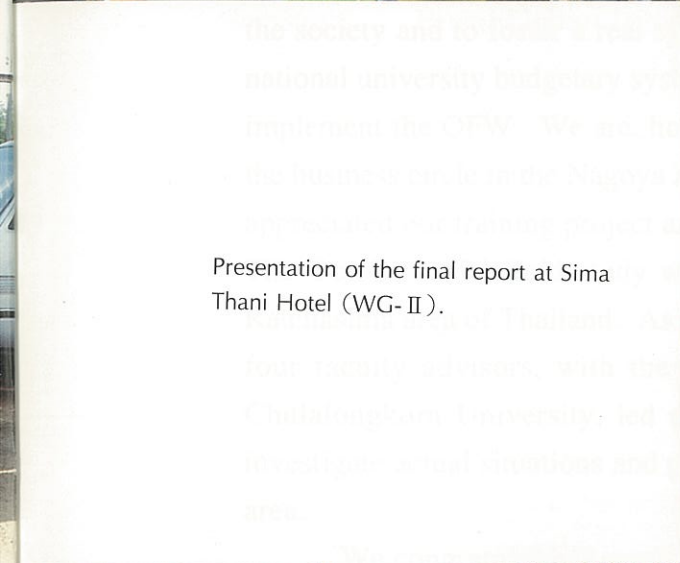
Visiting farmer's house and interviewing on water for agriculture and household (WG-III).

Briefing on water usage at urban area in Nakhon Rachasima Province (WG-III).





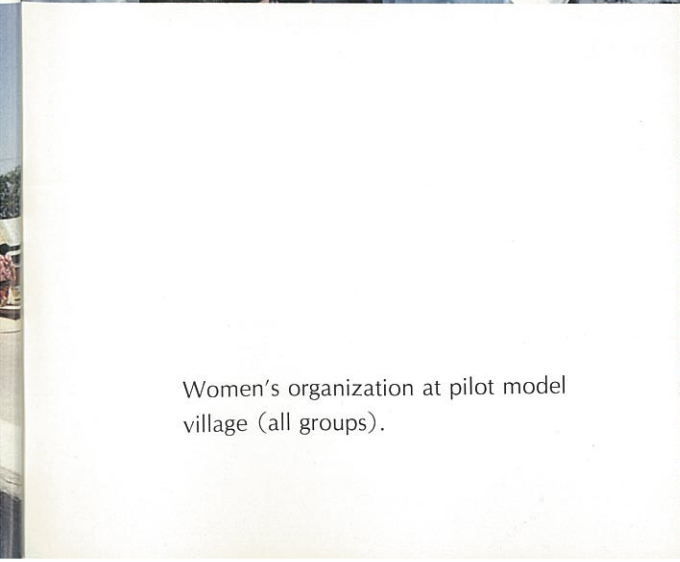
Briefing at slum area in Korat (WG-III).



Presentation of the final report at Sima Thani Hotel (WG- II).

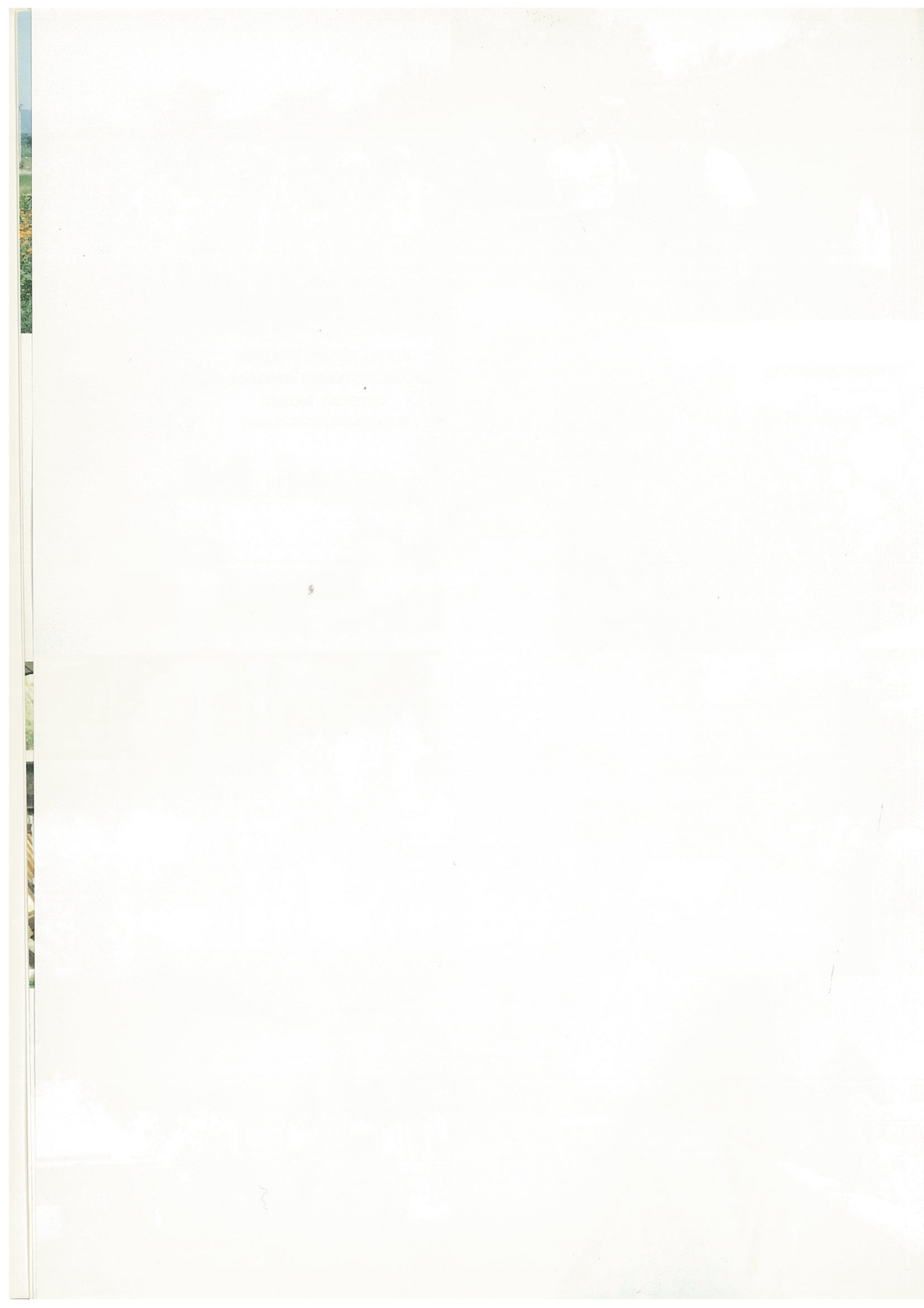


Visiting CBIRD project, NGO's community based integrated rural development in Buriram Province (all groups).



Women's organization at pilot model village (all groups).





Preface

We are pleased to publish the 1993 issue of the overseas fieldwork report of the Nagoya University Graduate School of International Development. The 1993 field study was the second in Thailand under our overseas fieldwork project (OFW). This project is carried out in the firm belief that graduate students of international development must train in the field in a third world country in order to truly understand the society and to foster a real spirit of international cooperation. Under the present national university budgetary system it is not at all easy to gain governmental funds to implement the OFW. We are, however, very fortunate to be able to raise funds from the business circle in the Nagoya Area. We are extremely grateful to companies which appreciated our training project and provided us with the necessary financial support. The October 1993 field study was conducted over a month period in the Nakhon Ratchasima area of Thailand. As in the previous year, Professor Haruo Nagamine and four faculty advisors, with the cooperation of faculty members and students of Chulalongkorn University, led some 30 GSID students from various countries to investigate actual situations and problems in economic and social development in the area.

We congratulate all participants on the success of the 1993 field study and the publication of this report. We also appreciate the time and labor they dedicated to making the project successful. Along with the 1992 report, this one will contribute to the establishment of a standard framework for future field studies.

February 15, 1995



Akio Morishima
Dean, GSID

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General Introduction

About the Report

This report consolidates the result of the Overseas Fieldwork (Hereafter abbreviated as OFW), an exercise of integrated development analysis conducted by the group of thirty students of the Graduate School of International Development (GSID), Nagoya University, Nagoya, Japan. The study was designed as an integral part of GSID's formal curricular activities, and was undertaken in about one-month's period in October 1993 in Thailand.

After the briefing sessions at two central government agencies in Bangkok that play pivotal roles in the development administration of Thailand viz. National Economic and Social Development Board (NESDB) and the Department of Local Administration (DOLA), Ministry of Interior, the Changwad Nakhon Ratchasima (hereafter abbreviated as "Korat") of Northeast Thailand was taken up as study case.

The whole group was divided into four working groups (WG). The domains of analysis of these groups were as follows:

- WG-I: Economic development and business management questions;
- WG-II: Education, health and other human resources development questions;
- WG-III: Physical infrastructures and natural environment conservation questions; and
- WG-IV: Development administration, participation, NGOs and other institutional questions.

Towards the end of the groupwork, a selected representative from each of the four WGs got together for the task of consolidating all the study findings for an interdisciplinary integration. The whole venture was concluded by a one-day seminar held at Korat, wherein the study findings of each WG were presented by the respective team leader students and the Project Director on the interdisciplinary integration phase for the sake of reciprocating the kind cooperation extended by local agencies and communities in Korat.

The report consists of five sections. Each of the first four sections contains the team report worked out by each of the four WGs mentioned earlier, with focus on the problem analysis and action proposals. In addition to the team reports, there also are individual reports prepared by students on individual basis, but are not contained in this publication for the sake of its brevity, although the titles of those individual reports are listed in each section. The fifth and last section, prepared by Project Director, summarizes the discussion made for interdisciplinary integration, keeping in view the development of Thailand as a whole in perspective rather than Changwad Korat itself.

All the students who participated in the fieldwork took the Intensive Lecture Course of fifteen days (hereafter "ILC") held in July 1993 at GSID which focussed on the problems and issues pertaining to local/ regional development of the Northeast and Korat together with the national development of Thailand as background. Such preparatory inputs were absolutely necessary to make the fieldwork of just one month effective and meaningful. Two senior faculty members of Chulalongkorn University (CU) joined in conducting ILC with GSID faculty members concerned. Even with all such efforts, needless to say, one can never expect perfect study reports from inexperienced students. Despite well intended eagerness with which all of them worked so hard all through the fieldwork, this report may still contain inconsistencies, misunderstandings, inappropriate observations, unrealistic proposals and so on. Nonetheless, we have decided to publish this document believing that it, despite all the imperfections, may still be seminal for the exploration of innovative approaches for the enhancement of meaningful development in the Third World. It is in this spirit that we cordially request frank comments and suggestions of every reader for improving the curricular content and modalities of our graduate education in the coming years.

The name list of students and advisors who provided guidance to the respective WGs, the programme of ILC conducted in July 1993 at Nagoya, and the work itinerary of OFW are attached.

Acknowledgement

As organizer of the whole venture, I wish first to extend my sincere gratitude to those experts of both Chulalongkorn and Nagoya Universities and other institutions who provided most valuable inputs and guidance as advisors

to our students, namely, Associate Professor Sriwongse SMITRA (Co-director, OFW Project), Assistant Professor Phaisal LEKUTHAI, Dr. Buddhagarn RACHATON of Faculty of Economics, CU, Professors EZAKI Mitsuo, KIMURA Hirotsune, WAKABYASHI Mitsuru of GSID, Nagoya University, Snanchit SUKONTASAP of Faculty of Education, CU as well as Associate Professor ABE Kazutoshi of Aichi University of Education, Japan. Professors Phaisal, Ezaki, Kimura, Wakabayashi and Snanchit kindly took part in the Project not only in OFW portion, but also ILC at GSID, Nagoya.

I must also acknowledge herewith the names of several experts of Japan who provided valuable inputs during ILC in July 1993, viz. Dr. HASHIMOTO Tsuyoshi of Nippon Koei Consultants Inc. (on infrastructures and environment), Dr. KAWAHARA Hiromi, Executive Director, Aichi Health Institute (on health aspects) and Ms. UEDA Yoko, Southeast Asia Study Centre, Kyoto University (on business management aspects). I should not forget to thank a number of CU students who, besides their devoted services in English-Thai interpretation, contributed immensely for the broadening of the scope of GSID students through the joint work and dialogue all through the period of the fieldwork.

My profound thanks are also due to Khun Vithya SIRIPONGSE, Deputy Secretary-General, NESDB and Khun Choowong CHAYAPUTRA, Director General and Khun Somsak SRIVONTNA, Deputy Director General, DOLA, MOI and Dean Thienchay KIRANANDA of Faculty of Economics CU. Both Khun Vithya and Khun Choowong so generously received our group at their respective offices in Bangkok for their highly informative briefing sessions on the nationwide perspective before we moved to Korat. Dean Thienchay, not only having been one of the most powerful supporters of CU-GSID academic exchange since its inception, fully participated in the final Presentation Workshop at Korat. We are also grateful to Dr. Krayudht DHIRATAYAKINANT, Faculty of Economics, CU for the initial briefing on the local public finance and taxation. Besides, I must also thank National Housing Authority (NHA) for providing an opportunity for us to visit the slum settlements and vigorous housing projects undertaken in Klong Toey area in Bangkok.

The intensive fieldwork of a month in Changwad Korat was fruitfully conducted owing indeed to the kind support and hospitality extended by Khun

Damrong RATANAPANICH, then Honourable Governor, and Khun Pot Jaimun, Deputy Governor, changwad Korat, Khun Supas THANAPAET, Lord Mayor, Roi-Et Municipality, Sikhiu Amphoe Office, and Sung Noen Amphoe Office. Let me also note with appreciation the kind cooperation extended by Korat Chamber of Commerce, Suranaree Industrial Estate, CBIRD and many other organizations, both public and private, that kindly received our team and provided useful information.

Professor MORISHIMA Akio, present Dean, GSID joins me in acknowledging the name of Professor Emeritus OGAWA Eiji, former Dean, GSID. It was through Dr. OGAWA's initiative and untiring fund raising effort that a considerable amount of voluntary contribution by Chubu Electric Power Company, Tokai Bank, Toyota Corporation, and other leading members of Nagoya business community was realized. Without their goodwill and spirit of international cooperation, GSID could never have carried out the OFW project, for the official budgetary allocation by Ministry of Education, Government of Japan was yet to be made for an unprecedented curricular activity like OFW, spearheaded by GSID since its establishment in 1991.

Lastly, but never the least, let me also acknowledge with cordial thanks the support and encouragement extended by other GSID faculty members for embarking on the new experiment of OFW, and the patience and cooperation with which Mr. KATO Masahide and his colleagues of GSID Administrative Office managed all the administrative and accounting tasks required for OFW. These in fact involved various actions quite new to the usual administrative practice of a national university in Japan.



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Professor and Project Director
OFW' 93- THA

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Itinerary
Overseas Fieldwork 1993 in Thailand
October 2-November 1, 1993

| | | | |
|------|---------|--|---|
| Sat | 2 Oct. | 14.30 17.00 | Arrival at Bangkok Airport Check in at Jade Pavilion Hotel, Bangkok |
| Sun | 3 Oct. | 8.30 | Leaving hotel for study tour |
| Mon | 4 Oct. | 8.00 9.00-11.00 11.00 13.00-16.00 17.00 19.30 | Leaving hotel for CU Special Lecture by Prof. Dr. Kraiyudht Lunch at Faculty of Economics, CU Briefing at DOLA Back to hotel Leaving hotel for reception dinner at Baan Thai Restaurant hosted by Dean, Faculty of Economics, CU |
| Tue | 5 Oct. | 8.00 9.30-12.00 13.00 14.30 17.30 | Leaving hotel for NESDB Briefing at NESDB Lunch at Faculty of Economics, CU Visit Klong Toey area Back to Hotel |
| Wed | 6 Oct. | 8.00 12.00 15.00 17.00 | Leaving for Korat Check in Sima Thani Hotel, Korat Korat Hydrology Centre Back to hotel |
| Thur | 7 Oct. | 9.00 -12.00 12.30 14.00 | Courtesy visits to Governor and briefing on Changwad Development Plan Lunch Visiting tapioca factory |
| Fri | 8 Oct. | 8.30 | Visits to Chamber of Commerce, Tambon Council, Cooperatives, Municipality, Suranaree Industrial Estate, Suranaree University of Science and Technology. |
| Sat. | 9 Oct. | 7.00 | Visiting developed and underdeveloped mubans (villages) in Si Kiew District |
| Sun. | 10 Oct. | Free time | Pimai Stone Castle |

| | | | |
|--------|-------------------------|------|---|
| Mon. | 11 Oct. | 8.30 | Field survey by each WG |
| Tues. | 12 Oct. | 7.30 | Leaving hotel for NGO: CBIRD (Community based Integrated rural development Project) and Phanom Rung Stone Castle |
| Wed | 13 Oct. to Wed. 20 Oct. | | Field surveys divided into four WGs |
| Thus | 21 Oct. to Sat. 23 Oct | | Report writing and supplementary interviews |
| Sun | 24 Oct. to Wed. 27 Oct | | Editing and printing of the reports |
| Thurs. | 28 Oct. | | Rehearsal of the presentation |
| Fri. | 29 Oct. | | Presentation of the final reports |
| Sat. | 30 Oct. | | Leaving for Bangkok |
| Sun. | 31 Oct. | | Study tour in Bangkok |
| Mon. | 1st Nov. | | Leaving for Nagoya |

Section I: Report of WG-1

Rural Urban Integration for Economic Development of Nakhon Ratchasima

Members:

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a. Introduction:

Thailand is one of the fastest growing economies in the world and its growth is prominent even in fast growing Asia. The steady growth trend started as early as the mid 1960's. The per capita income growth averaged about 4% during the period since the 1960's up to 1987. Since 1987, the growth has accelerated with an estimated rate of 13.2% in 1988, 12.0% in 1989 and 10.0% in 1990. The growth rate has only slightly slowed down to 7.5% in 1991.

Economic development has been led by a series of Five-Year Plans. The country is now under its Seventh Five Year Plan. Manufacturing has replaced agriculture as the major contributor to the national income. However, agriculture continues to provide employment to a large proportion of the population. Agricultural incomes remain low resulting in large scale migration from rural to urban areas leading to a number of social and ecological problems. A better balance between the rural and the urban sectors is an urgent necessity. We have thus concentrated on the topic of rural urban integration with reference to the issue of providing economically gainful employment opportunities and thus reduce income disparity between rural and urban areas.

The study area is the province of Nakhon Ratchasima (hereinafter changwad "Korat") in northeast Thailand. The Northeast region is considered as the poorest region of Thailand. The per capita income in the Northeast is the lowest as compared with Bangkok and the other regions¹. In terms of population and area the Northeastern region accounts for 19.8% and 32.9% of the total respectively as indicated in Fig. 2 and Fig. 3.² There is therefore an urgent need to achieve a more equitable distribution in income, eliminate poverty and raise the standard of living of the poor in the Northeastern region.

To identify key constraints in the development of this area, we used the problem structure analysis³. This has been developed through discussions among the members of our group based on statistical data and information gathered through interviews during the course of the field survey.

On the basis of the per capita income by region, we have identified the low income of the household as the crucial problem to be solved (no. 1). We have thus developed two parallel cause and effect relationships leading to low income of the household from both the agricultural sector and the industrial sector.

b. Problem Structure Analysis

Agricultural Sector

Low income of household (no. 1) in the agricultural sector is caused by the low output of production (no. 2). Low output is caused by the low productivity

1 Refer to Table 1 on page 22

2 Refer to Fig. 1 and Fig. 2 on page 22

3 Refer to Problem Structure Diagram on page 15

of the agricultural sector (no.3). Low productivity means the low yield of cultivated land. The average yield of paddy, the commonly grown crop in this area is 192 kgs. per rai (1 rai = 1600 m²) which is 68.8% of the average for the whole kingdom of 279 kgs. per rai and 46.2% of the average for the North⁴. Natural constraints (no. 4) i.e. salinity of the soil, scarcity of water together with infrastructural constraints (no. 6) in the form of inadequate irrigation facilities make the agricultural productivity low.

Low output of production (no. 2) leading to low income of the household (no. 1) is also caused by the less value added crops (no. 9) on account of poor crop diversification (no. 5). Tracing the reasons for the poor crop diversification, we could identify four causes i.e. the natural constraints (no. 4), infrastructural constraints particularly the absence of adequate irrigation facilities (no. 6), inadequate agricultural extension services (no. 7) and traditional methods of farming (no. 8).

Low output of production (no. 2) is caused by the low prices for the agricultural produce (no. 12). We could identify three factors related to the low price for agricultural produce as follows:

- (i) Unstable price policy (no. 16): Government policies are inadequate (no. 15) to protect the farmers from the impact of market fluctuations and the resultant price policy is unstable. In recent years in conformity with the international prices for primary commodities, the support prices provided by the government have also been falling.
- (ii) Decline in prices of primary commodities (no. 11): Both rice and cassava are affected by fluctuations in the international environment (no. 10). Recent fluctuations have brought about a rapid decline in the prices of primary commodities⁵.
- (iii) Dependence on middlemen (no. 14): On account of the infrastructural constraints, particularly the inadequate road and transport conditions and storage facilities (no. 6) there is poor access to the market (no. 13). As a result, farmers are obliged to depend on middlemen for the sale of their agricultural produce. Farmers have often got to sell their produce at lower prices to prevent spoilage and thus fail to benefit from demand and supply situations of the market.

Farmers tend to adhere to traditional farming methods (no. 8) because of inadequate financial assistance (no. 26), inadequate agricultural extension services (no. 7) natural constraints (no. 4) and low motivation to improve farm output (no. 19). Traditional farming methods mean inadequate use of fertilizers, pesticides, high yielding varieties of seeds etc. Government policies are not adequate to monitor the activities of the agricultural extensions services (no. 15). As a matter of fact, during the course of our field survey we found that one

4 Refer to Table 2 (page 23)

5 Refer to Table 3 (page 23)

agricultural extension worker had to cover as many as 24 villages. This is an impossible task given the existing infrastructural constraints.

The motivation to improve farm output is very low (no. 19) because of four interrelated reasons which cannot be isolated from each other. Government policies have been inadequate with regard to land reform (no. 15). There is thus a delay in land reform policy on account of which there are presently a number of landless farmers⁶ although their incidence is significantly lower than other regions. Landless farmers have been classified into the following three categories:

- (i) Landless farmers having no land at all.
- (ii) Near landless farmers who have less than 5 rai of land. and
- (iii) Marginal farmers who have more than 5 rai (0.8 Ha) but less than 10 rai (1.6 Ha) of land to cultivate.

In view of the small proportion of landless farmers in the Northeast (9.9%), the prime reason for the low motivation of farmers (no. 19) in this region are the unstable price policy (no. 16), low prices for agricultural produce (no. 12) and natural constraints (no. 4) all leading to low motivation to improve farm output (no. 19). As there is low motivation to improve farm output (no. 19) people are always on the lookout for jobs outside (no. 20). This leads to outmigration (no. 21)

In the absence of an adequate package of economic and social infrastructures in the rural areas, migration may be inevitable but if facilitated in the right manner, it could eventually bring about economic prosperity by inflow of money from outside the region. In the case of Changwad Korat, we noticed that those migrants who have been able to get good income earning jobs, particularly by going to the Middle East, have been able to establish some side business after their return. For example, cycle repair workshops, retail shops and so on. However, there still are many more who, because of their ignorance of wages and other working conditions (no.22) and the lack of knowledge (no. 28) get cheated by agents and employers (no. 23). They thus get low wages (no. 24) and this is reflected in their inability to remit money (no. 25) to their family left behind.

The average cash income of each agricultural household is very low. The average cash income was only 24,675 baht (approx. US\$1000) for the year 1981⁷. Therefore there is a necessity for farmers to have side jobs to supplement their income. On the basis of the information we gathered through interviews at the two villages, it was observed that people who presently have some type of side jobs like repair shops or retail shops have been able to do so mainly because of the remittance brought about by working outside, either in Bangkok or in some of the Gulf countries. We also observed that other side jobs like making wicker baskets etc. do not have the potential for creating income because of the crude

6 Refer to Table 5 (page 23)

7 Refer to Table 4 (page 23)

nature of production, poor access to market and the low price obtainable from such products. The only side jobs which we found effective were those which were organized on a co-operative basis like making of Thai silk etc. We also observed through the course of interviews that although the farmers want to do some sort of a side job to supplement their income, they do not have the necessary skills and lack in the ideas regarding what could be viable from income earning point of view. This is because of the lack of education and training provided by government agencies at the local level (no. 28). Also the opportunity for creation of side jobs is limited because of the limited access to financial assistance (no. 26) . Thus the low opportunity and less economic viability of side jobs (no. 27) leads to low output of production (no. 3) and also leads to low employment creation.(no. 29)

Industrial Sector

There have been mixed results with regard to the industrial development of Changwad Korat. It has attempted to follow a double track policy of industrialization i.e. promoting location of large and medium scale manufacturing industries from outside Changwad Korat as well as supporting small scale and traditional types as well as agro industries, but constraints continue to exist in both Strategies.

Low income of the household (no. 1) can be traced to low employment creation / poor economic viability of employment created (no. 29).

The development of large and medium scale manufacturing industries has the potential of creating vast employment opportunities. However, the large and medium scale manufacturing industries in changwad Korat are relatively few (no. 42). Our study on the large and medium scale manufacturing industries was limited to those in the Suranaree Industrial Estate and some manufacturing establishments outside the Estate. These were of various types like auto parts, toys, synthetic fibres etc. Most of the industries in the Suranaree Industrial Estate are oriented to export. While some have been established as ancillary units to their parent units in Bangkok, some have been established by entrepreneurs from Japan, Pakistan and Province of Taiwan.

As large and medium scale manufacturing industries require huge amount of initial investment, the best way to promote investment of this type is through the promotion of multi-national enterprises which can bring not only the required investment, but also the necessary technology. A number of multinationals have established themselves in Bangkok area to take advantage of the cheap labour cost. Nonetheless, they appear to be reluctant in venturing away from Bangkok. Main factors affecting this are the concentration of procedures at Bangkok (no. 40) and infrastructural constraints (no. 6) which do not facilitate the rapid inflow of industries from outside Changwad Korat (no. 41). Also the limited entrepreneurial ability (no. 30) hinders the establishment of large and medium scale manufacturing industries.

There being only two types of agro industries, (no. 31) and the low keyed nature of development of the small scale and traditional industries (no. 32), both these industries have low economic competitiveness and have resulted in their limited growth (no. 34). This leads to the poor employment creation (no. 29) and to the low income of the household (no. 1).

Agro industries exist quite a few in number, but are concentrated in rice milling and cassava processing only. On account of their large number and their small scale of operations, their economic viability is low (no. 35). Inadequate linkage between agriculture and industry (no. 39) and the absence of research and development support (no. 36) have resulted in the concentration of agro industries into these two types only (no. 31). The cost of production is very high (no. 38) because of poor managerial and technical capability (no. 33). There is inadequate support for skill development and training at the local level (no. 37).

Our study on the small scale and traditional industries has been confined to the pottery industry in Changwad Korat. During our visit to the Governor's office, we were impressed by the importance accorded to the pottery industry in the province as a way of preserving the cultural heritage and also for promoting tourism. However, the actual field survey revealed that there is less support for the pottery industry than what is manifested in the slogans. Poor technical and managerial skills (no. 33) have led to the low keyed development of this industry (no. 32). There is considerable waste in the production process leading to a high cost of production (no. 38) and as this cost cannot be recovered easily through raising prices of the products, the industry is characterised by low economic competitiveness (no. 35) leading to low wages (no. 24) resulting ultimately in the low income of the households engaged in the pottery business.

c. Proposals

Locational Advantages of Changwad Korat

Changwad Korat is situated at a very strategic position with a number of locational advantages. It is situated at a distance of 260 km. from Bangkok and has the potential for becoming the new centre for trade in the Northeastern region. The development of the Eastern Seaboard would also enhance trade with the Indo China countries.

The Government of Thailand in line with its policy of urban decentralization has been trying to decentralize industries away from Bangkok. Changwad Korat has been identified under Board of Investment Zone No. 3 and many special privileges in the form of tax concessions have been granted to investors in this area.

The province has an abundant supply of cheap labour with sincere and hard working qualities. Therefore, it can be turned into a highly potential resource for development once the level of their education and training is upgraded.

Our study has been limited on account of the time and language constraints, despite the best and sincere collaboration of the Thai students from Chulalongkorn University. In spite of these limitations the following proposals are put forward for consideration for the future development of Changwad Korat.

Proposal 1

Project title: Crop diversification, integrated farming and agricultural extension services.

Objectives: Improving the output profile for raising income from the sale of agricultural produce.

Activity components:

1. Diversification in market and use of tapioca

Tapioca has enjoyed protection under the fixed export system of the EC, but this fixed export system is likely to end by 1994. Also there is competition from Indonesia which can sell tapioca at a lower price because of the lower labour cost. In the absence of any support from the government, the farmers may have to suffer on account of free market competition. There is therefore an urgent necessity either to explore new markets or to find new uses of tapioca such as animal feed, generation of fuel i.e. alcohol production etc.

2. Crop diversification in favour of high value added crops

By introducing more profitable crops, it is possible to raise the income accruing from the sale of agricultural produce. Some of the promising crops include oil crops such as groundnut, soybean, sunflower and certain varieties of grains. These could also have strategic importance by providing raw materials for new types of agro based industries.

3. Integrated and mixed farming

One of the constraints identified in the problem structure is the low use of fertilizers, pesticides etc. The poor financial position and the inadequate financial assistance are the two main reasons for the low use of fertilizers. This problem could be solved by the use of integrated and mixed farming. Animal raising would not only provide additional income, but also support agriculture as animal waste can be used as best fertilizer for sustainable farming.

4. Agricultural extension services

Further strengthening of agricultural extension services with regular field visits of extension officers, veterinary surgeons to the villages would establish a system of communication and transfer of knowledge and skills from the government agencies to the farmers.

Executing agencies: BAAC (Bank for Agriculture and Agricultural Co-operatives), Agricultural Co-operatives, Ministry for Agriculture and Agricultural Cooperatives.

Target beneficiaries:
Farmers having own land or tenants who rent the land, but have right to select their own crops.

Proposal 2:

Project title: Creation of economically viable side jobs through provision of information, training and financial assistance.

Objectives: Provision of income earning opportunities through employment generation for rural people.

Activity components:

- 1) Granting of loan to landless labourers and women in rural households
- 2) Information dissemination and training programme through Community Development Department at the amphur (district) level.

Side jobs are necessary to supplement agricultural income in the rural area. There are three factors essential for ensuring access to a side job, namely:

- 1) Information
- 2) Training
- 3) Financial assistance

All the above three factors are linked to each other and no one factor can be treated in isolation. The Bank for Agriculture and Agricultural Co-operatives (BAAC) has been providing loan to the farmers for creation of side jobs, but the regulations do not permit loan to the landless labourers. During the survey, it was also observed that the local government has a tambon development budget for the creation of side jobs, but the operation of this scheme is limited only to certain villages because of budgetary constraints.

The main constraint in granting loans to the landless labourers and women in the rural household appears to be the lack of collaterals. If these people were organized into a group, it would be possible for BAAC to extend the guarantee under group liability taking cue from the impressive experience being registered by the Grameen Bank of Bangladesh.

Another aspect relates to the information and training without which a person in the rural community will not have the the minimum level of confidence for starting a new business. The Community Development Department could provide such information through newsletters or brochures and provide training programmes from time to time.

A strong collaboration between BAAC, Agricultural Co-operatives and the Community Development Department is necessary for facilitating and monitoring the progress of side job opportunities in the rural area.

Target beneficiaries:

- 1) Farmers of all sorts i.e. having own land, landless and working as labourers on others' land for wages, not having own land, but illegally occupying land etc.
- 2) Others who do not have any sort of employment

Proposal 3

Project title: Organized system of migration

Objectives: Establishment of a better migration system

Activity components:

- 1) Supervision of labour exchange activities by the Ministry of Labour at the Changwad office.

- 2) Promotion of economically viable side jobs in rural areas
- 3) Promotion of industries in the urban areas of Changwad Korat

The field survey has revealed that there are usually four different ways for getting jobs. These are:

- (1) Introduction to jobs by friends or relatives
- (2) Through personal efforts
- (3) Through a recruitment agent sent from a company or factory to the village.
- (4) Introduction through private job introducing brokers

On the basis of the field survey, it has been noticed that many people who get jobs through the agents or brokers are cheated through incorrect information about jobs, wages, working conditions etc. In order to promote a better system of migration, the Ministry of Labour at the Changwad office should supervise the private job introducing agents so as to avoid cheating. The Ministry of Labour should enhance its efforts to provide side jobs in rural areas and promotion of industries in the urban area of Changwad Korat to reduce the migration to Bangkok

Executing agency: Ministry of Labour at the Changwad Office

Target beneficiaries: People looking for employment in the labour market

Proposal 4

Project title: Support for R & D and professional management and marketing skill development for agro industries

Objectives: Support research and development and development of professional management and marketing skills for diversification and better management of agro industries.

Activity components:

- a) Support research and development for agro industries

The agro industry is basically concentrated in two types; rice milling and tapioca processing. So as to facilitate diversification in the agro industry, a research and development laboratory at the local level is required which could promote research for new uses of existing agricultural produce together with promoting cultivation of new agricultural produce. A necessary function of such an activity is the co-ordination between the agricultural and the industrial sectors to promote the growth of agro industry.

- b) Facilitate development of professional management and marketing skills

If the agro industry is to be developed as an industry with viable export potential, it is necessary to develop professional management and marketing skills. Standards for food preservation, quality, cleanliness etc. would have to be maintained and these require professional management skills. Secondly, it is necessary to have correct type packaging, food content, methods of preparation calorie count etc.

Executing agencies: Provincial Industrial Office in co-ordination with Food Institute and private industries.

Beneficiaries: Potential entrepreneurs, agro industries

Proposal 5

Project title: Traditional industries support project

Objectives: Provide financial and technical support for new product developments and improve marketing and operational skills for small scale and traditional industries

Activity components:

1) Financial support

- For buying new equipment, for marketing and advertising

2) Technical support

- For improving the quality of the present products
- For improving the production process so as to minimize waste and reduce the cost of production

Small scale industries are limited in terms of their growth potential because of limited access to financial resources and limited technical and managerial skills, because of which their innovation and marketing capabilities remain low. Financial support together with technical support would enable these industries to operate as economically viable units and would be in line with the policy of dual industrialization i.e. supporting small scale and traditional industries while promoting large manufacturing industries at the same time.

Executing agency: Industrial Finance Corporation of Thailand (IFCT)

Target beneficiaries: Small scale and traditional industries particularly the pottery industry

Proposal 6

Project title: Development promotion for large/medium scale manufacturing industries

Objectives: Decontrol of procedures from Bangkok and development of urban infrastructural facilities for the promotion of large and medium scale manufacturing industries from outside Changwad Korat (industries diversifying from Bangkok, foreign investments) by means of:

- (i) Facilitating entry of foreign multinationals
- (ii) Facilitating diversification of industries away from Bangkok

Activity components:

Entry of multinationals would enable the flow of capital and technology into Changwad Korat which would be of much help for development of large and medium scale manufacturing industries bringing with it the potential for creating vast employment opportunities.

Diversification of industries away from Bangkok would enable relieving the congestion in Bangkok and would facilitate the development of Changwad Korat as the next centre for trade and commerce.

Executing agency: Board of Investment, Thailand, in collaboration with Provincial Industrial Office

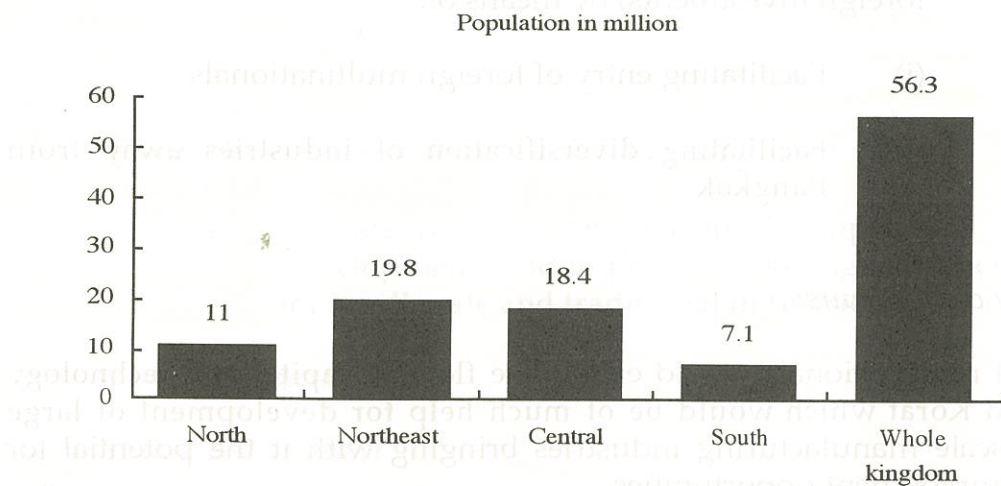
Target beneficiaries: Potential entrepreneurs, Large and medium scale manufacturing industries, foreign multinationals

Table 1 Per capita income 1960 to 1988(Current price) Unit: baht

| | North | Northeast | Central | South | Bangkok | Whole kingdom |
|------|--------|-----------|---------|--------|---------|---------------|
| 1960 | 1,496 | 1,982 | 2,565 | 2,700 | 5,630 | 2,106 |
| 1970 | 2,699 | 1,822 | 4,662 | 3,858 | 10,234 | 3,849 |
| 1979 | 8,781 | 4,991 | 17,655 | 12,683 | 30,161 | 12,067 |
| 1988 | 16,154 | 9,493 | 28,294 | 20,387 | 93,496 | 27,631 |

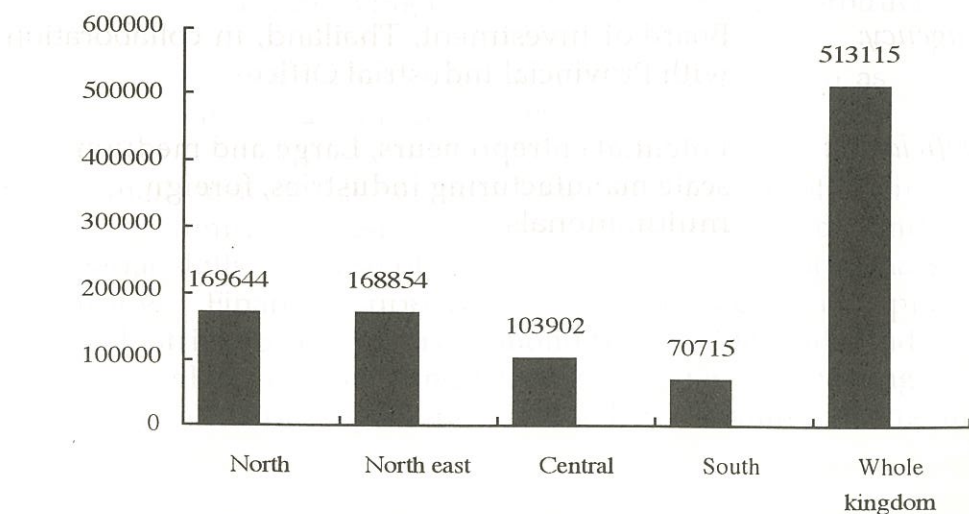
Source: National Economic and Social Development Board

Figure 1: Population in million



Source: Population Institute Chulalongkorn University

Figure 2: Area in sq. km.



Source: Population Institute, Chulalongkorn University

Table 2. Average yield of paddy per rai by region 1985

| Region | North | North-East | Central | South | Total |
|--------------------|-------|------------|---------|-------|-------|
| Yield / rai (Kgs.) | 416 | 193 | 334 | 270 | 279 |

Source: Ministry of Agriculture

Table 3: International prices of rice and maize (Unit: US\$/ton in 1985 value)

| | 1970 | 1980 | 1985 | 1990 |
|-------|------|------|------|------|
| Rice | 394 | 414 | 216 | 197 |
| Maize | 160 | 119 | 81 | 75 |

Source: IBRD, Commodity Prices and Price Projections, 1991

Ref: National Economic and Social Development Board and Japan International Co-operation Agency, *The study on Regional Development Plan for the Lower Northeast and Upper East Regions*, Nippon Koei Co. Ltd. March 1993

Table 4: Average cash income per agricultural household by region (1981)

Unit: baht

| Region | Farm income | Non farm income | Total income |
|-----------|-------------|-----------------|--------------|
| North | 22,486 | 9799 | 32,285 |
| Northeast | 15,057 | 9618 | 24,675 |
| Central | 42,623 | 14,315 | 56,938 |
| South | 20,166 | 15,353 | 35,519 |

Source: Office of Agricultural Economics

Table 5: Proportion of landless farm households

| | a) Landless | b) Near landless | c) Marginal farmers | d) Those owning more than 10 | e) Total | a+b e (%) |
|------------------|----------------|------------------------|---------------------------|--|-------------|-----------------|
| NE | 102,322 | 111,762 | 203,319 | 1,740,834 | 2,158,237 | 9.9 |
| N | 176,818 | 264,733 | 251,736 | 901,236 | 1,594,523 | 27.7 |
| C | 101,112 | 59,305 | 59,179 | 504,658 | 724,254 | 22.1 |
| E | 11,381 | 7,480 | 10,823 | 80,829 | 110,513 | 17.1 |
| S | 12,418 | 26,840 | 29,159 | 228,155 | 296,572 | 13.2 |
| Whole country | 404,051 | 470,120 | 554,216 | 3,455,712 | 4,884,099 | 17.9 |

Source: Research conducted by S. Chirapamda and W. Tamrongtanyalak as well as Agricultural Land Reform Office and Asian Regional Team for Employment Promotion, ILO, quoted in Tanaka Toshio: *Economics for Deforestation of Tropical Forest and Poverty*, .

d. List of Individual Reports

| | Author | Title |
|----|--------------------------------|---|
| 1. | Booranit CHANWANIKUNCHAI (Ms.) | Production and Marketing in Agriculture |
| 3. | Indira Gajawelli RAO(Ms.) | Industrial Development in Nakhon Ratchasima: Issues and Prospects |
| 3. | ITAKURA ken | A Case Study of Side Jobs |
| 4. | KOBAYASHI Hideo | Rural Development and Financial Assistance |
| 5. | KUROSE Yuriko (Ms.) | Local Industry in Nakhon Ratchasima |
| 6. | Arachchilage SAMARASINGHA N.S. | Agricultural Extension and Promotion Services in Nakhon Ratchasima |
| 7. | WONG Chen Jen | Automobile Industry Development: Nakhon Ratchasima vis-a-vis Thailand |
| 8. | YOKOYAMA Eri (Ms.) | Agro Processing Industry in Nakhon Ratchasima: The Possibility of Development |
| 9. | FURUSAWA Kana (Ms.) | Migration in Thailand: A Case Study of Village Thung Phanom Wang |

Section II: Report of WG-II

Human Resource Development in Nakhon Ratchasima (With Focus on Education and Health)

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a. Introduction

The Northeastern region of Thailand is always considered as lagging behind the other regions not only in terms of economic development, but also of human resource development. However, in recent years, owing to the increasing investment in the industrial sector and the effective management of regional development, the situation has started changing rapidly. People at all levels are highly motivated to get higher education and to achieve higher quality of life. Especially in Nakhon Ratchasima Province (hereinafter "Changwad Korat"), people believe in the prosperous future by actively taking part in the progress of development in Changwad Korat.

Nonetheless, there do exist serious socio-economic gaps in many respects, such as economic conditions between Bangkok and Northeast regions, opportunity gaps between well-educated and less-educated, between the industrial and the agricultural sectors and so on.

It is our conviction that the ultimate goal of development is the achievement of high quality of life. HRD is an essential strategy for its attainment for every people. To accomplish this goal, all people should participate in the development process to maximize their potential. Education can improve people's capability in analyzing and understanding the world they live in, so that they can get more opportunities to change their lives in a self-reliant manner.

Health also constitutes the physical as well as psychological foundation for people to participate in the development process. In this sense, health is the prerequisite for any kind of productive human activities towards development.

b. Problem Structure Analysis

In the first place, we would like to point out the problem of low income families, as illustrated in the central part of our Problem Structure Diagram (Boxes no. 15 through 18, Refer to page 28). Despite efforts made by the government to extend financial support, it appears that the majority of the people still fail to shoulder educational expenditures. Furthermore, children are obliged to help parents, even if they want to continue studying. In certain situations, parents have to migrate to Nakhon Ratchasima city, Bangkok, or even to foreign countries to earn money. The absence of parents at home thus caused affects children's attitudes towards pursuance of higher education, for it results in the absence of what is called "role model". For low income families, more effective support systems would be required.

At each level and for each type of education, we face the same problem, namely, the shortage of qualified teachers (Box no. 23). The quality of education primarily depends on the quality of teachers. However, the teacher training system is not satisfactory to meet the demand for quality instruction. Especially in the remote areas, working conditions of teachers are not favourable, compared

with those in urban areas or in the private sector. We have also found that with regard to non-formal and vocational education, there are same problems of the shortage of qualified teachers, especially in teaching modern subjects such as new technology, English, the work oriented subjects and so on. Even when the attractive curricula were prepared, the shortage of qualified teachers and the lack of facilities prevent such curricula from being fully utilized.

There exist insufficient revenue problem which causes small budget (as shown by Box. no. 31) in each area because the tax collection is less satisfactory to support government programmes. One of the largest problems related with poverty is that the majority of households have low income. Accordingly, people cannot afford enough tax to the government.

Underneath the basic problem just mentioned, there lies a universal problem of inadequate budget allocation. Also we have found that the horizontal coordination system in the field of education is insufficient. The same functions are performed by many agencies (as shown by Box no. 36), for example, extending basic education from Grade 6 to Grade 9, ONPEC (Office of the National Primary Education Commission) and GED (General Education Department) sometimes work separately, by duplicating their efforts towards exactly the same objective.

In some occasions, owing to the functional overlap in the bureaucratic system, the existing schools do not cover all the geographical areas, concentrating around the town and urban areas. As a result, people in the remote rural areas find it difficult to go to school because of the long distance.

In terms of public health care, this province seems to have made a good progress. We have found that the Village Health Volunteers (VHVs) in the rural area we visited are active in educating and helping people by working closely with medical personnel of the hospital and health centre officers. In the village, we have found that VHV's activities based on the community organization have effectively contributed for the enhancement of health status of very poor families. Accordingly in our Problem Structure Diagram, it is shown that the low income of households *per se* has not necessarily caused bad health status. However, health of people in small pockets especially in rural areas is vulnerable (Box no. 12). People in rural area are covered in less than sufficient way in terms of medical facilities and implementation of health insurance.

However, some new problems have emerged calling for immediate attention, particularly AIDS and VD (venereal diseases). Especially, the current epidemic disease of AIDS seems to call for a drastic change to public health administration. As a matter of fact, it is reported that about 1% of pregnant women in Thailand are infected by HIV. We therefore have to pay more serious attention to this problem.

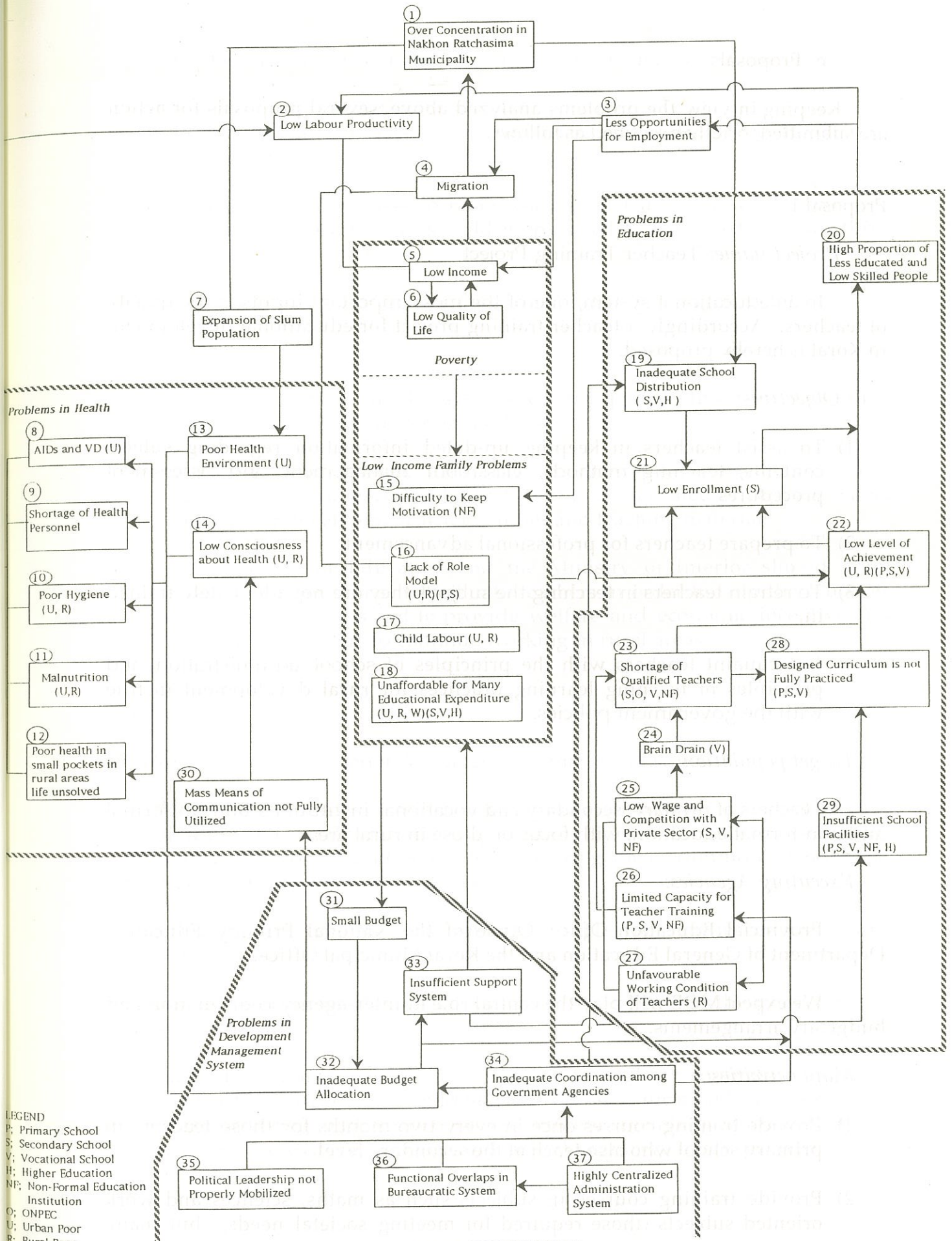
The second key problem is the shortage of health personnel. Although the government has made efforts to solve this problem, the number of health personnel has not met the increasing demand particularly in rural areas.

The third is malnutrition. In addition, poor hygiene must be the fourth area to be addressed in relation to malnutrition. However, thanks to the activities of health volunteers, medical personnel and health officers, we can say that these two problems are largely solved except in small pockets of the province only. The typical case in point in Changwad Korat are the slum areas and the poor rural areas. For example, owing to the fact that the residents are living in illegal squatter settlements, the government has difficulties in taking adequate measures to control the environmental conditions of those areas, such as garbage collection.

On the whole, the government policy on public health seems to be appropriate, but the ways by which the policy is being delivered to the people are not necessarily adequate. This problem can be identified as the inadequate use of "mass means of communication". To distribute public information to the local people, mass media must be fully utilized. In this province, this is a very important issue. According to our observations over mass media in Changwad Korat, it has been found that the government is already exerting some efforts to utilize mass communication channels. For example, they have introduced broadcasting towers, and are also using newspapers, television and radio stations to deliver public messages to people in the communities. However, problems still remain. We have learned that people cannot repair their broken broadcasting tower in some villages, because they do not receive the budget for repairing. There are 3,101 villages in Korat, but only 1,746 of which have a broadcasting tower. It means that the provision of mass means of communication is far below the needs of the people. Inadequate budget allocation and insufficient coordination among government agencies must have largely to do with this situation.

At the same time, the contents of radio and television programmes need to be improved to attract more people to the government announcements. It happens sometimes that the time table and the quality of television programmes do not meet the need of local people. They find some programmes too boring to pay attention to. perhaps the effect of broadcasting can be significantly improved by improving the attractiveness of each programme.

The last problem to be addressed in relation to mass media is that in Korat, there exist only public radio and television stations which the Korat people can listen to and watch. We feel that the competition among two or three stations would help improve the quality of mass media substantially. If the private sector would join the radio and TV business, the situation may be much improved. The increased access to Mass Means of Communication will help Korat people to acquire more knowledge and the government to reach more people easily. This will also create a more open and free social environment for information flow for the betterment of Korat people.



- LEGEND
P; Primary School
S; Secondary School
V; Vocational School
H; Higher Education
NF; Non-Formal Education Institution
O; ONPEC
U; Urban Poor
R; Rural Poor
W; Women

PROBLEM STRUCTURE DIAGRAM

c. Proposals

Keeping in view the problems analyzed above, several proposals for action are submitted, briefly described as follows.

Proposal 1

Project name: Teacher Training Project

In an educational system, one of the most important inputs is the quality of teachers. Accordingly a teacher training project for educational development in Korat is hereby proposed.

Objectives:

- 1) To assist teachers in keeping up-dated information regarding subject contents, teaching methods, classroom management and assessment procedures
- 2) To prepare teachers for professional advancement.
- 3) To retrain teachers in teaching the subjects they are not adequately trained in.
- 4) To acquaint teachers with the principles of school administration and principles of teaching learning practices for rural development in line with the government policies.

Target population:

Teachers of primary, secondary and vocational institutions both in formal and non-formal education, with focus on those in rural areas.

Executing Agencies:

Provincial Education Office, Office of the National Primary Education Department of General Education and the Korat Municipal Office.

We expect MOE will play the central role in inter-agency coordination and budgetary arrangements.

Main activities:

- 1) Provide training courses once in every two months for those teachers in primary school who also teach at the secondary level.
- 2) Provide training courses in subjects such as maths, sciences and work oriented subjects (those required for meeting societal needs, but many

teachers feel their skill and knowledge are inadequate in teaching) three times a year.

- 3) Provide training courses in evaluation and monitoring methods at least twice a year.
- 4) Provide training courses to retain competent teachers at every level. In this course every teacher should be required to participate at least three times a year.

Provide training/ seminar courses in areas that need urgent actions.

Other remarks

- The government should set up clearer policy and implementation procedures to develop abilities of the teachers.
- At the provincial level, school clusters should be utilized as resource centers to retrain teachers. Budget need to be allocated to support school clusters for developing teacher abilities and teaching materials.
- The Ministry of Education and the Ministry of Interior should grant financial support for scholarship to teachers in order to help them update their teaching skills and to provide welfare and economic incentives for motivating teachers to continue working in rural areas.

Proposal 2:

Project name: Education Volunteer Organization Project

Objective: The main objective is to identify strategies for motivating the economically and socially disadvantaged people, namely the rural as well as the urban poor, the women and elders for furthering their education. Under this broad objective, there are sub objectives.

First is to support the disadvantaged people for starting or continuing education.

Second is to promote formal education in the context of the philosophy of "Education for All".

Third is to mobilize the community people to establish community self-help actions. For this purpose we would like to propose "Education Volunteer" as the basis for furthering participation of community members in development, following the successful experience of "Health Volunteer" in the primary health care sector.

Target group: The main target population of this project is the poorest 2.5% of the population, namely the physically, socially and economically disadvantaged groups (A New Direction.....The Seventh NED Plan⁸)

Executing agency: Ministry of Education. The experience of MOE and other agencies in the literacy campaign from 1984 to 1987 shall be fully mobilized. This project can be coordinated at the Tambon Council level.

Main activity components:

To provide sufficient educational information to community people in order to encourage them to study further.

To visit the students who cannot attend school or cannot keep studying at non-formal education, and find the problems in order to provide proper advice, and

To play the role of a monitoring agent by way of sending feedbacks to the educational system of the government.

Proposal 3

Project name: Mass Means of Communication Project

Target population: The changwad population at large

Objective: To utilize the modern mass media as a tool for effective communication system in Korat

Executing agency: At the central level, the Public Relations Department under the Office of the Prime Minister, and the Department of Transportation and Communication. We feel that the military be also involved. At the provincial level, the Department of Non-formal Education, the Public Health Promotion Centre⁹, the Provincial Chief Medical Officer (PCMO) and the Non-Formal Education Centre¹⁰. In this connection, the members of Provincial Council in Korat and of National Parliament in Bangkok should be called upon for the amendment of legal provisions and other institutional arrangements for the sake of promoting the deregulation on mass media industry.

Main activities in short and long-term periods: In a five year period, an effective communication system for Changwad Korat should be established. The system should enable the local mass media to study the preference of the general

8 Source: Ministry of Education, Thailand, Centennial 1892-1992, Americ Printing Group Co. Ltd.

9 Provincial Institute for Promoting the Public Health Information

10 Provincial Institute for Promoting the Non-Formal Education

public more carefully, and establish mutual communication channels to allow participation of the public in making local news. The importance of this idea is stressed because the local people are generally quite modest, and are not accustomed to express their opinions openly. By way of making a survey on the reception rate of radio and T.V every month, and incorporating more public opinions into news programmes, the level of participation of local people in the public communication process will be intensified.

In the context of ten years, the deregulation of mass media industry should be realized. Entry of private sector is essential for improving the quality of mass communication industry in Thailand.

Other Remarks: More budget allocation on promotion and campaign activities is necessary to the development of Changwad Korat Province.

Proposal 4

Project name: Up-Bringing of Medical Personnel

Target population: Medical personnel and students

Objective: In the health sector, one of serious problems is the shortage of medical personnel, especially doctors. Medical facilities have expanded thanks to the seven NESDB Plans in the past decades. Also the organization of people, for example the organization of Village Health Volunteers, has been quite successful. However, the number of doctors is not enough. For example, there are only five doctors in Si-Kiew District hospital and a doctor visits the Tambon Health Centre about once a year only in some villages. Accordingly, one of our proposals is to bring up medical personnel and to retain them in this province.

Executing agencies: Ministry of University, Ministry of Education, and Ministry of Health

Main activity components: More medical schools and institutes should be established. Regarding this project, tow points should be considered. One is the location of those institutions. It means that those institutions should be located not only in the central city but also in other towns in this province. It would also be helpful to decentralize because universities and other institutes can serve as the core of knowledge and skills in each area.

Other remarks: Considering these points, cooperation with the education sector is much more important. This project must be undertaken with long term vision under close cooperation amongst sectors concerned, especially those of health and education. Bringing up medical personnel requires long time and much resources. However, it being a very fundamental task, we are keen to propose this project.

d. List of Individual Reports

| | Author | Title |
|----|------------------------|---|
| 1. | AOKI Noriyo (Ms.) | Human Resource Development towards Balanced Development: The Basic Problems of Education for Korat Development. |
| 2. | HATTORI Maki (Ms.) | Education for Employment in Nakhon Ratchasima |
| 3. | IMAMURA Junko (Ms.) | Expansion of Educational Opportunities through Non-formal Education |
| 4. | WANDEE Tiasakul | The Quantity and Quality Improvement in Lower Secondary Education |
| 5. | YAMAMOTO Keiko (Ms.) | Expansion of Educational Opportunities for the Promotion of Rural Development in Nakhon Ratchasima |
| 6. | ITO Madoka (Ms.) | Public Health Administration and a Current Concern with Common Diseases in Korat |
| 7. | MATSUOKA Marie (Ms.) | The Role of the Community Organization for Health Development |
| 8. | CHOU Chao- Liang (Ms.) | Using Mass Means of Communication as a Tool to Promote the Korat Development Project |

Section III: Report of WG-III

Physical Infrastructures and Natural Environment

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a. Introduction

This group attempts to examine the problems and issues related to physical infrastructure and environmental conservation. Needless to say, the physical infrastructure is one of the most essential prerequisites for integrated development, for the social and economic development cannot be enhanced without it. That is the reason why vehement efforts have been made for the development of infrastructures. However, the development of infrastructures has often caused extensive exploitation and destruction of natural resources, making it difficult to recover those once destroyed. Therefore, every care must be taken for infrastructural development in order to make it the effective means of sustainable development compatible with environmental conservation.

For the shortage of time and other constraints, this group has confined its investigation to the area of garbage disposal, water for household use, water for agricultural use and the development and conservation of forest.

B. Problem Structure Analysis

Note: Readers are requested to refer to the Problem Structure Diagram attached at the end of this section. The numbers mentioned in brackets correspond to the respective numbers assigned to the "Problem boxes" in the Diagram.

Garbage: The garbage problem of Nakhon Ratchasima Municipality (Hereafter "Tesabahn Korat" is caused primarily by the progress of urbanization and industrialization (1) in changwad Nakhon Ratchasima (hereafter "Changwad Korat"). Tesabahn Korat has a plan to expand the site presently used for garbage collection, for the Tesabahn authority envisages rapid pace of urbanization within its administrative boundary.

There are two principal problems concerning the waste disposal. One is the collection process itself and the other, the methods by which the collected garbage is disposed. Increase of garbage (2) is resulting from the growth of industrialization (1). The present waste collection capacity of Tesabahn Korat is 121 ton/day, for which it has 105 crews and 27 trucks. They are very small and inadequate, because Tesabahn authority estimates that they fail to collect the garbage of approximately 45 ton/day owing to insufficient garbage collection capability (3). Although there is no exact data on the uncollected garbage, it is likely to be dumped into canals or just thrown away at the roadside or in open spaces.

The other problem related to the collection process is the treatment of dangerous garbages, particularly the waste from hospitals. At the moment, it appears that all the garbages collected are brought to the dumping site in an indiscriminatory manner. Such a practice will cause soil and water pollution. Moreover, the present dumping site will be saturated in 10 years. Accordingly, Tesabahn authority must find a new dumping site.

Water for household use: Like the problem discussed above, the problem of water use in the urban area has become serious in accordance with the industrial growth (1). People from rural areas have begun to migrate into the urban area with the objective of getting jobs being created in the process of rapid industrialization (4). In order to cope with the envisaged urban concentration, Tesabahn Korat currently intends to expand its administrative boundary (5). The immigration from rural to urban area and the Tesabahn's policy of Municipal area expansion will entail a considerable increase in the population to be served (6). Furthermore, the people in Tesabahn Korat nowadays demand a larger amount of water per person (7).

However, the capacity of water supply is unlikely to meet its growing demand, owing primarily to the shortage of water source caused by geographical and climatic conditions of the area, contamination of existing water sources and the weakness of relevant infrastructures (14) (10). As a result, the water demand exceeds the supply capacity (8). It should also be noted that unless tesabahn authority can strengthen its infrastructure for the waste water treatment, the waste water problem should also become serious in accordance with the increase in water consumption (9).

Agricultural water use: The shortage and problem of waste water from household use are found in the rural area as well. However, the problem of agricultural water may be more serious in the rural area. There are two main problems in this regard, namely, the shortage and the salinity of water. In the meanwhile floods (11) or droughts (12) that always regularly plague the area pose serious difficulties for the people. Concentration of rainfall (almost 90%) in the rainy season from May to October easily causes flood in the lowland area, which is mainly in the northern part of Changwad Korat. At the same time, less rainfall is registered in its southern part where the land level is generally high. These situations are due to the low water retention capacity of the soil (13) and to the inefficient storage facilities (14), both of which further aggravate the situation. The aggravation of the low water retention capacity (13) is mainly caused by natural soil destruction (27) such as desertification (15) and deforestation (16). Inefficient water storage (14) leads to the water shortage (10), resulting in the low and unstable agricultural productivity (17). This is one of the essential reasons for the poverty (18). More amount of water can be stored from rainfalls if efficient water storage facilities are increased. Such facilities on the other hand will reduce the incidence of flooding.

The second problem of water is salinity (19). This is mainly caused by the extensive rock salt layer of soil (20). 50% of the soil in Changwad Korat is saline. Although this is still better compared with some other provinces in the Northeast Thailand, the agricultural productivity is unavoidably very low on the land of this kind (17). In the area wherein over half of the labour is engaged in the agricultural sector, the salinity is indeed a serious problem. But it may be fair to say that the delays in taking effective measures to lower the salinity (21) may be the more serious problem now, rather than the salinity itself.

Land Use: There are two most serious problems about the land use. One is that many farmers do not maximise the land use (22) for they are not motivated to do so (5), owing to the unattractive price of farm produce (24). The other is that the agricultural productivity is not only low, but unstable (17). They are related to each other. As the productivity is low and unstable (17) many farmers tend to consume most of their own paddy, crops and fruit which they produce. It means that they can produce only small surplus (23) of those. They cannot earn good income by selling small amount of produce only, for selling by a small amount means the low bargaining power vis-a-vis middlemen. As a result, besides the government policy of low price, the price of agricultural produce is generally lowered (24) by middlemen. In the meanwhile, many farmers have no access to marketing information (46) for example, which kinds of crops sell at high prices at where, when and so on.

These three reasons, namely the inadequate land use (22), the low and unstable farm productivities (17), and the low price of farm produce (24), together make many farmers poor (18). Consequently, even if the poor farmers may obtain land ownership through a certain land reform arrangement of the government, they may by and large lose it (25). The loss of land ownership results in increase of landless farmers (26)¹¹ Once they lose land, they have no way but to be employed as tenants and lose the motivation to work hard. Being deprived of the means of production, there are only two options left accessible to them. First many of them decide to migrate from rural to urban areas (4). It means that the quality of life in the rural community is very low, such that the farmers are no longer interested in living there. Second, they encroach upon the forest for illegal cultivation, as discussed later (35).

Meanwhile, the quality of soil in some areas of Changwad Korat is low. There are many problems concerning land, such as soil erosion (27) and land salinity (20). This means that the land suitable for agriculture is scarce (42). Furthermore, if farmers pump water from underneath the saline soil, the water is also saline (19). This means the scarcity of water for both agricultural and household use. Consequently, the scarcity of fresh water leads to low and unstable agricultural productivity (17).

Next serious problem is that a significant number of farmers do not have land ownership title (28). There are two reasons for this problem. One is that farmers need much time to acquire a land title (29). The other is that the procedure is highly complicated (30). If farmers do not have the land registration like N.S.3 (a kind of land right for land utilization only) or normal land title, they cannot formally borrow money from the bank (32). In Thailand, farmers have limited access to subsidies or low interest credits (31). This is one of the serious weaknesses of the government policy to support farmers (48). As a result, farmers cannot invest effectively in agriculture (47).

¹¹ Working Group I reported that the ratio of landless farmers is about 10%. However, the ratio will increase if the present situation continues.

Meanwhile, if the level of infrastructure is low (33), for example, if the road is damaged, the progress of land reform is delayed because the area becomes inaccessible (34). Consequently, the number of landless farmers does not decrease (26).

Deforestation Problems: As pointed out earlier, the incidence of landless farmers accelerates deforestation. As the number of landless farmers has increased (26), they search for new land for their livelihood (35) and expand encroachment upon the forest area (36). As a matter of fact, the encroachment of forest area is one of the four main reasons for deforestation (16). Second is the resort development such as that for golf courses (37). At first developers tended to acquire the permission for development, but afterwards, they started developing the land without permission. These both legal and illegal resort development activities are causing low water retention capacity of soil. Third is the illegal cut down of forest trees by logging traders (38). About three hundred and fifty people in the Southern region of Thailand died in flood and landslides in 1988¹²

As a result, Thai government banned commercial logging by the traders in 1989. Nevertheless, the traders continue illegal logging both in Thailand and its neighbouring countries. Fourth is the inadequate management of eucalyptus plantations (39). The resettlement projects for afforestation were often ill prepared because government did not provide enough land for all people to live. Consequently people started rioting. This means that the afforestation, despite its absolute importance, has become socially unacceptable in certain cases. Inadequate settlement projects (4) therefore are one of the reasons for inadequate afforestation (39). The Kor Jor Kor Project also caused by the encroachment of forest. Indeed the inadequate afforestation has failed to cope with deforestation but also soil erosion (27), desertification (15) and other environmental hazards (11 and 12). These environmental problems have brought about the low water retention capacity of soil (13)

As briefly discussed above, there are a number of serious problems in the domains of environmental conservation and infrastructure development which are obviously related to each other and constitute multiple layers of vicious circles.

Concluding Remarks

As obvious from our analysis summarised above, there are a number of problems that have made changwad Korat remain poor. Apparently, the poverty poses serious constraint in the financial resources required for various forms of investment. Furthermore the development policies in the past have had various deficiencies. For example, the low pricing policy on farm produce appears to have deprived many farmers of their motivation to continue farming.

¹² Tasaka Toshio, "The Economy of Tropical Forest Destruction and Poverty," Ochanomizu Shobou, 1991 p 118. Japanese Text.

All prepared afforestation projects have caused serious objection of farmers being affected. These are caused primarily because of inadequate feedback from the people to the policy makers about the problems and aspirations of the former. These policy deficiencies have resulted in the inappropriate allocation of scarce resources. The inadequate investment in turn reinforced the poverty traps of various kinds. Our Problem Structure Diagram clearly illustrates the multi-dimensional structure of the fundamental vicious circles amongst poverty, deficient policies and the inadequate investment.

The Diagram in the meanwhile clearly demonstrates that the environment is closely related with development. In developing countries, generally the economic development has been accorded higher priority over environmental considerations. However, our group is convinced that the development can be made compatible with the enhancement of environmental conservation so long as adequate care is taken for the balance between the two in accordance with proper policies. At issue, therefore, is whether we have adequate policies and operational means to carry them out or not. In order to ensure sustenance of the quality of life, we must pay attention to the environment in the context of long term view. Development policies conceived under short term view will often give rise to irrecoverable natural destruction. Keeping these in view, we would like to suggest a few proposals as a package of actions for tackling those problems.

c. Proposals

Proposal 1

Project title: Waste Disposal Improvement

Background: We need two parallel approaches for solving the garbage problem. One is the financial approach and the other is the establishment of systems for waste disposal improvement.

Objective: Establish separate collection system of garbage collection and a system for its recycling

Activity components:

(1) Strengthen Tesabahn's capacity to:

- Provide garbage collection service and
- Establish a system for separate garbage collection.
- Truck: 100 vehicles.

Container truck: 10 vehicles. Drivers: 50 persons (full time employment) and 100 persons (temporary),

Collectors: 300 persons

Budget: 50 million baht¹³

Tesabahn has few incinerators for burnable garbage to reduce the volume of garbage collected. People and officials in Changwad Korat should learn the purpose as well as the necessity of separate garbage collection.

- (2) Provide information to the people in order to enhance their co-operation particularly for the separation of garbages as the basis for its recycling.
- (3) Educate people to bring their garbages to the fixed collection points in order to facilitate efficient collection service.
- (4) Recycle paper and iron wastes in order to reduce the amount of garbage.
- (5) Target beneficiaries: People in Tesabahn Korat
- (6) Executing agency: Tesabahn Korat Authority

Proposal 2

¹³ These concrete figures proposed keeping in view 1) the number of vehicles, manpower presently available and 2) the fact that the authority presently collects about 1/3 of all garbages produced.

Project title: Improving Water Supply for Household Use in Rural Areas

Objective: To ensure constant supply of water in the rural area, especially during the dry season.

Activity components:

1) Intensive water jar fabrication

In rural areas, about 75% of water supply depends on the rain water mainly stored in large cement containers called "water jar". Under the original "Water Jar Project", which was already completed, the villagers were trained to produce the water jar by themselves. This project covered the whole province, but failed to reach all the target villagers. Moreover, we learned that some of them still had to buy the water jars by instalment. Accordingly, revising the old "Water Jar project" that finished two years ago, the government is at present promoting the installation of water tanks. However, in view of the affordability and convenience of water jar compared with those of water tank, we suggest to resume the support for more intensive water jar fabrication including technical assistance for improving the quality of water jars.

2) Utilization and development of local water sources such as small streams, natural ponds and ground water.

Generally the Korat plateau is flat and the soil quality of the region is quite inadequate for storing water. On account of such topographic and soil characteristics, the water resources are quite limited. For maximising the utilization of limited resources, it is required not only to exploit existing facilities, but also construct new storage facilities.

Target beneficiaries: Rural people in Changwad Korat

Executing agency:

Changwad Korat Authority in collaboration with central government agencies such as Natural Resources Department (NRD), Department of Mineral Resources (DMR) Accelerated Rural Department (ARD) and Public Works Department (PWD), Department of Public Health and the Central Security Agency.

Project title: Improving Domestic Water Supply in the Urban Area

Objective: To develop water supply facilities to meet the growing water demand resulting from urban population growth

Activity components:

Partial Privatization: In Tesabahn Korat, the Tesabahn Authority is responsible for the water supply system. A public enterprise can enjoy the merit of the economies of scale for it can monopolize a large number of clients even with a low rate of water charges. As a matter of fact, Tesabahn Korat provides water at a lower price than any other public enterprises in Thailand. Nonetheless, the fact remains that a public enterprise can never be expected to be as efficient as a private enterprise.

The effect of partial privatization is expected to emerge in two respects, namely, the low production cost and the improvement of water services as a result of competition among enterprises.

Target beneficiaries: Urban people in changwad Korat

Executing agency: Tesabahn Authority

Proposal 4

Project title: Integrated Rural Development with Multi-Purpose Pond

Objective: Construct multi-purpose pond to

- (1) Store rainwater
- (2) Raise fish
- (3) Use for animals ie. cattle and pigs,
- (4) Grow vegetables and fruits
- (5) Reduce water salinity

These all in all constitute what deserves the name of the integrated rural development. For this purpose, the final objective is to improve the quality of life of farmers and their income and to reduce migration to urban areas.

Activity components:

Construction of ponds in such a way that the pond will be effective for:

- 1) Storing the rainfall and ground water
- 2) Storing the returned flow of water from surrounding paddy field

- 3) Diluting dense saline or original ground water if any, and
- 4) Gradually desalinizing the ground water by way of expanding the fresh water layer around the pond.

The effectiveness of the pond depends upon the following three technical considerations.

- (1) The location of the pond should be carefully chosen keeping in view the topography of the water shed and water catchment area.
- (2) The size, shape, depth, angle of the embankment of the pond should be carefully designed.
- (3) Good water management is required with regard to the amount of water used and left in pond¹⁴.

Target beneficiaries: The rainfed area without irrigation facilities and the saline area in the Northeast Thailand

Executing agencies:

Royal Irrigation Department (RID) for most of pond construction in private farm lands, Irrigation Office of Accelerated Rural Development (ARD) for public land ponds and Changwad office for inter-agency coordination.

Other remarks:

A special budget for environment problem is earmarked by Ministry of Interior, Ministry of Public Health, Ministry of Agriculture and Cooperatives and Ministry of Industry. All of them need to be mobilized for the pond construction. Effective support of the government agencies concerned would be essential.

Proposal 5

Project title: Land Reform

Objectives:

- (1) To enable a large number of farmers to obtain the land right
- (2) Distribution of appropriate size of land to each farm household.
- (3) Consolidation and reshaping of farm land configuration.

¹⁴ This project was first developed and experimented by the joint team of Chulalongkorn University (Thailand), Kyoto University (Japan) and the Royal Irrigation Department of Thailand. It was already implemented at three pilot villages in the Provinces (Changwads) of Khon Kaen, Roi-Et and Mahasarakham in Northeast Thailand in 1983, and has demonstrated a considerable success.

Activities:

- 1) Simplification and expedition of administrative procedures is now being implemented, but its progress is slow. In order to correct the status, the investigation for determining the eligibility of farmers for the land right should be simplified and made short in period.
- 2) Identification of the minimum threshold level of land holding. Even if poor farmers may be conferred a land title, they may easily lose it unless they can produce minimum amount of yield required for their self reliance. The farm size should therefore be determined so as to prevent those farmers from losing the land again.
- 3) Appropriate configuration of farmlands: The shapes of farm lands in Changwad Korat are often quite irregular. If the shape of land is unsuitable for mechanization, farmers would be unable to raise land productivity even if certain farming machines may sooner or later become affordable for them. Hence, government agencies concerned should see to it that the farm plots be made as rectangular as possible.

Target beneficiaries:

Those farmers who do not have N.S.4 (a kind of land right for real ownership) as well as those who have only small amount of land.

Executing agencies: Land Department and Agricultural Land Reform Office

Locational implications: All areas in Changwad Korat

Other remarks:

The Activity (1) needs a large number of personnel to manage the daily business. Activity (3) needs skilled manpower. However, the land reform and related activities Chaopraya River basin in the environs of Bangkok are much more progressed, so that the required skilled manpower must be available in Thailand as a whole. We expect that the manpower can gradually be transferred to Northeast, upon completion of the land reform activities in the Central Region.

Proposal 6

Project title: Farmers Training

Objectives: Dissemination of farming skills for the promotion of crop diversification.

Activities:

- (1) To conduct training courses for farmers
- (2) To promote demonstration farming
- (3) To construct a training centre
- (4) To increase the amount of low interest loans available for farming innovation
- (5) To conduct trainer training courses for extension workers

Executing agency: Agricultural Department, Ministry of Agriculture and Cooperatives

Project duration: 5 years

Locational implications: All areas in Changwad Korat with emphasis on those Amphoes with high crop diversification potentials (ie. locational advantage, water availability, soil and other agronomic conditions, and availability of community leadership).

Other conditions About 500 trainers from the Agricultural Department in addition of foreign financial and technical assistance would be required.

Proposal 7

Project title: Forest Conservation Project

Background: In general, the government has a sound afforestation policy as described in the Seventh National Economic and Social Development Plan (1992-1996). However, in reality, the progress of afforestation projects has been slow for various constraints. In particular, the absence of long term vision is noted.

Objective: Effective forest conservation and afforestation

Activities: Five activity components are identified as follows:

- (1) **Monitoring:** Make clear of the boundaries among Conservation Zone, Economic Zone and Agricultural Zone of the forest area. And promote the assessment of afforestation.
- (2) **Information dissemination:** Establish a system for enabling everyone to know the conditions of the forest and the progress of afforestation.

- (3) Reinforcement of laws and regulations: The land supervision system, for example, should effectively prevent the landless farmers and resort developers from entering the conservation area.
- (4) Raising the level of awareness of the natural environment on the part of both the people and the business sector by public opinion of environmental conservation

Technical improvement in forest management: For bringing about a sound balance between the forest conservation and timber production, the management skills like appropriate spacing of trees, logging through selective cutting and the diversification of tree species should be introduced. If management is properly organized in accordance with the specific characteristics of tree species, for example, fast growing trees like eucalyptus will not destroy the surroundings¹⁵

Target beneficiaries:

The farmers who are willing to take the forest management as the major source of livelihood. The total area for afforestation is targeted as 40% of the Changwad Korat, commensurate with the national target.

Executing agency: The Royal Forestry Department in collaboration with Changwad Administration.

Locational implications: Eastern and hilly parts of the Changwad should be given priority.

¹⁵ This was verified at a field interview with a forest owner who has introduced eucalyptus in an extensive manner. As a result familiar rumours such as, eucalyptus expels insects for its medicinal contents, eucalyptus suffocates all other tree species for the same reason etc. have been found not true.

d. List of Individual Reports:

| Author | Title |
|------------------------|--|
| 1. IMAI Rieko (Ms.) : | Forest Conservation: Issues Concerning Afforestation |
| 2. MITA Masahiro : | Maximisation of Land Use in Nakhon Ratchasima |
| 3. SATO Yoko (Ms.) : | Agriculture Water Use: Irrigation in Nakhon Ratchasima |
| 4. TOBINAGA Eri (Ms.): | Water for Drinking and Other Household Use: A Case Study on Nakhon Ratchasima Province in Thailand |

Section IV: Report of WG-IV

Institutional Dimensions in Development Management

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**Team Leader*

a. Introduction

This report consolidates our studies made during the Overseas Fieldwork in Nakhon Ratchasima (herein after "Changwad Korat") and the Intensive Lecture Course (ILC) held in July 1993 at Nagoya, Japan. Although we did our best, the report might contain incorrect or insufficient analysis owing to the time and other constraints. In any event, taking this opportunity, we would like to extend our sincere thanks to the officials and people of Changwad Korat who so kindly received us and provided valuable information despite their busy duties.

b. Problem Structure Analysis

The focus of our study is on the institutional dimensions in development management. Since the institutional dimensions must deal with the whole range of development management problems, the issues we have to review include economic, social and other aspects from our own analytical perspective, although these are elaborated by other three groups respectively.

Needless to say, the majority of people in Changwad Korat are still engaged in agriculture as the main source of income, and their income is very low (Box No.1, the number given in brackets corresponds with the number shown in each box in the Problem Structure Diagram) on account of the prevalent low productivity (No.2) compared with that of those engaged in manufacturing and service sectors. Productivity is low owing primarily to poor natural conditions (No.3) which make farming impossible during dry season. Thus people are unemployed during the post-harvest season (No. 5). They also need to generate additional income from other sources even during the harvest season, so as to meet the demand for higher economic consumption caused by profound socio-economic changes in their life styles from the subsistence economy to the market economy. However, as non-agricultural and agro-industrial potentials of Changwad Korat are yet to be fully utilized (No. 7), the employment opportunities for farmers as unskilled labourers are very limited (No. 6). Therefore, farmers have no option but to look for jobs by migrating to Bangkok (BMA) or even overseas to get quick and better income (No. 8).

There are two main reasons contributing to the low productivity. First, as already mentioned, poor natural conditions such as water scarcity and poor soil conditions caused by high salinity are very serious, making the increase of productivity very difficult. Such conditions are being further deteriorated by the deforestation (No. 9) caused by encroachment of people upon the forest areas.

Traditionally in Thailand, land is inherited by children by dividing it (No. 10). With a small piece of land to cultivate, it is difficult for them to produce sufficient yield to support their family. As a result they have to move to new land in forest reserves without land titles (No. 11). Second, services provided by BAAC (Bank for Agriculture and Agriculture Cooperatives) are often inaccessible to the poor families who do not have collateral i.e., legal land titles, required for the borrowing (No. 12).

Another constraint that hampers broader distribution of services of these financial institutions besides availability of mortgage is the inadequate amount of budget of the government (No. 13). Currently, the government has been implementing land reform as an attempt to alleviate the problem of landless farmers. However, the process of the reform is rather slow (No. 14) because many government agencies are involved in the process of implementation. Coordination among government agencies is generally difficult and time-consuming (No. 15). This is due to the fact that the central government agencies (i.e., Ministries and Departments) are fragmented into many organizations (No. 16). As is well known, the fragmented set-up of bureaucracy has been caused by the competition for expanding the functional jurisdiction of each agency. The situation is further complicated by the fact that the decision-making authority is highly centralized (No. 17).

This system is also causing policy formation and planning of development strategy without much input from local governments, resulting in unbalanced urban and rural development (No. 18) and unbalanced regional development (No. 19). This highly centralized administrative system has inevitably led to a vertically structured administrative system which penetrates into all levels of government administration down to the Tambon Council (No. 20).

In the 7th National Economic and Social development Plan (1992-1996), the government points out that the existing legal framework, rules and regulations have failed to keep pace with rapidly changing economic and social conditions. The highly centralized administrative system and organizational structure of the government need to be appropriately decentralized by giving more responsibilities and power to the provincial and local authorities (the 7th National Economic and Social Development Plan). However, implementation of this policy is rather slow (No.21) owing to a long history of centralized control. Accordingly, the autonomy of the local governments is still weak (No. 22) especially financially, because the revenue system is highly centralized and controlled by the central government.

There seemed to be some discussions and plans being considered at the central government quarters, such as the revision of ratio of distribution of central tax revenues between Bangkok Metropolitan Administration and other provinces, or the issue of conferring judicial status to the Tambon Council. Nonetheless, the principle of a highly centralized system under which the decision-making is made only at the central level, is yet to be re-examined from the viewpoint of bringing about the much talk-about cause of decentralization. The slowness of the progress appears to result in the inadequate accomplishment in terms of meeting people's needs (No. 23). However, at the same time, it should be recognized that the ineffectiveness of project output owes a great deal to the weak advocacy of people (No. 24). This can be observed from the indifference of farmers to collective (joint) actions, especially from the weakness of farmers' organizations (No. 28).

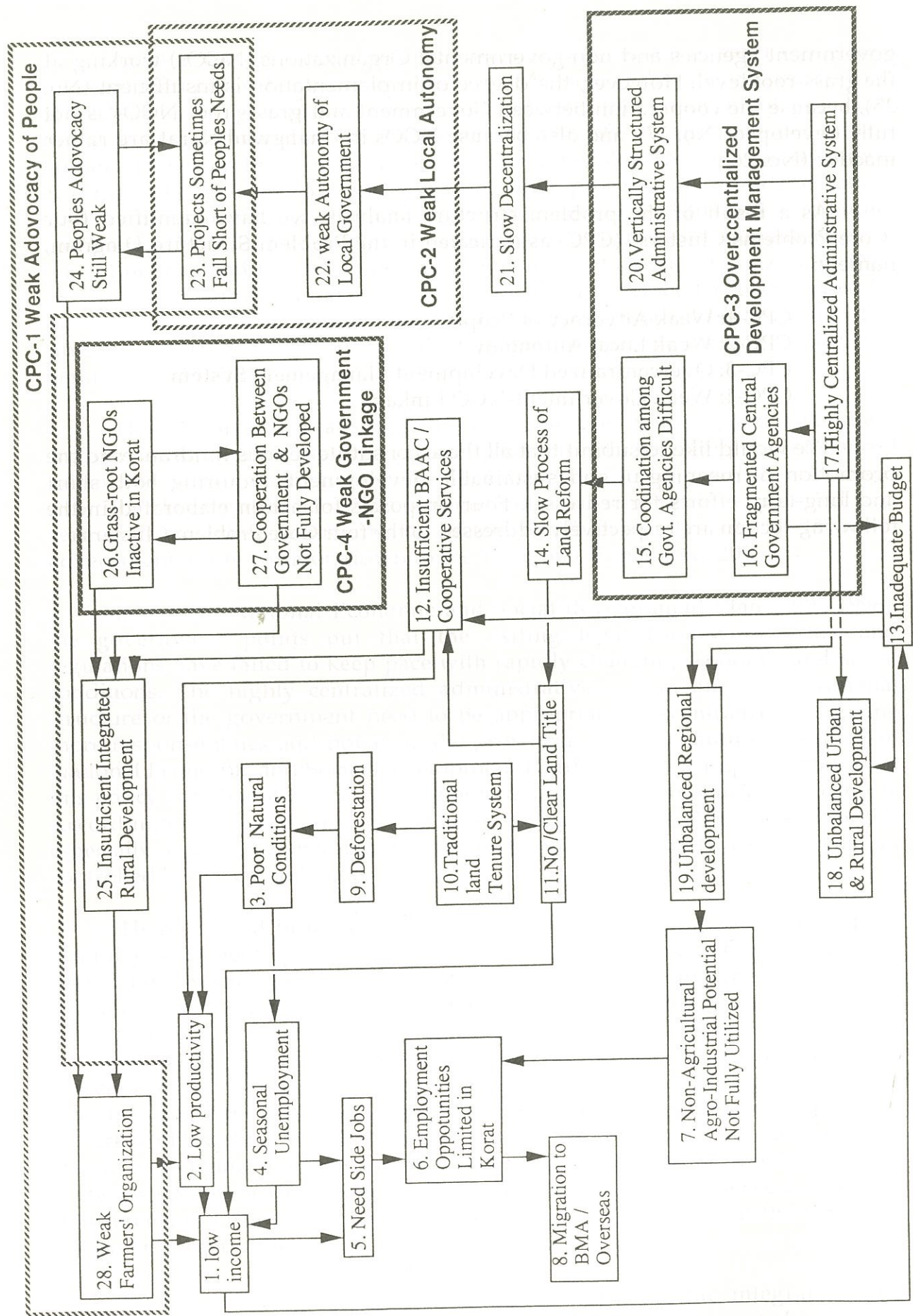
As one of main strategies for rural development, the integrated rural development has been introduced and is being implemented by both

government agencies and non-governmental Organizations (NGOs) working at the grass-root level. However, the degree of implementation is insufficient (No. 25), because the cooperation between Government and grass- root NGOs is not fully developed (No. 27), and also because NGOs in Changwad Korat are rather inactive (No. 26).

As a result of the problem structure analysis, we have identified four "Core Problems Clusters" (CPC) as indicated in the Problem Structure Diagram, namely:

- CPC-1: Weak Advocacy of People
- CPC-2: Weak Local Autonomy
- CPC-3: Overcentralized Development Management System
- CPC-4: Weak Government-NGO Linkage

We would like to submit that all these constitute serious hindrances to the promotion of meaningful and sustainable development, requiring both short and long-term efforts for redressal. Four proposals for action elaborated in the following section are respectively addressed to the four Core Problem Clusters.



PROBLEM STRUCTURE , WG-4: INSTITUTIONAL DIMENSIONS IN DEVELOPMENT MANAGEMENT

c. Proposals for Action

Keeping in view the problem structure analysis, several proposals are submitted for the reaction of those concerned, both government functionaries, and peoples in the province.

Project 1: Strengthening People's Advocacy

Objective 1.1: Enhancement of villager's awareness and knowledge about development projects.

During our field work, we met some villagers who did not seem to understand the procedure of development projects in their village, nor the importance of some long-term projects such as social forestry. It would be important, therefore, to strengthen effort to enhance people's awareness of the relationship between development projects and their life.

Activities:

We would like to recommend local governments to have long-term visions to promote agricultural projects like "Korat as Green Province""Korat as Fruits/ Nuts Province" and "Korat as Meat/ Milk Province" and village projects like pond system and providing up-to-date marketing information, etc.

Under the "Korat as Green Province" project, villagers are encouraged to plant valuable trees to enhance their income. This project can be combined with the "Korat as Fruit/ Nuts Province" project in the near future. In similar veins, under the "Korat as Meat/ Milk Province" project, local governments are urged to promote livestock raising activities and combine them with marketing to BMA or foreign countries.

Combining village projects and villagers' income raising activities will promote villagers' interest in development. Presumably, such interest will contribute to the promotion of participation. As a step to enhance their participation, it would be important to encourage villagers, as a first step, to take the role of decision making initiated by themselves.

Executing Agency: Local government

Target beneficiary: People in the rural area

Objective 1.2: Empowerment of village committee

The village committee is responsible for the identification of problems and needs of the people in the village, and propose projects to solve the problems. However some committee members seem to be chosen by the village headman with his personal preference.

Activities:

We wonder if it is not meaningful for villagers to elect all the village representatives, for example, representative from agricultural cooperative groups, women's groups and so on. We hope this would result in the enhancement of the people's experience in democratic practice and their sense of belonging to the village and village development.

Executing Agency: Electing Committee established under Tambon Council

Target Beneficiary: People in the rural area.

Project 2: Enhancement of Local Autonomy

Objective 2.1: Training of local administrators

Activities:

It is necessary to enhance the capability of Tambon Council to meet their duties that must get more complicated and enormous after the conferment of judicial status to the Tambon Council.

1. As the short term activity

Some budget should be allocated for the Tambon Council to employ some professional public administrators to run day-to-day business of the Council.

2. As the long term activity

In order to raise the Tambon Council members' capability for development management, short term seminars, workshops, study tours, etc. need to be arranged for improving their professional knowledge and skills.

Executing Agency: DOLA is appropriate as the executing agency.

Target Beneficiary: The Council members and the youth who live in the Tambon area.

Objective 2.2: Strengthening legislative powers of Changwad Council

Activities:

It appears that the legislative power of the Changwad Council is rather limited. Enhancement of relevant statutory measures taking into account the specific conditions of Changwad Korat would be an improved basis for strengthening the local initiative for development.

In particular, the decentralization of legislative powers should be accelerated.

Executing Agency: DOLA should take the main responsibility.

Target Beneficiary: Changwad Council and other relevant organizations functioning at the Changwad level.

Objective 2.3: Strengthening formal procedures for requesting an administrative action.

It appears that a number of Local Council has poor capability to plan for development. Establishment of a formal procedure for enabling local councilors to propose plans and projects may become a meaningful proposition once we succeed in strengthening the professional capabilities of Local Councilors. Therefore, we would like to suggest these projects given below to achieve the objectives.

Activities:

Local Councilors are desired to be better representatives for the people, especially at the grass-root. It means that they should be able to propose and design projects by themselves and to have frank dialogues with the government administrators. Furthermore, it would be desirable that representatives are elected from various kinds of occupations.

The concrete activities will include:

1. Training of local councilors for legislative skills

It would be better that local councilors could have enough skills to make policies through legislation. For this purpose, seminars, workshops and study tours about law and politics for local councilors would be useful.

2. Instituting formal dialogical meeting between Local Councilors and the government administrators.

If local councilors have effective dialogue with the administrators at the same time, however, it is felt necessary to upgrade the discipline of Local Councilors and administrators in order to prevent them from excessive exploitation of personal influence.

3. Enhancement of organizations in which farmers are involved

As a result of fieldwork, we have learned that people at leading positions as Provincial Councilors and Kamnans (Tambon Headman) include a number of those people engaged in business. Relatively few of those engaged in farming are represented. This may be a problem, for the majority of people are farmers. It would be quite desirable, therefore, if more farmers could be representative in local councils. For this purpose, it would be necessary to strengthen various

forms of organizations such as farmers' cooperatives, women's clubs, youth clubs and so on.

Executing Agency:

1. DOLA is desired to exert leadership in conducting the training in collaboration with the local government concerned. Political parties could undertake it as well.
2. Mainly DOLA could implement that in cooperation with local government and councils. It may be also necessary to introduce common standard at the national level, viz. National Parliament.
3. Farmers organizations at the grass-root should take part in the design and implementation of the training.

Target Beneficiary:

The people who are presently deprived of access to express their interest and needs vis-à-vis their political representatives and/or administrators, specially the rural people at the grass-root.

Locational Implications:

Most of these project activities need to be implemented at the local level, namely, municipality, district and province. Needless to say, however, it would be important for these projects to be coordinated at the central level.

Project Period:

These project activities should be sustained at least ten years, for the project objectives should be attained not only through the administrative reform-oriented policies, but also through changes in peoples' political awareness and behaviour.

Objective 2.4: Reform of Tax System

Activities:

1. As the short term activity

To support current debate at the central government level, and extend it to the bottom level.

2. As the long term activity

All local administrative organizations should be given sustainable financing development. The central governmental should provide

guidance and supervision via an interdepartmental committee for the prevention of malpractices.

Executing agency: DOLA, Provincial Council and all other local administrative organizations.

Project Period:

During the next five-year development plan period, although preparatory activities should be started immediately.

Project 3: Improvement of the Administrative Structure of the Government.

Objective 3.1:

More effective inter-departmental coordination and improvements in the coordination between a ministry and departments under its jurisdiction.

In order to be more efficient in the preparation of ministerial plan or with regard to budget requests and plan implementation, the coordination amongst departments concerned, as well as the coordination between a ministry and its subordinate departments are vital. Although inter-departmental coordination exists, there is much room for improvement. In the Thai bureaucratic system, an individual department, for example, can file budget requests and implement projects and therefore, the need to coordinate with other departments is not always viewed as necessary. As Philip Hirsch put it, "each department within each ministry runs its own projects with its own budget, and duplication is rife. Furthermore, it is in each department's interest to expand its role at the expense of others in order to secure larger budget allocations. While inter-departmental infighting related to budget allocations is largely at the national level, it does not little... to secure cooperation of local programs." (Philip Hirsch, *Development Dilemmas in Rural Thailand*, 1990, pp. 22-23) Further, Chartchai Na Chiangmai states that "each concerned department perceives rural poverty problems from its own perspective depending upon its major mandates, technologies and values. The complicated rural poverty problems have not been considered comprehensively covering all aspects of poor people's life on each province." (Chartchai Na Chiangmai, *Reaching the Rural Poor Effectively: Mainstreaming an Alternative Delivery System*, 1991, p. 9)

Activities:

Establish mechanisms whereby each ministry, through the Office of the Permanent Secretary is enabled to coordinate more closely with all the departments under its jurisdiction. This would be crucial for developing a common perspective regarding the problems of rural poverty, and would facilitate each ministry to draw up a well-coordinated ministerial plan, and to implement the projects more effectively.

Enhance inter-governmental coordination within a ministry, in order to ensure the consistency of the goals of each development with the overall ministerial plan and to avoid duplication of activities. Such action will be effective for eliminating waste of financial resources, which are unavoidable through fragmented approaches.

Executing Agency:

Each ministry concerned, especially the six main ministries involved in rural development (i.e., Ministry of Interior, Education, agriculture and Cooperatives, Public Health, Industry and Commerce), and the departments under their respective jurisdiction.

Objective 3.2: More effective inter-ministerial coordination

Like many other nations, the Thai bureaucracy is organized by division of sectoral functions. Nonetheless, there appears to exist considerable duplication of functions amongst various ministries and departments. With regard to water resource development, for example, various ministries including the Ministry of Interior, Agriculture and Cooperations, and Public Health are involved, so that inter-ministerial coordination becomes an even more complicated task. Further, owing to the highly centralized administrative structure, most linkages are vertical, with insufficient horizontal linkages between ministries, causing the dilution or loss of comprehensive development goals for rural development.

The government, in order to eradicate poverty as stated in its Fifth National Economic and Social Development Plan (1982-1986), established a separate administrative structure in 1982 to focus specifically upon the problems of rural poverty. At the national level, the National Rural Development Committee (NRDC) was established principally as a policy making body to formulate rural development policies and allocate the budget to the concerned agencies for implementation of projects under the National Rural Development Programme (NRDP). Provincial Rural Development Committees (PRDC) and District (i.e., "Amphur") Rural development committee (DRDC) were established to tackle rural development problems at the provincial and district levels respectively. The Tambon Councils and Village Committees were formed to deal with development problems at the tambon and village levels. This administrative structure plays an important role not only in formulating policies and implementing them, but also in coordinating with NRDP. However, the structure needs to be further improved in order to facilitate more effective inter-ministerial coordination. As Demaine has noted, "the regulations for NRDP indicate that the planning section of the Provincial Office will have an important coordinative role in the whole planning system, acting as the secretariat for the Provincial Development Committee and its rural development sub-committee in much the same way as NRDC does at the national level. Unfortunately, it is widely recognized that the Provincial Office is scarcely equipped to carry out this role." (Harvey Demaine, Thailand's National Rural Development Program: An Experiment in Semi-Decentralized Planning in Harvey Demaine and Romana E.

Malong (eds.), *Decentralization: Area Development in Practice in Asia*, 1987, p. 158)

Activities:

Establish methods for enhancing the horizontal communication amongst the ministries at every level of the administrative structure of NRDP (i.e., NRDC, PRDC and DRDC), thereby avoiding the duplication of functions and promoting a more comprehensive strategy towards rural development.

The first step toward the objective would be to establish mechanisms for the exchange of information among officers in the field representing various ministries.

Executing Agency:

The six main ministries involved in rural development are desired to initiate the project and thereafter include other ministries.

Reference:

1. Philip Hirsch, *Development Dilemmas in rural Thailand*, Oxford University press, Oxford, 1993
2. Chartchai Na Chiangmai, *Reaching the Rural Poor Effectively: Mainstreaming an Alternative Delivery System*, a paper presented at the International Political Science Association Conference, Chiang Mai. Jan. 12-15, 1993.
3. Harvey Demaine and Romana E. Malong (eds.), *Decentralization: Area Development in Practice in Asia*, The Rural- regional Development Network, AIT, Bangkok, 1987.

PROJECT 4: Cooperation between Government Organizations and NGOs

Objective:

In the process of promoting rural development, not only government organizations but also the grass-root NGOs should play important roles.

While we have observed with appreciation the effort of the government for encouraging participation of NGOs in the development process of rural societies, it seems that the establishment of better relationships between the government and the grass-root NGOs is very much called for. This project aims at the enhancement of closer cooperation between the two parties.

Activities 4.1: Government's financial support to NGOs

The allocation of financial support of the government for NGOs should be determined through careful evaluation on the meaningful contributions made by each NGO for the promotion of integrated rural development.

No doubt, heed should be taken by the government in extending support for NGOs, for such a support may erode the very rationale of NGOs. In particular, intervention in political contexts needs to be avoided by all means. Nonetheless, certain amount of government's financial support is obviously called for, as financial assistance from foreign countries for NGO activities has drastically decreased recently.

Executing Agency 4.1: Provincial and District Rural Development Committees.

Activities 4.2:

Increase occasions of both formal and informal meetings to exchange ideas between government and representatives of NGOs. Although NESDB recommends the Provincial and District Rural Development Committees to invite NGOs in their forum, not many of them have been invited actually. The reluctance is observable on both sides. Therefore, both government agencies and NGOs are urged to strengthen their effort for exchanging information about rural development, comparing their respective experience in the promotion of village development and improvement of quality of life of rural people.

Target Beneficiary: Rural people, particularly the poor and deprived.

We would also like to note that a set of proposals with similar view are advocated in the OFW Report of GSID, conducted at Roi-et Province in Thailand in 1992. Refer to i.e. its chapters 4 and 5.

d. List of Individual Reports:

| Author | Title |
|------------------------|--|
| 1. UMEMURA Naomi (Ms.) | : Rural Development Policy and Administration for Women in Thailand: A Case Study in Korat |
| 2. OHGA Ai | : Rural Development and Administrative Services |
| 3. YAMAMOTO Sayako | : Election Process and Political Participation |
| 4. WANG Xiaokui | : A Value Survey of Farmers and Students in Korat |
| 5. ABE Naotaka | : Analysis on Institutional and Financial Aspects |
| 6. HUIJITA Sanae | : NGOs' Activities in Changwat Korat |
| 7. SHIMADA yuzuru | : Decision-Making Process in Rural Development Management |

Section V

National Development of Thailand An Attempt for Interdisciplinary Integration

I The Problem

Our fieldwork was conducted by way of dividing the whole group into four working groups (WGs), respectively focussing on:

- 1) Economic and business development aspects,
- 2) Human resources development aspects (i.e. Education and health),
- 3) Physical infrastructure and environmental aspects and
- 4) Institutional dimensions of development management.

The result of study findings have been presented in a brief summary form, together with several proposals for action in the preceding sections.

However, as already discussed in our Study Report on Changwad Roi-Et conducted in 1992, all these sectoral analyses need to be integrated into a unified perspective, for our life by itself is of an integrated nature. This brief paper attempts to put forward, though in a cursory manner, an interdisciplinary perspective as the basis for the debate on the formulation of integrated development strategies taking cue from all the proposals made by the students.

A special issue of Bangkok Post on Sunday 24 October 1993, featuring the problems and issues concerning the rural to urban migration in Thailand today, was extremely informative and thought provoking. Accordingly, an attempt is made to relate our study findings in Korat with the nationwide perspective drawn out in the Bangkok Post as summarised in the integrated Problem Structure Diagram presented herewith.

In all situations, the people and the government are the two principal actors in the process of development (X and Y). While the interest of the people is supposed to be represented by political leaders under the democratic system, the government formulates policies as fundamental guidelines for carrying out all sorts of development actions (W and Z). It would be fair to conceive therefore, that all the problems related to development need to be solved by the ways by which and the extent to which all the four elements, i.e., W, X, Y, and Z work together for managing the development process.

Needless to mention, all these problems stem from historical and cultural background so that the solution of those problems usually requires sustained efforts for a long period. Furthermore, all of them relate to each other and constitute various forms of vicious circles. It is neither possible nor appropriate, therefore, to try to identify one or two of them as ROOT causes and expect that a concentrated attack on that particular problem(s) will lead to the solution of all the problems involved. On the contrary, our efforts need to take a multifaceted approach, while identifying those problems in a selective manner for which intensive efforts may bring about effective results, in terms of both short and long range perspective.

As clearly observable from the diagram, a number of arrow lines lead to migration (Box 11). The most fundamental of all those would be the low level of QOL (Quality of Life) in rural Thailand (Box. 2). Many people are getting weary of life in rural areas which lacks in excitement.

No doubt, the low QOL in rural areas resulted from the inadequate investment in those areas, in terms of both physical infrastructure and human resources development. Those who have risk taking vitality and capability, if at all, are no longer satisfied with the monotonous life. At the outset, such people would be difficult to be created on account of deficient educational/vocational opportunities in rural areas.

Why, then, investment in rural areas is inadequate? As a matter of fact, the officials of almost all agencies we visited in Korat unanimously pointed out the chronic shortage of budget. Financial resources in the hands of the government is scarce (Box 8), for a large chunk of the fruit of sustained economic growth of Thai economy remains in the hands of urban private sector (Box. 14). It is because the current taxation system favours the private sector (Box. 20), despite decentralization policy advocated in the 7th Plan (Z)

The wealth of capital thus concentrated in the urban private sector is the fuel for massive investment particularly in Bangkok area, pursuing quick profits (Box 13). Rural people rush for meagre opportunities for unskilled labour (This is the only accessible job category for less educated farmers) (Box. 12).

It should also be pointed out that PPP (Polluters-pay-principle) is only loosely enforced in Thailand today. As a result, it is quite cheap and profitable for private enterprises to continue business in Bangkok areas. It means that the government is failing to capture the benefit of externalities presently accruing to the urban private sector. No wonder that the urbanization spreads in the laissez-faire environment (Boxes 25 and 19) particularly in the BMR area.

At this juncture, a remark should be made to a rather serious point pertaining to the current pricing policy on farm produce. No doubt, controlling the price of farm produce low, particularly rice has contributed a great deal to the growth of Thai economy as it has also helped controlling the labour cost in the urban modern sector, besides retaining competitiveness of Thai rice in the international trade market.

However, as put forward in this diagram, it has started to exhibit negative consequences over the life of the majority of Thai people. As a matter of fact, we were struck by finding out that miles and miles of paddy fields along the highway to Kanchanburi from Bangkok were left fallow and left to the growth of weeds. Most of those lands must already be in the hands of non farm interests. It was obvious that a number of farmers have already lost interest in continuing farming, except for own household consumption, or even the food for own consumption might be purchased in the market by cash income they may earn from urban employment (Box 27).

The Bangkok Post reports ominous trend of farmers' selling land, out of desire for quick income, which is now possible owing to widespread land speculation (Box 22). Farmers without entrepreneurial capability simply squander the big income thus accruing to them, leading sooner or later to impoverishment (Box 17) by becoming landless again. Such incidences further reinforce rural to urban migration. Is there any assurance that the land titles being conferred to farmers under tremendous effort of the government to be surely retained by those farmers and meaningfully utilized for farming purposes?

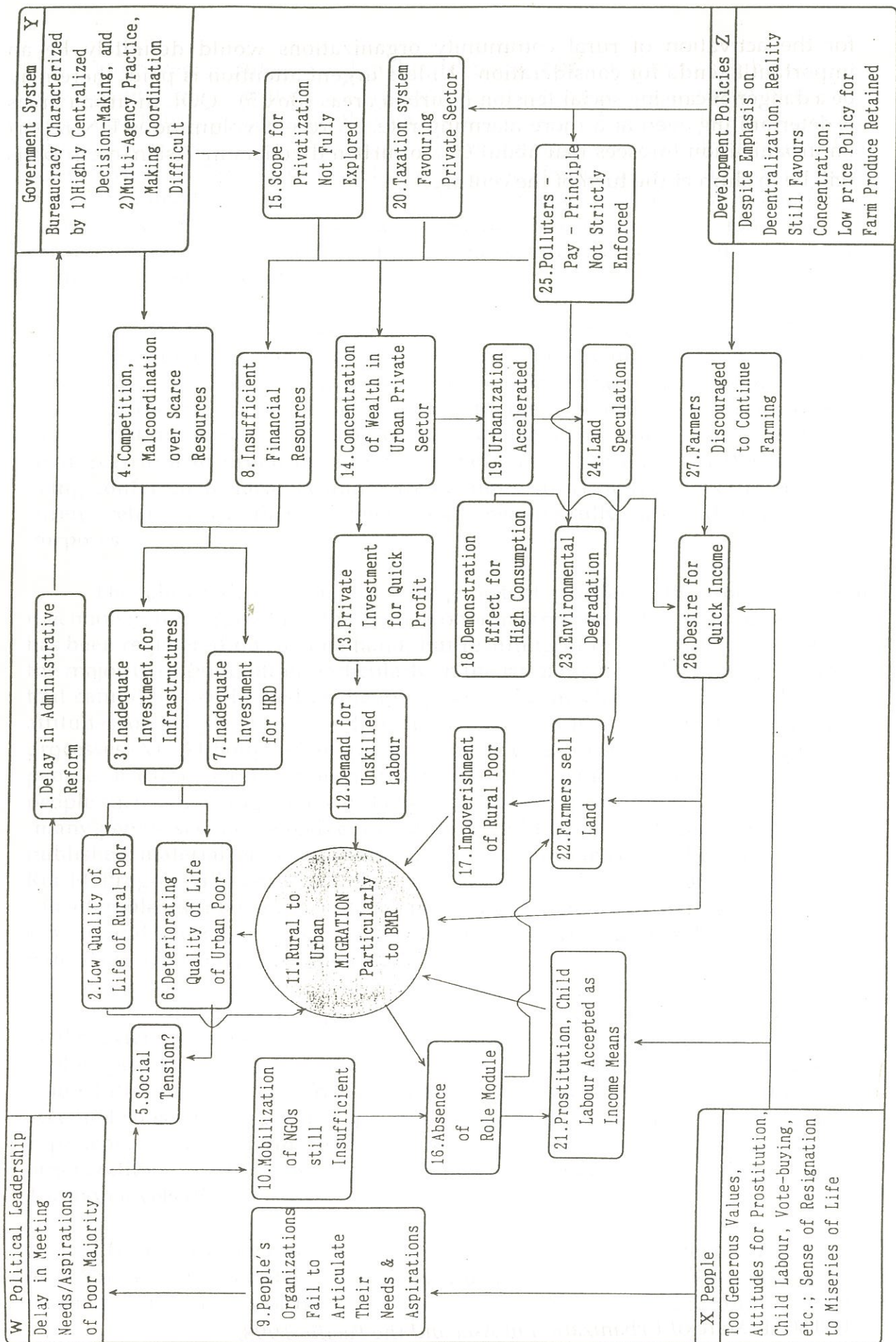
The above discussion, to a large extent, explains the socio-economic mechanism through which the high economic growth of the national economy has been registered on the one hand, but resulting in the degradation of QOL of the majority of population particularly in the rural areas on the other. One thing that cannot be overlooked in the grasping of the mechanism is the values and attitudes of people in responding to all such socio-economic transformation processes (X). Although through very limited cases of interviews with common people in Korat, we have been struck with the easiness with which common people such as a young village girl at grade 6 accepts prostitution as lucrative job-many people seem to perceive prostitution, child labour, vote buying (There is a published material on a questionnaire survey conducted by the Task Force of Roi-Et Progress Project about the vote buying. The material reports that a considerable number of people blankly admit their vote selling. No doubt, buying and selling of votes is everywhere, however, the blankness is striking indeed) as a normal part of their daily life.

Although values and perceptions of common people need to be respected to the extent possible and appropriate, there may nonetheless be a need to explore possibility of redressal in this regard. In the first place, people should be made fully aware of the tragic consequences of something which they have accepted so easily since long time and second, they should be exposed to actual experience of articulating their needs and aspirations through community organizations, such as Rural Development Committees at village and/or Tambon levels (Box 7).

Presumably, the rareness of opportunities for such experience may be one of the reasons for the delay on the part of political leadership in meeting the needs and aspirations of the poor majority (W). Further mobilization of NGOs

for the activation of rural community organizations would definitely be an important agenda for consideration. Unless urgent attention is paid, there may be a danger of causing social tension in urban areas (Box 5). QOL in urban areas is deteriorating even at a more alarming rate. A recent voluminous UN report on urbanization foresees that about 60% of urban dwellers in Asian metropolis will be in slum at the turn of the century.*

* UNESCAP, *State of Urbanization in Asia and the Pacific 1993*.



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II Proposals

Keeping in view the various proposals made the four WGs, an attempt is made to consolidate those into four proposals from the view point for interdisciplinary integration. Frank reactions of Thai development planners and administrators working at the central, Changwad and lower local levels are requested for furthering discussion for the promotion of meaningful development of Changwad Korat.

Proposal A:

There is a need of redressal for the various socio-economic forces that unduly favour urban-oriented capital flow. As a result of those socio-economic forces, the decentralization policy advocated in the 7th National Development Plan seems to fail to muster effective momentum. One of the first steps to be taken may be, among others, the redressal of the low price policy on farm produce hitherto taken.

Presumably, every effort needs to be concentrated to resume attractiveness of rural areas and motivate as many farmers as possible to decide to remain in rural areas. We are convinced through interviews in rural Korat, that it is not a totally unrealistic proposition. Should we succeed in providing avenues of side jobs which farmers can avail during dry seasons, there is a good possibility that a number of them may prefer to stay in their village rather than seasonally migrate to Bangkok. The developmental implication of the Mixed Farming would be very important in this regard. While the mixed farming can produce no lower yield than conventional farming, it is labour saving, for farmers don't need to till the land nor weeding and other time consuming works.

Proposal B:

The most vital means to actualize the strategy A above is the increase of investment to be made for improving the quality of life of poor majority both in rural and urban areas. For this to happen, two serious bottlenecks need to be overcome, namely, the diversion of financial resources in favour of public finance. For this purpose, there would be no way but to introduce substantial redressal in the current taxation system, and the administrative reform for augmenting the efficiency of public expenditure by way of minimizing the duplication of functions, and maximising the effectiveness of coordinative procedures at all levels.

Proposal C:

Third is the cognitive transformation of values and attitudes of people in certain respects. No doubt, this is a highly sensitive agenda, requiring concerted actions at various corners of the socio-economic system. An integrated programme involving not only the government agencies engaged in community development tasks, but also various inputs through formal and non formal educational channels, mass media, studies by academic researchers,

philanthropy movement of enterprises besides grass root oriented NGOs would have to be mobilized. It is felt that the Provincial Development Committee, among others, would be the most relevant forum where such an integrated programme be formulated, coordinated and carried out.

Proposal D:

In the fourth and last proposal, we would like to point out the positive role to be played by a province located outside the BMR, yet having strong potential for further development such as as changwad Korat.

Earlier, we have stressed the importance of resuming the attractiveness of rural areas by strengthening investment of infrastructure and human resources development. However, it should not be misconstrued that we intend to confine the lives of farmers in villages. Rather, the creation of life sphere, as it were consisting of one core provincial town connected with its neighboring rural villages would be able to offer quite a viable alternative over that of Bangkok in terms of quality of life. In this regard, we are convinced that Korat will serve as model for initiating such an urban rural unified life sphere in order to meet better the needs and aspirations of the majority of Thai people.

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