THAILAND HUMAN DEVELOPMENT REPORT 2003

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United Nations Development Programme

The cover photo shows a huge stage poster of the Assembly of the Poor (AOP)'s rally in front of the Government House that says "Assembly of the Poor follows up on the (Government's) promises". On the wrist is written "United like sticky rice, together as one for the victory". The placards mention various problems and issues that AOP have campaigned for or against, e.g. dams, forest-land, alternative agriculture, state's projects, fake pigs-cows.

Photo credit: Friends of the People (FOP)

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FOREWORD

His Excellency Thaksin Shinawatra

Prime Minister of Thailand

It is my pleasure and honour to introduce the second UNDP National Human Development Report of Thailand.

At the beginning of the new millennium, all nations are eager to focus on poverty alleviation in its broadest sense, not just from an economic and technical perspective as tended to be the case during most of the 20th century. UNDP's focus on "human development" provides an excellent framework for this broader approach and matches well with Thailand's own "people-centred approach" to development.

Globalization has tended to divert attention from this broader perspective, focusing too often exclusively on economic growth and its attendant opportunities. While such employment creation is indispensable to poverty reduction, it is not sufficient in itself. Yes, it provides opportunities but it also threatens traditional values. As a result, local communities feel a compelling need to balance these global forces with greater control over their lives, seeking inner strength through community empowerment.

In Thailand, itself engaged in a powerful process of democratization, this dialectic – between the global and the local – has been steadily growing, especially in the past two decades. We understand the need to reconcile these sometimes-conflicting forces, and the deeply felt need of people to assert their own interests and values. We know that values and wisdom of all sorts exist in the Thai community and that these must be harnessed for the greater benefit of our society.

The challenge is how best to accomplish this and I believe that this report provides many useful insights. It is clear that community empowerment in Thailand means evolving an entirely new enabling environment for rights and accountability, indeed, a whole new way of thinking. *"The challenges of today's problems, and tomorrow's cannot be met with yesterday's solutions, suitable as they may have been to yesterday's problems."* This kind of development is long-term work to which the Thai government is actively committed, inspired by His Majesty the King's advice on self-reliance and sufficiency economy.

I have no doubt that many organizations will be moved and inspired by this particular Report. I believe it will assist understanding of the issue and create an opportunity for us all to support and promote community empowerment both as a means to, and as an end of human development.

(Thaksin Shinawatra)
Prime Minister of Thailand

PREFACE

Dr. Sippanondha Ketudat

Former Chairperson, the National Economic and Social Development Board
Chairperson, Thailand Human Development Report 2003 Review Board

I was honoured and delighted to have the privilege of serving as Chairperson of the Thailand Human Development Report for the second time.

Like all sequels, the challenge of the second issue is to be at least as good, if not better, than the first. The task is therefore not easier, but more difficult. But I must say that the difficulty in producing this Report far exceeded my expectation.

This, I hope, says something about this Report. It is a product of much expectation exasperation, hard work, long-hours of debate, zigged-zagged and patchy progress, play-by-ear plans, several revisions, contention and compromise. In many ways, it reflects the state of play in community empowerment as well as other developments in Thailand right now.

As Chairperson of the Review Board, I shared the stewardship of this Report by negotiating and balancing among different viewpoints, while ensuring that the Report can fairly represents community empowerment in Thailand.

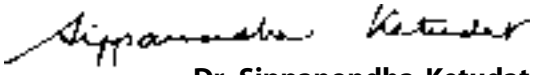
As a Thai citizen who has served in the academic, public, private, and civil society sectors, I actively shared my ideas and experiences, and was heartened to observe that, while there were many points of divergence both at the philosophical and practical levels, some fundamentals have been unequivocally established, at least among the diverse groups engaged in the drafting process.

Among these fundamentals is the general agreement that the changing complexities and needs of our society far exceed the skills and capacity of any government, and that the solutions often lie where the source of the problems were thought to lie – i.e. the people, especially rural communities.

These people, in spite of poverty and deprivation, have demonstrated that they have the capacity to overcome adversities, especially structural and institutional barriers; to stand on their own; to challenge the conventional practice with their local wisdom; and to extend a helping hand to their peers.

It is a revelation that is crucially important to the future of this country. It is my hope that the UNDP Report contributes to this empowering process by echoing different perceptions, ideas, stories, suggestions, and sharing them widely within and outside the country.

Finally, I hope that the Thailand Human Development Report 2003 will be read, discussed, challenged and enjoyed by all, including the communities – some of whom have contributed their valuable time in making it possible.



Dr. Sippanondha Ketudat

PREFACE

Mr. J.K. Robert England

Resident Coordinator, United Nations System in Thailand
Resident Representative, United Nations Development Programme, Thailand

This is the second time that the UNDP is releasing a Thailand Human Development Report. This second Thailand Report joins a diverse family of such reports worldwide – prepared at the national, sub-national and regional levels – which complement our global flagship publication. Each such report seeks to throw light upon a particular dimension of development, as seen from the vantage point of human – or people-centred-development.

UNDP has been supporting Thailand's development efforts since 1955, almost five decades of close and productive partnership. As elsewhere, our work always has as its primary goal the promotion of sustainable human development of the sort that springs from national priorities and is shaped by the special circumstances and local needs of Thailand itself. We are fortunate in that Thailand is widely regarded as a remarkable development success story, and we hope our work has contributed in a modest way to this success. Certainly, we ourselves have benefited immensely from the many lessons learned through pioneering development initiatives undertaken by public, private, and community organizations in this vibrant country.

Thailand is a fertile and exciting ground for community empowerment experiences, an important dimension of the development process in many countries. In this country, the government, the private sector, academia and the communities themselves have all been actively involved in this dynamic process. They have variously engaged in studies and research, piloting exercises, comparing experiences, discovering best practices, learning and re-learning the meaning of community and community empowerment, documenting and sharing knowledge, institutionalizing changes to facilitate community empowerment.

It was for this reason that UNDP Thailand decided two years ago to make "community empowerment" the focus of the second Thailand Human Development Report. In doing so, we decided to follow the cardinal rule of community empowerment: "the process is as important as the result". The process of making a community empowerment report should also be empowering for the communities. Put another way, a report about this subject would be hollow if it were not founded on the views and experiences of communities themselves.

In the making of this Report, UNDP Thailand therefore provided a continuous forum for an active exchange of ideas and experiences. Contributors ranged from policy-makers, public officials, civil society leaders, academics, non-governmental development workers, and last but not least, community leaders from various regions.

It was a difficult, but very enriching experience. We were impressed by the diversity of ideas; the breath and depth of the debate; the spiritual and cultural underpinning of the Thai experience; and the passionate account of bitter but inspirational struggles for self-empowerment of community leaders over the last several decades. If the process of preparing this Report was an especially challenging experience, it was precisely because there is so much energy in the community empowerment sub-culture of Thailand. We hope this is captured in the Report itself.

Community empowerment through the making of the Community Empowerment Report

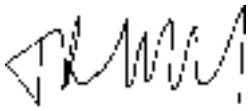
Community empowerment through the making of this Report took place through:

- The participation of 4 community leaders not only in the preparation of Chapter 1 but also in the regular meetings of the Review Board.
- Community's ownership of chapter 1 "The Communities' View". This chapter presents community voices echoed through regional community forums, dialogues recorded and transcribed and compiled by regional coordinators and advisors, and communities' own writings.
- Review of other chapters at the regional community forums.
- Participation of 2 community leaders in editorial meetings.
- The Report's editing style that places the community's view at the heart of the Report, and aligns other chapters around it.

While so much has been accomplished in this area, the challenge is still formidable. One of the most important challenges is to negotiate between the force of globalization and localization, and to ensure that the communities have viable options and the capacity to exercise them in this increasingly globalized world. This should certainly not be seen as necessarily in conflict: the communities themselves clearly wished to participate in and benefit from the economic opportunities that globalization can foster. However, they do not wish their own culture and priorities to be swept aside in the process.

Another important challenge is that of decentralization. This dramatic shift in political power in Thailand, hastened by and largely on course since the 1997 Constitution, represents another critical opportunity and challenge for community empowerment. If carried out effectively, it will move the locus of decision-making as well as accountability closer to the communities wherever possible, thus balancing the often impersonal forces of globalization. However, such a change needs careful management and capacity enabling/building at the local level, if it is not to fall short of expectations and risk consequent reversal.

But, I think the communities should be permitted to speak for themselves in this Report, and in the Kingdom. And I hope that this Report illuminates this dimension of development and contributes to a broad discussion on this score.



Mr. J.K. Robert England

ACKNOWLEDGEMENTS

UNDP Thailand wishes to convey its profound gratitude to a number of individuals and institutions for making their valuable contribution to this Report.

First and foremost, UNDP is indebted to *Dr. Sippanondha Ketudat,* Chairperson of the Review Board, who chaired 8 review board meetings, joined several consultative sessions in Bangkok and upcountry, reviewed and provided valuable comments on the various drafts. Through his initiative and strong support, the drafting process became an empowering experience for all involved.

UNDP also wishes to thank NESDB for its interest and enthusiastic collaboration in this exploration of community empowerment, as well as its engagement in the preparation of the Human Achievement Index (HAI) as a public policy instrument.

The Review Board itself was an active and engaged group of individuals and institutes. A full list of the Board's membership follows these individual acknowledgements. At the meetings, the most prominent were the community representatives and their advisors, namely *Khun Johni Odochao, Khun Jaidee Sawangarom, Khun Pranee Noanchan, Khun Viboon Khemchalerm, MR. Dr. Akin Rabibhadana, Dr. Chayan Vaddhanaphuti, Dr. Ken Kampe* and *Khun Nisakorn Rabibhadana.* This team was responsible for enriching the discussion by bringing stories, voices, poems, lyrics and songs from communities in the four regions to the Report, and the Review Board.

Among the most hard-working and hardest-hit were the contributors to the various chapters and the draft translation namely *Dr. Chartchai Na Chiangmai, Dr. Kanitta Kanjanarangsrinon* and *Khun Weeraboon Wisartsakul, Dr. Apichai Puntasen* and *Dr. Patamawadee Pochanukul Suzuki, Khun Sunantha Natenuj,* and *Dr. Chanida C. Bamford.* They produced draft after draft for review and comments, and endured the creative tensions with grace and good spirit.

Efforts of various contributors would have gone to waste had it not been for the ingenuity of the principal editor – *Dr. Chris Baker* – who gave real meaning to the saying "the whole is larger than the sum of its parts". He was the main architect of the structure, style and analysis of the report. Credit also goes to contributing editors, namely *Dr. Jafar Javan* and *Dr. Apichai Puntasen,* as well as *Khun Pranee* and *Khun Jaidee* – two community representatives who participated in the editorial meetings.

The Report also benefits considerably from top-notched expertise around the world. *Prof. Robert Chambers* gave valuable comments on the participatory drafting process. *Dr. Charles Myers* provided technical overview of the HAI. *Mr. Marc-Andre Franche* provided feedbacks in the initial phase, while *Ms. Saraswathi Memon, Ms. Sarah Burd-Sharps* and *Ms. Cherie Hart* volunteered comments to the near-final draft.

Last but not least, credit is due to many UNDP Thailand staff, who contributed to the process, including *Khun Punnipa Ruangtorsak, Khun Walaitat Worakul, Dr. Ampai Harakunarak, Khun Tongta Temboonkiat, Khun Sirisupa Kulthanan* and *Mr. Håkan Björkman.* However, special thanks should go to *Mr. Alvaro Rodriguez* who provided support and guidance throughout and to *Khun Parichart Siwaraksa,* who not only contributed greatly to the substance of the Report but managed the process through 30 turbulent and argumentative months, during which she never lost her cool or her belief in the value of the end product.

Institutions, individuals and community representatives on the Review Board

Institutions:

Office of the National Economic and Social Development Board (represented by Khun Boonyong Vechamesri, Khun Komol Chobchuenchom, Dr. Witit Rachatatanun, Khun Suwanee Khamman, Khun Waranya Teokul, Khun Suladda Sirilerkpipat, Khun Aratip Archaviboonyobol, Dr. Priyanut Piboolsrawut, Khun Chitti Chuenyong, Khun Somsri Luangmanirut, Khun Araya Ma-In, Khun Phichai Likitvarakul, Khun Suchart Jaturongchaisatit, Khun Nipa Kittiruangchan, Khun Thammarong Jaratdamrongwat, Khun Artisuda Nanakorn, Khun Nareeta Supradist)

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Khun Jaidee Sawang-arom (from the South)
Khun Pranee Noanchan (from the Northeast)
Khun Viboon Khemchalerm (from the Central Plain)
MR. Dr. Akin Rabibhadana
Dr. Chayan Vaddhanaphuti
Dr. Ken Kampe
Khun Nisakorn Rabibhadana


THAILAND HUMAN DEVELOPMENT REPORT
REVIEW BOARD MEETING # 7
6 OCTOBER 2002

OVERVIEW

THE POWER OF EMPOWERMENT

Human development is about improving people's lives. It means more than increasing incomes or national wealth. It aims to expand the capability of people to live long, healthy and creative lives, to acquire knowledge, to have access to the resources needed for a decent standard of living, and to enjoy dignity, self-respect, and the respect of others.

Empowerment is both a means and an end of human development.

Many people in the world deserve better lives than they live today. Few would disagree with that. But suppose we change the statement a little. Many people *have the right* to better lives than they live today. That's a much more powerful idea. It's the result of joining together the idea of human development and the commitment to human rights. As the *Human Development Report 2000* stated: "Human rights express the bold idea that all people have claims to social arrangements that protect them from the worst abuses and deprivations – and that secure the freedom for a life of dignity". This approach makes development into a right which people can claim, rather than a gift bestowed by others. It's an idea which *empowers* people to claim the right to development. That is why the thematic section of this *Thailand Human Development Report* is about empowerment.

There's a second reason. We assume we know what a "better life" means – higher income, greater security, better health, longer lives, fuller knowledge. The Human Development Indices in Part II of this Report measure how well these goals are being achieved. But in reality each person or each group of people has a perception of what a "better life" means. This perception may change over time. So the first step in empowerment is letting people determine their own development goals. Empowerment is both a means and an end of human development.

Part II of this Report contains maps and tables showing some key indicators of human development in Thailand. The Human Achievement Index (HAI) is a summary of all these measures. It has a striking pattern. The provinces with the highest scores are mostly grouped close to the capital city of Bangkok. Those with the lowest scores are mostly along the borders, at the farthest distance from the capital. The pattern is far from exact and uniform. But it tells a story. In the past, power has been very centralized in the national capital. The progress of human development has tended to reflect the pattern of power. The empowerment of people is a way to reverse this trend.

What is Community and What Communities?

Community is experience, feeling, relationships. It is not defined by geography or by official rules. It is something which people feel they belong to. It is a network of relationships. It can be big or small. It can change over time. It can strengthen or decay.

Each community is unique. Some may be very egalitarian. Others not. Some may work by consensus. Others not. Some may be dominated by "influential" people. Others not. The variety is huge and defies generalization.

The community stories which appear in the following chapters come mostly from villages and provincial towns. This reflects Thailand's demography. The capital is the country's only large city, and three-quarters of people live in the villages and provincial towns. But it is also a deliberate choice. There are also important urban communities but their characteristics, their problems, their organizational networks, and their relationships with government are rather different. They deserve separate treatment. This Report focuses on the communities of the rural area and provincial towns.

But why *community* empowerment? On a world scale, globalization has increased inequities – of livelihood, access to power, access to resources, and ability to maintain stocks of social and cultural capital. This has the effect of eroding the fruit of the state's policies to advance the goals of human development. As a result, communities everywhere have looked more to their inner strengths in order to negotiate their own accommodation with the forces of globalization. Demands for community rights have increased – especially over natural resources. And governments, development workers, and international agencies have increasingly looked to communities to replace or supplement the work of government bureaucracies. Community empowerment is emerging both from the bottom up, and the top down.

The demand for grassroots development in many parts of the world has been made on behalf of communities. One place where this demand has been heard loudly and long is Thailand.

THAILAND AND COMMUNITY

In Thailand over the last two decades, the role of the community has become an important part of both social theory and development work. At least three different sets of actors have contributed to this trend. First and foremost, local communities themselves have led the way. In some cases they have realized their own potential to create new forms of social, economic, and human capital in the locality. In other cases, they have demanded shifts in the power structure to allow themselves greater control over natural and human resources. Second, a growing number of NGOs, development workers, social activists, and academics have given support and assistance to projects to strengthen communities in a variety of different ways. Third, several government departments, donors, businesses, and international development agencies have promoted community-based schemes. This trend has accelerated since the 1997 economic crisis.

In the view of Thailand's community activists, the community is much more than an institution which can help deliver development. Rather the community itself embodies social values which contribute to the well-being which is the goal of human development. In particular, communities provide a link to tradition and culture; they facilitate participation; and they foster close social relations which are the basis for providing social protection.

This is captured by two of the maps in Part II. Map 6 shows that family and community life is weakest in the relatively developed areas in and around the national capital, and strongest in some of the poorer areas in the periphery. Community participation in Map 8 shows a similar pattern (though with different regional variation). These maps suggest how building and maintaining strong communities is one strategy through which people combat the bias of centralization. The cases presented in chapter 1 show how this is being done.

But communities are not isolated. They are part of a broader economy and society, and subject to the authority of government at different levels. They cannot provide all their own needs, and hence have an interest in how decisions are made on the public goods which they require. In the past, such decisions tended to be made top-down. But communities do not deal with government authorities on equal terms. In some cases, government agencies have ignored or sacrificed the interests of local communities on behalf of a "national interest" which may not have been well-defined. Community empowerment is thus also about the ability of people to demand public goods and to defend their rights within a wider political arena. Some of the cases in chapter 1 show how communities have mobilized for these purposes.

Thailand's experience with community empowerment is uniquely important because it has been growing over at least two decades, because it involves a range of different actors, and because there is an active and sometimes passionate debate about the community, its role, and its future. The Thai case is interesting because it is so varied and so vibrant.

WRITING EMPOWERMENT

The commitment to produce this Report began within UNDP, among professional development workers. But it quickly became obvious to those involved that the production of a report on the theme of community empowerment ought to empower communities as part of the process. Hence the method of producing the report was radically revised. Four representatives of local communities were included on the Review Board overseeing the project. Community members were added to the editorial team. Community forums were convened to express ideas and to select local writers to draft sections of the report. Drafts (in Thai) were submitted to review by community representatives.

The report is thus the result of a dialogue between development professionals and consultants on one side, and community representatives and sympathetic organizations on the other. It would be wrong to present this as a smooth and easy process. Rather, it revealed very considerable gaps in understanding and hence took much longer than expected to complete. It would be wrong too to expect the resulting report to present a single, homogenous, and neatly logical view. The aim of the report is to *explore* community empowerment in the Thai context, including the diversity of experience and the conflict of views.

EXPLORING DIVERSITY

The term "explore" is important. The objective of the report is not to provide an operational definition of community empowerment or to prescribe formulas of how it works in practice. Empowerment has been defined within UNDP as "the ability of people to gain understanding and control over personal, social, economic, and political forces in order to take action to improve their life situation". But this is a definition of "what" rather than "how". The English term "empowerment" is something of a paradox. It suggests there is an agent (the government? the development specialist?) who is somehow making the community more powerful in some way. But this action itself is a display of power on the part of the agent. Not surprisingly, Thai community representatives who were involved in producing this Report rejected Thai translations which made this paradox explicit. They preferred forms which translate as "regain community power" or "revive community authority". Their definitions clearly shifted the *right* to empowerment away from any outside agent to the community itself.

One important conclusion of this exploration is that *diversity* is an intrinsic characteristic of local communities, and that embracing this diversity is a precondition for community empowerment. Each community has its own uniqueness. Each community has its own problems and its own capacity (or lack of) to confront those problems. When we move from national policy to a community focus, we move from the unified to the diverse.

A second important conclusion is that community empowerment is neither easy nor uncontroversial. By definition, it implies a shift in power relations – sometimes within communities, more often between the community and power-holders in the outside world.

Often this entails a struggle. How far such struggles are justified, and to what extent they should alter the power relations on a general basis, is a matter of debate. In many of the examples of community empowerment in Thailand presented below there has been a high degree of cooperation and agreement between the parties involved – between communities and their various components, and government in its various components. However in some cases there has been disagreement and contest, on a fairly large scale. These cases may be in the minority but they are important because they pinpoint the areas where there is not yet a consensus. One of the objectives of this report is to identify these areas and suggest routes towards a solution.

In sum, this Report is an exploration which seeks to uncover diversity and reveal debate rather than lay down definitions, prescriptions, formulae, road maps, or quick guides. It is hoped that by reviewing not only records of success but also points of confrontation and areas of misunderstanding it will contribute to a process of learning and consensus building by all parties concerned.

PLAN OF THE REPORT

PART I: COMMUNITY EMPOWERMENT AND HUMAN DEVELOPMENT

1: THE COMMUNITIES' VIEW

This is the foundation chapter in which people from local communities themselves describe how they have struggled to gain power to improve their lives and prospects. It includes case studies compiled by communities from all regions of Thailand. The chapter concludes that communities have a clear idea of community empowerment as a learning process with three key strategies.

2: THE NEW INSTITUTIONAL CONTEXT FOR COMMUNITY EMPOWERMENT

This chapter begins by looking briefly at the history of communities in Thailand, highlighting how much they were disempowered by the political and economic changes which arrived rapidly from the 1950s onwards. It then looks at the forces which returned community empowerment to the national agenda in the 1990s and which have begun to change the institutional environment. It reviews the major changes in the institutional context brought about by the 1997 constitution, the Eighth and Ninth Plans, the decentralization to local government, and education reform. Finally, it questions how far these changes facilitate community empowerment and what further reforms are necessary.

3: PROMOTING COMMUNITY EMPOWERMENT

Community empowerment takes place within a broader, national context. This chapter looks at the development of community-based approaches as a learning process on a national scale. It starts by reviewing some early examples of community schemes and cooperation between communities and outside agencies. Then it traces how government agencies have funded research to understand community dynamics, resulting in the gradual adoption of bottom-up community-based planning techniques. Finally the chapter reviews the rapid expansion of community-based initiatives in response to the 1997 crisis, especially projects inspired by H.M. the King's "Sufficiency Economy", and projects supported by the Social Investment Fund.

4: COMMUNITY EMPOWERMENT AT THE CROSSROADS

This chapter brings together conclusions from the three preceding chapters. Empowerment has become an important concept in development strategy as a result of the marriage of human development with human rights. Community members and activists in Thailand reached a similar conclusion as a result of the confrontation with a centralized state and top-down development. While recent institutional changes have facilitated empowerment, there are still considerable barriers of conservative opposition and bureaucratic inertia. Learning from successful local projects need to be disseminated. Democratic decentralization must be helped to succeed. The institutional weaknesses in systems for claiming rights must be overcome. The final part of the chapter suggests ways that various actors – communities, government, development organizations – can assist community empowerment in the pursuit of human development goals, and what changes in national policy-making are needed to promote community empowerment as a means and end of human development.

PART II: MEASURING HUMAN DEVELOPMENT

5: HUMAN DEVELOPMENT INDICES

This chapter introduces a new composite index – "Human Achievement Index" (HAI) which is an adaptation of UNDP's global Human Development Index (HDI). HAI compares the state of human development in 76 provinces of Thailand by using 8 components of human development indicators, namely health, education, employment, income, housing and living conditions, family and community life, transportation and communication, and participation. In this chapter, HAI, HDI and GDI are presented at both the regional and provincial levels, confirming a pattern of inequities and uneven development that deserves immediate and long-term policy action.

Contents

Contents

Contents

CONTENTS

PART I

COMMUNITY EMPOWERMENT AND HUMAN DEVELOPMENT

CHAPTER 1

THE COMMUNITIES' VIEW

> The strength of people and communities at the grassroots is the strength of the nation.
>
> *– Wibun Khemchaloem*

INTRODUCTION: WRITING THIS CHAPTER

There's a Thai saying, "Speaking is easy, doing is difficult". There's also a more mischievous variant, "Speaking is easy, listening is difficult". A first step towards empowering communities is to listen to them, and let them tell us what they think empowerment means, how it can be achieved, and how it is sometimes impeded.

This chapter presents community voices from all over Thailand. This is how the chapter was written:

- four coordinators who work with communities in different regions of Thailand identified groups of villagers to participate in the project
- forums were held where the community representatives were encouraged to tell how they had learned to grapple with their own problems
- the dialogues were recorded, transcribed, then compiled into a report by the coordinator
- these reports were edited down for length and readability; the "voice" in each of the accounts below is a synthesis of several people in the community

We present these histories and opinions here with no introduction. We will come back to summarize and interpret them briefly at the end of the chapter, and then more fully in chapter 4. But to start off, the difficult but necessary task is to listen.

CONFRONTING DEVELOPMENT IN THAILAND'S RICEBOWL: LEARNING SELF-RELIANCE

Photo credit: Dr. Ken Kampe

"Speaking is easy, listening is difficult". Let them tell us what they think empowerment means.

In my village we used to grow rice, and go into the forest to hunt animals and collect things to sell. Families and kin were close. People helped one another. Villagers didn't know much about money. But since development came, we have new crops. The community started to change. People began to think differently. Even I changed. My parents told me to work hard and make money. I followed along.

Photo credit: Energy for Environment Foundation

Thailand's Central Plain is naturally very fertile. Five rivers flow down from the hills – the Phetchburi, Thajin, Mae Klong, Chaophraya, and Bang Pakong. For centuries they have bought down sediment which formed a fertile delta. The kings built canals criss-crossing the delta. These canals were meant as highways, but they also attracted settlement. More and more people came. But even in the memory of people living today, it was not too crowded. There was more than enough for everyone. But the changes over the last "development" generation have been massive. The economy and ecology were dramatically altered. People are still grappling with the resulting impact on their own lives. This section comes from the experience of many Central Plain villagers who have been inspired by the self-reliance teachings of Headman Wibun Khemchaloem.

Then BAAC[1] began to offer loans. From then, relationships in the community started to change. We used to exchange labour among families. Now we hire people. In the past the family all ate from the same pot. Now they eat from the same food vendor.

– Nikon Kaeokham, Chachoengsao province

Before, you wouldn't think of rice without fish and vegetables too. If we went to plough a field, we'd collect vegetables from the ponds and eat them right there. Now these kind of vegetables have all gone.

– Udom Klipmalai, Ayutthaya province

Back then we lived off nature. We grew rice by broadcast. We could live because we did not worship money. We'd barter among ourselves for coconut, sugar, beans, vegetable – all of which were easy to find around here. We had plenty of rice to trade for other things at the local market. Boats came there with vegetables and fruits to trade. At that time, there was no pressure. With some effort, we could produce enough to eat and barter.

– Sivilai Klipmalai, Ayutthaya province

The ways of life of those days are not forgotten. They are part of our culture. We had enough. Nobody went hungry. And nobody wanted to grab more than they needed, because there was always enough to go around – for ourselves and our children. It was a good life.

Around 1961 the government set out a new course of development. We can remember the time because there was a famous song about Headman Li calling villagers to a meeting to learn about the new policy. It's a funny song because both Headman Li and the villagers can't understand the new policy. It's written in city language they don't understand. But it's a sad song too, because it pinpoints the time when we ceased to control our own lives. People from outside came to tell us what to do. Our own knowledge and old ways were no longer good enough. And even if we did not understand the new ideas and new orders, we had to follow them.

With development, many things got better – schools, health care, electricity, roads. But having enough to survive was no longer enough. We wanted more so we could trade. More trade, more profit,

Photo credit: UNDP Thailand

[1] The Bank of Agriculture and Agricultural Cooperatives, the government's bank for rural lending.

more money, more savings, more power. Money became more important than real value. We let slip things like relationship, unity, and our own old wisdom. You can't estimate the value of such things. And we sold the very things that have made us rich and secure in the past – the natural resources around us.

> The first plan began in 1961. The government introduced new rice strains and had a competition on yields. Our family won. I've still got the trophy. But overall there was not so much change, not so much impact from this first plan. I was even a little resentful that other places were already more developed, while we were still using buffaloes. Then under the second plan, people started to plant a second crop. The kamnan[2] did it first. He bought a tractor and new rice seeds. It was only possible along the canal where there was enough water. Others went and bought the seeds too, but they failed because there was not enough water. Who advised us to start a second crop? It's something we ask ourselves. We were attracted by money. The second crop made a profit. But before long the price dropped and we got into debt.
>
> *– Udom Klipmalai, Ayutthaya province*

Many farmers mortgaged their land to the moneylenders and local traders. And lost it. Many people went off to clear new land in the forest. Families went by the truck load. The forest was cut down for big plantations of cassava, maize, and soybean.

The other way out for the landless was to go to the city, and work on construction sites. After the forest was closed,[3] this was the only way out. Besides, by that time, industry had begun to grow. Many young people went to work in the factories. And the industrial areas started to spread out from the cities.

> Up to 1982, even though we had drought years, people still had little or no debts. After that they grew steadily. From 1987, land started to change hands. Then after the factories appeared, the youngsters went to work there. There was nobody to plough because only a youngster can do it. So people left the land idle and waited for their kids to send them money. Parents couldn't criticize their kids because they depended on them. This created another kind of problem. The factories brought many changes. Land was left idle. Kids bought vehicles and got into accidents. Towns sprung up around the factories with casinos, snooker, karaoke. From that time, money was everything. The family started to break up. The old warmth was gone. In 1987-91, the price of land soared. People said farmers ought to be happy, but they didn't understand. In an agricultural country, if land prices soar, before long there'll be trouble; the country will hit a crisis.
>
> *– Udom Klipmalai, Ayutthaya province*

When the natural resources are used up and destroyed, then the communities are weakened.

Headman Li

In 1961, Headman Li banged the meeting drum, and the villagers came to the meeting,

To the meeting at Headman Li's house.

I, Headman Li, will now inform you what this meeting is all about.

The authorities have ordered villagers to raise ducks and *sukon*.

Grandpa Si with the shaky head asked: "What's this *sukon*?"

Headman Li answered like a shot,

"A *sukon*, yes, it's just an ordinary puppy, a puppy, an ordinary puppy."

In fact, *sukon* meant a pig, in the formal Sanskritized Thai which officials liked to use but which villagers (at that time) had never heard. This misunderstanding so beautifully typified the reality of top-down development that the song became a huge hit.

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2 The head of a group of villages or sub-district (*tambon*), chosen from among the village heads.

3 In 1989, government revoked all logging concessions and tried to prevent further destruction of forest.

Headman Wibun Khemchaloem has become a living example of self-reliance. At first he was caught up in the trend towards commercial farming. He had a large farm and he produced for the market. But bit by bit he got into debt, and eventually he lost most of his land. He decided to use the small plot that remained to provide as much as possible for his own needs. He gave up growing maize, cassava, and soybean for the market. Instead he grew just enough rice for his own needs, and divided up the rest of the plot for fruit trees, a vegetable garden, a fish pond, and some animals. He found that he could survive even on a small plot. He grew what he ate, and ate what he grew. That became his motto. And he found that he was much happier than before when he was a big commercial farmer. Headman Wibun's story spread. Journalists wrote about his success. People came to look at his farm. Organizations invited him to come and give them advice. He was asked to explain his ideas in a television series. Now he spends a lot of his time advising communities on planning for self-reliance.

Development made people lose their confidence in themselves. We're told our old ways and our old knowledge aren't good enough any more. The local wisdom and the knowledge passed down from generation to generation are being destroyed. The knowledge of dharma[4] which teaches us to rely on ourselves is also being lost. The education system actually helps destroy the old knowledge. Education has been designed to produce people for industry. Learning has become something that is bought and sold. Education is an investment and investors want to get a return on their money. So people who go through schools just end up like cogs in the industrial machine – sometimes without even realizing it.

Our capability is actually going down because our self-confidence is ebbing away. In the end we won't know anything. We have to start relearning things so we can strengthen our communities. We have to think how the community can regain its self-confidence to tackle problems, and rely on itself rather than waiting for help and sympathy from others.

> I didn't come to this decision by choice. I simply had nobody else to rely on so I decided to rely on myself.
>
> *– Wibun Khemchaloem*

Other farmers don't need to wait until they are in such dire straits as I was. They should act now. Self-reliance is easy to preach but difficult to do. But it's worth the effort. We have to survive, but with dignity too.

The first stage is to make a plan. When we define the problems we face, we find some can be solved within the family, but others can be solved only within the community as a whole.

The second stage is to look for the information we need for making decisions and reducing the risk of failure. For some information, we need to look outside the community. We have to go looking for new information and be prepared to test and experiment. These are the main areas to cover.

1. Rice is the staple of the region so this has to be the starting point. We tend to think of rice as just rice. But there are over 30,000 different strains to choose, and over 2,000 ways to use the plant, not only the cooked grain but the husk, bran, stalk, leaf, flower, and root.

Photo credit: Dr. Ken Kampe

"Bai-see" – is a merit making ceremony to honour the Goddess of Rice.

[4] Buddhist teachings.

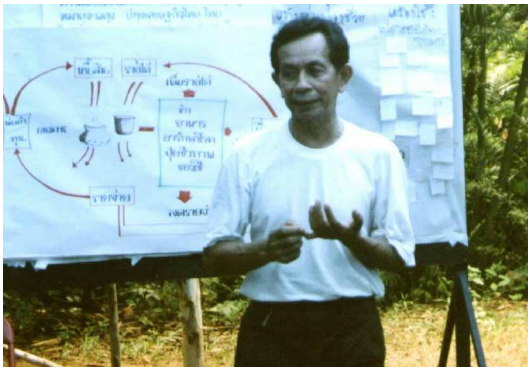

Photo credit: Dr. Ken Kampe

Wibun Khemchaloem

2. Other food can come from many different places. We can plant crops. We can gather many things from the forest, from the edges of the fields, from ponds. We can preserve foods in various ways.

3. Sickness is a fact of life. Some ailments we should prepare to cope with on our own. Others are more complex and we have to organize ways to deal with them at the community level.

4. We need tools and equipment, and a lot of these we can easily find from nature around us – fabrics, dyes, wood for tools and furniture. Beyond these basics, we should develop our abilities to make things rather than simply buying them.

5. The land is important. We need to understand natural ways to increase its fertility so that we can live in harmony with the land.

These are the basic principles. Once these are understood, the next stage is developing the community through participation to create a common learning process.

If a community can develop its capacity to learn as a process with a definite direction, then the community will recover the confidence to develop its own strength and capability. Bit by bit we can rebuild from the community, to the society of the Central region, and then the nation. The strength of people and communities at the grassroots is the strength of the nation.

– Wibun Khemchaloem

The villagers in Tha Kradan subdistrict are an example of Headman Wibun's ideas in practice. They started by making a survey which showed that the 168 households had an average income from rice, maize, soybean, and sesame of 45,000 Baht[5] a year, but expenses of 75,000 Baht a year. As much as 72 per cent of the expenses were inputs like fertilizer, chemicals, and gasoline that had to be bought from outside the community. We knew that raising the income would be difficult. We had to find another way.

The learning process began with the foundation of a savings fund. It was a way to get people to join together, exchange knowledge, and understand one another's problems. After a year, villagers realized that one important problem was that some people did not have enough rice to eat and so had to devote some of their time to earning wages. The solution was to set up a rice welfare fund. There's an old belief that you shouldn't sell your old stock of rice until the new crop is harvested. The villagers who kept to this belief had stocks which they put in this welfare fund.

Next was a scheme to preserve and manage the community forest. We had to relearn old wisdom about the value of food and medicinal plants from the forest. Then we had a fish scheme – a ban on fishing during the breeding season – and now the overall catch is much larger. We had to think up new customs. For instance, having a merit-making ceremony for fish that have been poisoned, and planting twenty trees whenever a child is born. Also we made a point of using organic fertilizer, raising buffaloes to reduce production costs and restore the environmental balance, thinking up ways

5 At the time of writing, US$ 1 is approximately 42 Baht.

to process and preserve agricultural produce, and making things to replace items purchased from outside like detergent, shampoo, toothpaste, and drinking water.

> In July 1996 I had the chance to stay at Headman Wibun's place. We talked about many things. He advised me to review my income and spending. So I started keeping accounts. When I added things up after one year, I understood why I was in debt. Our little family eats three times a day for 365 days a year at 20 baht a time, which works out as 21,990 baht for the year. How many rai[6] of maize do we have to grow to pay for that? And we haven't started talking about tobacco, alcohol, school fees, and other outgoings.
>
> So I stopped growing maize, and planted vegetables and trees. I grew everything I ate, and ate everything I grew. With 40 to 50 rai of maize I couldn't stay out of debt, but with only a little land we had enough to eat. At the beginning, my wife argued against it, and so did the friends I used to drink with. But when I grew papaya, they came to buy them from me. In 1997, I gave up drinking and smoking and encouraged my friends to form a group to think about developing the village. We drew up a plan. We knew it had two possible outcomes – survive or die. But we also knew that if we didn't follow a plan, there was only one possible outcome. So, no choice. The government has lots of projects for us to do. But it has never had a project to help us think about what to do.
>
> *– Liam Butjantha, Chachoengsao province*

A strong community does not arise just like that. It starts from learning, from analysing ourselves so we understand the source of our problems, so we realize the value and the wisdom of all sorts that exists in the community. Then we can fine-tune that wisdom for today's world in order to solve very basic problems. Sustainable agriculture is the foundation. It provides enough to live. It must fit in with the environment and resources which are the common property of the community. It should not harm our health but rather strengthen it. Once we have enough for ourselves then we can think about selling what's left over. But we should not be selling raw materials. We should find ways to develop products by setting up family industries or community industries. We need to save up our own capital so that we rely as little as possible on outside capital. We should have our own system of community welfare.

It starts from asking ourselves how we want to manage our lives, and how we can join together as a community or locality. We have to learn and be creative to make systems that are right for the community.

> I started discussing with friends and relatives. At first nobody believed me because there was no concrete result. Now it's easier. A member of our savings group had a motorcycle accident. I went and paid the medical bill from our welfare fund. That made people believe that a youngster like me could do things. No need to wait until the *oboto*[7] gets set up. We've been waiting for ages already. Our group just decided to do it. We'd make mistakes but we could put them right. We have to focus on the main problem: how to make everyone self-reliant. We have to eat every day but we don't have income every day. So I realized we had to build a secure foundation by first reducing expenses as much as possible.
>
> I once asked a waitress why she worked in a restaurant. She said she didn't want to work in the fields. She was afraid of worms and centipedes. I thought of my own daughter. If we

[6] A rai is 0.16 hectare.

[7] *Oboto* is the Thai abbreviation for the Tambon (sub-district) Administrative Organization (TAO). This new level of local government is considered in chapter 2.

don't know how to manage our children, then they will turn out like that. I can't abandon farming because it's my livelihood. But we need to create the conditions which will allow us to survive. As a family and as a nation, we need to plan ahead.

I've come to realize the value of our natural resources. I'm beginning to understand how to manage things and I'm not afraid of problems. Also, I'm not ashamed of having been a buffalo boy because now buffaloes are even more expensive than cars. Besides, they don't need petrol or repairs. Nature has taught me to be smart and strong. Otherwise I couldn't survive.

– Nikon Kaeokham, Chachoengsao province

Community empowerment starts with learning and especially with learning about ourselves. We have to look at ourselves and our communities, research the origin of our problems, rediscover the old wisdom in the community. Reviving local wisdom is a way to start a learning process in the community, to trigger a movement for change towards self-reliance, survival with dignity, and independent decision-making. The three basics are people, natural resources, and wisdom or local knowledge. The three aspects of the learning process are: knowing how to know, knowing how to use existing knowledge, and knowing how to relate with nature. Local knowledge from the past gives us the confidence that the available natural resources can support our livelihood, build society, and preserve local culture. With this confidence we can begin to learn new things too. This is community empowerment.

COMMUNITY LEARNING: THE BANK OF LIFE NETWORK

We didn't have money, but had everything else. We bartered. Later on, we had to sell, to take loans. We were all in debt, but did not know what to do.

– U-taphao community member

Khu Tao is a community on the U-taphao canal outside Hat Yai, one of the main towns of the south. The rapid growth of Hat Yai has transformed the surrounding area. The "Bank of Life" is a savings group started in Khu Tao in October 1984. The story is told by the monk and villagers who initiated and manage the scheme.

We used to grow rice, vegetables, and fruit. We rarely used money. Each household had two pigs, two cows, and nine or ten chickens. We used to travel by canal to the market where we bartered our banana leaves, fish, sugar cane, sugar-palm nuts, pomelo, and orange for honey, shrimp paste, betel nuts, and other goods. Then development came. We abandoned the canal and travelled by road. We abandoned the rice fields and looked for jobs in the town. At the annual Chak Phra[8] festival we used to carry the Buddha image along the canal by boat. By 1976, it went by road.

Villagers left the community. Prices went up. Soon we had to take loans from local lenders, then from banks. We all had debts, but did not know what to do. BAAC lent money, not knowledge. People here had never seen sums like 30,000 baht. They mortgaged their land and got guarantors. Smart people took advantage of others. A few got rich while others became poor. The government was wrong in doing this.

Photo credit: "Bank of Life" savings group

Than Thong initiated the "Bank of Life".

The key to solving these problems was to work together. The savings group was the idea of a monk, Than[9] Thong, and some villagers. Than Thong came up with the name the "Bank of Life", meaning we entrusted our life to the group. Than Thong was highly respected because he strictly observed Lord Buddha's teaching. He was also a development monk who drew the community into the temple. He used Buddha's Five Precepts and the principle of honesty as the group's code of conduct.

8 A festival in which the Buddha image is taken out of the temple and paraded around the community.

9 "Than" is a title of respect.

Photo credit: "Bank of Life" savings group

The bank charges a fee or interest on loans, pays no dividends, but offers medical and other welfare to community members.

At first, the group had eighteen members, each contributing one baht a day. Many people didn't understand how this could help people. But later others joined the group. Then there were suspicions that Than Thong would hand the money over to the abbot. If the original eighteen hadn't been patient, the group would never have got this far. But now it's a success.

So many people wanted to borrow that the funds were not enough. At first we drew lots to decide who would get a loan. But all the members agreed that was not fair. Someone who really needed the money might not get it. This was solved by having all would-be borrowers discuss together and decide who needed the money most. This system encourages people to care about one another and to share problems. Members cannot take out new loans until they repay old ones. Exemptions are made when schools open and the people need money for school fees. The key principle of the Bank of Life is sharing: "You know my problems and I know yours. So, we understand each other". Every member is equal, has one share, and pays the same amount each day. If a small number of people held a lot of shares, they could bully the others.

The bank charges a fee or interest on loans, but pays no dividends. At first we used the income for making merit and donating to the temple. Now we provide welfare benefits to members for funeral expenses, medical care, emergency loans, disaster relief, scholarships, and school lunches. Everyone gets the same welfare.

Starting with 18 in 1984, the Bank's membership is now about 900. Long-time members can borrow more. Now the Bank of Life has three locations, all in a *wat* (Buddhist temple), each managed independently by a committee. At each *wat* there is a Dharma Forum where people meet to discuss community problems. Monthly meetings rotate around the three temples.

When the Bank had become well established, it got more funds from the government's SIF[10] scheme and from the Songkhla Rural Village Rehabilitation Association. This has enabled the Bank to expand its operation, not only to help more people, but also to strengthen the community's capacity to cope with the changing world. The Bank has started a fund to promote skills that disappeared from the villages, such as producing sugar, making products woven from banana fibre, and making *thong muan*, a famous local snack. These products use raw materials available in the community. Through the Bank of Life we have learned how to be more self-reliant.

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[10] The Social Investment Fund was an crisis mitigation strategy begun in 1998 and funded mainly by the World Bank. It is reviewed in chapter 3.

NEGOTIATING COOPERATION TO CLEAN A RIVER

In the past, along the coast of the Gulf of Thailand and up the river estuaries were mangroves. Many fish, crab, shrimps, and shellfish lived in the mangroves. People have lived around these river mouths, and along the banks of the rivers, for a long time. They grew rice and many other crops. They fished and collected many things from the mangroves. But in recent decades, these areas and the peoples who depend on them for livelihood have been threatened by industrial pollution. This section comes from the experience of villagers around the estuary of the Thajin river to the west of Bangkok.

> In the past, we just went to the canal bank and caught shrimp. Just like that. No need even to go down into the water and get wet.
>
> *– Fisherman, Samut Sakhon province*

The Chaophraya and all the other rivers are now so polluted you cannot use them for drinking or washing. As for the fish and shellfish we used to eat, over 90 per cent of the species have disappeared. Even the fish in the local markets all come from fish farms. River fish are just myths and dreams. Only the rich can afford them. As for the great biodiversity of this region, it's just too sad.

This all came from the development of industry from the first plan[11] onwards. Factories, big and small, are scattered along all five rivers. They spill waste and pollution into the rivers without thinking. The towns around the factories also create garbage. Nature has to suffer everything.

> The pollution along the coastal strip is critical. The Thajin river is bad all year long. The creeks leading to the coast are black with filth, and no fish, prawns, or shellfish can survive. The polluted water comes from the factories which release untreated waste into the river – power stations, semiconductor plants, textile factories, and industries of all sorts. It's getting worse. Every river is polluted, and so the whole coastline is polluted. There's a law about treating water, but the factories don't follow it, and the officials don't do their duty honestly. If there's going to be an inspection, they warn in advance. In short, there's corruption.

We can't live the way we did. We can fish for no more than four months in the year. This year we have been out to sea for only ten days.

When the water turns tea-coloured, everything dies. Only the bones are left. You have to go out to sea for ten miles before you see any sign of life.

In the past we fishermen were happy. Even ate in restaurants and hotels. Now in our village, only 10 per cent have their head about water, and the other 90 per cent are in debt.

We have formed the Thajin River Conservation Club and are taking matters into our own hands because we've had enough. From now on water released into the river must be treated first. If not, we'll blockade a road. We have to raise people's awareness about keeping the river clean by not throwing garbage, bottles, cans, and old lubricating oil in it. Once the river is clean again, we must continue to look after it.

We work in cooperation with government agencies. We're not attacking them. We are just telling them that the villagers have these problems and these requests. Tomorrow we're going to talk to the gas

Photo credit: Bangkok Post

A villager uses a dip net to remove dead fish, bred in floating baskets, died from pollution in the river.

[11] The first development plan covered the years 1961-66.

factories. We'll tell them we don't want to cause them problems but rather to help them. We'll ask them to prevent gas-impregnated water pouring into the river when it rains. We'll ask them how they treat the water and what it contains. Then we'll visit the acid factories and the dyeing works. But it starts with ourselves. We've been collecting the water hyacinth[12] for four months and using it to make fertilizer and food for wild boar and ostrich farms.

Solutions have to be effective. We have to find ways to monitor the discharges. We've identified ten points along the river where we check the water. If the water is still okay at the first point, then we go to the second. If it is not okay at the second, then we pinpoint who is the cause of the problem. There aren't many factories between the two points. This sort of monitoring is the way to deal with people who are not environmentally conscious or who simply break the law. We can tell them: we know you're doing it.

– Fisherman, Samut Sakhon province

BUILDING NETWORKS: THE PEOPLE LIVE, THE CANAL LIVES

The Samrong canal links the Songkhla lake, the largest lake in the South, to the Gulf of Thailand. Five slum communities, including Kaoseng, settled along its banks. Like many slum communities they had no rights to land, found it difficult to get public services, and faced constant threat of eviction. They were also accused of polluting the canal. Their lives changed when they realized that this accusation was not an unfair burden, but a source of power.

I told our people that we lived on the canal, so we have to take care of it. If we let government agencies do it, they will kick us out. They think we are responsible for the pollution. A big elephant dies, the government doesn't smell a thing. A goat dies, they say it stinks.

– Jaidee Sawang-arom, Kaoseng community leader

[12] A fast-growing water plant which tends to block waterways.

Photo credit: "Samrong canal" community

Samrong canal before the clean-up.

Samrong canal used to be clean and clear. Pollution started only ten years ago. The communities along the canal are not the only culprits. The factories are responsible too. But the blame gets put on the communities.

– Jaidee Sawang-arom

It used to be easy to catch black tiger prawns in the canal. The pollution began in 1986 when factories discharged untreated water into the canal. Now there are no fish. The city people accuse us. We might be responsible for 20 per cent of the problem, but no more. There are many sources of pollution – factories, municipal drainage, lubricant oil, water running off the street. Still, they put all the blame on us because we are slum squatters.

Photo credit: "Samrong canal" community

Samrong community cleaned up the canal.

Photo credit: "Samrong canal" community

Samrong canal after the clean-up.

City people look down on us. They believe slum dwellers cause all sorts of problems – drugs, gambling, and crime. Some communities were ordered to leave, but they refused. Some have been removed to make way for commercial development. We are seen as an obstacle. If the land is vacant, it's easier for the authorities to develop the area. But we believe that the people and the canal can live together.

In the past, the government would tell the slum communities what to do and we would follow without question. Then the NGOs came and gave advice, especially the Housing Development Foundation. We had been deaf and blind for a long time. So they were like eye-drops and ear-drops. We began to see and hear better. We believed we could control our own lives. The NGOs did not make decisions for us; they were just our consultants. In the old days, we could never have done this. As soon as we got together, we were strong. Government agencies did not like us to be strong because they thought we would oppose their ideas. That was wrong. In fact, coming together just made us smarter.

In 1990, we started by setting up a savings group to provide some security to the communities that were always in danger of eviction. It's difficult to set up savings groups in urban communities because people come from different places. But the authorities weren't going to help us, so we had to go it alone. Five groups started by 1991, and now there are ten. They give loans to members and use the income for health, education, housing, and other welfare.

The savings groups were just the start of getting together. Once we had this organization, other projects were easier. We started a Child Development Centre for pre-school. This is important because slum kids easily get looked down on when they first go to school. We got money from SIF to help the poor, elderly, abandoned children, and people with HIV/AIDS. We got money from the National Housing Authority to build walkways, piped water, electricity, and drainage but somehow the budget was cancelled. But we got some money from elsewhere to build drains.

> Mostly we dug the drains ourselves, but we also had to cross a municipal road. We wrote to the municipality to give us permission and to help us with a back-hoe for two or three days. We wrote twice but got no answer. We went to see a councillor but he said no back-hoe was available. Then we went to see the mayor. He was shocked. He had not been informed. He sent a back-hoe immediately and we finished the work in three days.
>
> *– Kaoseng resident*

The idea to clean up the canal came up in our savings group discussions. At first each community wanted just to develop itself. But we wanted to show the authorities we were not polluters. So we set up a joint task force. We planted trees along the canal. We organized seminars and invited the relevant officials. We asked business people for help. Most refused but a few understood and still support us. We asked NGOs for help. They found some boats to collect garbage out of the canal.

In the dry season, the canal got blocked by sandbar. The water went stagnant and garbage collects on the bar. People blamed us for the garbage and pollution, but really it came from upstream.

Before the monsoon season, we got together to dig out the sand, otherwise the houses along the canal would be flooded. We also cleared up the garbage. But next dry season, the canal was blocked again, and the garbage and water hyacinth piled up. Again we were the scapegoat. But in fact there was even a fire in the canal because someone discharged a lot of oil into it.

We discussed with our NGO friends how to prevent the pollution. We wrote a proposal requesting UN support to build a wooden fence along the banks of the canal. We also came up with a scheme to stop the sandbar forming each year. While we were working on this, some people saw us from the bridge and notified the municipality that we were encroaching on the canal. The Governor[13] ordered the arrest of the community leaders.

But we did not let them arrest us. We went to see the Governor ourselves. We told him that we had good intentions. We had not consulted the authorities first because they didn't seem to care about the canal. They never acknowledged that factories polluted the canal but always blamed it on the people. Officials at the provincial, district, and municipality offices accepted bribes from the factories. The factories claimed they treated waste water before discharging it. But treatment costs a lot of money. We took the Governor to see where they discharged the water at night. How could we prevent that? If we were not careful, we might be gunned down. We asked why the Governor did not take any action. He told us that he had talked to the factory owners but nothing happened.

Our discussion with the Governor was fruitful. He offered to help us. We asked for 10 million baht. The provincial office drafted a project proposal on behalf of the people to dredge the canal and develop nearby communities. When the budget was approved, we were very happy. At that time we thought the authorities would take care of the factories, and we would handle the garbage problem. But then they told us to relocate 101 of our houses. We did not accept that. We felt that if the canal could live, so should the people.

We made a survey of all the houses along the canal. This helped us use facts and figures to negotiate with the authorities. Our survey found that only forty-four houses needed to be shifted a little. There was no need to relocate them. In the end we agreed to move some houses a bit to make room for a dredger.

The Department of Social Welfare gave us two boats to collect garbage. Now each community looks after its own section. People upstream still throw their garbage in the canal but we have built a barricade to catch it and we clean this occasionally. Now the canal water is green and clear.

Government agencies began to understand us. The provincial clerk even said his work on the Samrong canal made him famous and got him promoted to deputy

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[13] The Governor is the official head of a province's administration, appointed by the Ministry of Interior.

governor in only one year. He admitted that he used to think in a bureaucratic way. He thought the area should be cleared of houses. Now he sees that he needs cooperation from the canal people. After several years of working together, we think many government officials are good. They're not all bad.

Recently we had a ceremony to celebrate ten years of the rehabilitation project. Many important people attended. But the canal is still not as clean as it should be. Recently a TV programme showed the factories illegally discharging waste. We cannot stop them. Only the government can. But it won't.

We cannot look after the canal on our own. The government and the people of Songkhla need to see the importance. After all the canal doesn't belong to the communities on its banks but to the people of Songkhla as a whole.

REDISCOVERING LOCAL KNOWLEDGE IN THE HIGHLANDS

> We want this group to be an example for the lowlanders to see and accept that hill people can live with the forest without destroying it.
>
> – *Khun Ta Villager*

The north of Thailand is an area of narrow valleys separated by hill ranges. One way to see the region is as a number of different river basins. Each river starts up on the watershed, falls down the hill slopes, and emerges onto the valley floor. Along each basin there are settlements of different peoples, and they all in different ways depend on the river. This section is about one such river basin – of the Mae Wang, a tributary of the Ping river in Chiang Mai province. On the upper slopes, there are Hmong villages. Further down are Karen. And on the valley floor are northern Thai. The story is told by Karen and Hmong communities in the basin.

We Karen have lived in the hills around here for at least 200 years and maybe much longer. Back some seven or eight generations, for instance, a Karen elder bought a piece of land in Khun Ta village from the Chiang Mai ruler and paid with musical instruments, cloth, and a Karen blanket. There are several stories like this. Once a map was drawn on leather to define the area, but it was buried with a leader when he died.

We have always lived very close to nature. There's a Karen saying, "On land we can smell wild animals, in water we can smell fish". We have many traditions which teach us how to live with nature. Another saying runs: "We drink from streams, we must protect streams. We eat from the forest, we must protect the forest".

We have always had good relations with people in the lowlands.

> Twenty or so years ago, when a highlander had some business in the lowlands, he'd go down and stay in a lowlander's home. And if they came up here, they would stay with us. We traded and bartered with one another.
>
> – *Huai Somboi village history*[14]

In the old days of opium cultivation, often Karen and lowlanders cultivated it jointly. If we had a bad rice harvest, we would go down the hill and work for rice. If they had a bad harvest, they would come up the hill and work for rice.

■ ■ ■

We Hmong used to live in China. We have come south over a long period. According to Headman Kaet who has done research on the history, groups of Hmong started coming into the hills here around 1844. Now we are found in thirteen provinces. We live in the highland areas. We grew rice, corn, vegetables, sugar, yams, and chillis. We kept horses, cows, sheep, and pigs. Mostly we

[14] The villages contributing to this project were encouraged to compile their village histories, mainly from the memories of the elders.

produced for our own use. We had customs to limit and control what we produce so that we can live in harmony with the hills.

Since 1960 we have had to deal with many new outside forces. The security forces came into the hills to fight communists. The government set out a plan to convert us into Thai citizens which meant abandoning our own traditions. Soon the government relaxed and just wanted us to learn Thai and show loyalty. But getting official Thai citizenship – an ID card – became more important.

Photo credit: UNDP Thailand

A Highlanders' meeting on obtaining Thai citizenship.

Since 1981, the area has come under many projects to replace opium cultivation with new crops. The army, the UN, the Thai-Norway project, and the government have all been involved. They told us that our shifting cultivation was destroying the forest, and that opium was creating problems for the society and nation. The projects gave us fertilizers and pesticides to grow new crops such as coffee, lychees, cabbages, and Chinese pears.

We got many benefits. We could send children to school. We got access to health care. But not everything was good. People became more selfish. We depended more on the outside for new goods. Some people got Thai citizenship but others didn't. After the opium eradication projects ended, some of the supporting agencies departed. Soon after, we were criticized for growing things which were not appropriate for the hills, and for using too much fertilizer and chemicals.

> Planting the crops which these projects supported was not a good solution for the villagers, because after a time it created new problems, and we were criticized for using too much chemicals and creating all sorts of problems for the lowlanders down below. We began to think that the problems did not come from what we Hmong did ourselves, but from what outsiders encouraged us to do. But as the problem came down on our heads, we'd have to find the solution.
>
> *– Hmong villager*

> At that time we were being told to do many new things. We didn't know what was wrong or right. The outsiders told us this and that. They brought the fertilizer and chemicals. It went on like this until the villagers were forgetting their own crops and getting interested only in money.
>
> *– Joni Odochao, Karen elder*

In the early 1990s, the pressure on the Karen increased. Around then there were many forest fires. Also loggers were very active. And the forestry department began to define more areas as national parks where nobody was allowed to live.

The biggest shock came on 12 August 1990 when the forestry officials arrested twenty-two villagers for trespassing on national park land. The villagers had been living on that land for generations. But the forestry department had decided to apply the strict letter of the forest conservation law. Since then, there have been many such incidents, not only around here but all over the hills.

> We were being blamed for destroying the forest, and we couldn't allow this to go on unchecked. We lived on the hills and we looked after the forest according to Karen customs. But the society didn't know this and didn't understand.
>
> *– Khun Ta village history*

> The Highland Conservation Group was formed in 1992 because the outside pressure was very strong. We could see that we would have to

> protect ourselves. We would have to stop doing certain things which were judged as too much. And we would have to do more of the things which were seen as appropriate. That was the way to survive. So we formed the group.
>
> *– Huai Somboi village history*

The Karen leaders from all the villages in the area, totalling 777 households, held a meeting to discuss various problems. This led to the establishment of the Chomthong Highland Conservation Group. The first president was a village teacher. He invited many organizations to become advisers to the group including the Regional Centre for Social Development at Chiang Mai University. The Group created a travelling forum to explain the objectives to villages around the area.

> The conservation group started in 1992 on the encouragement of Teacher Kam. It became more effective after IMPECT[15] donated funds because it's difficult to do anything without some funds. In 1993 we had many activities including tree ordination and local sports events. We got housewives and children involved too.
>
> *– Khun Ta villager*

We knew that we had the knowledge and traditions to preserve the forest. But we were no longer isolated. We were part of a bigger society. Many people in that society had been taught to believe that we were destroying the forests with opium, slash-and-burn, chemicals, and cabbages. Just having the knowledge to preserve the forest was no longer enough. We had to persuade others in society that we had that knowledge. And to do that, we had to pool our resources with other Karen, other groups in the hills, and with our friends in the lowlands.

In addition to the other problems, in 1993 there was a drought which caused more forest fires, and problems with people taking oil and bark from pine trees for sale. A forum was held at Mae Manao temple including our own highland representatives, lowland leaders, the forestry department, other government organizations, and some NGOs. The forum decided that each group should rehabilitate the forest in its own area. Then on 14 October 1993, Karen and Hmong met and formed the Mae Wang River Basin Network.

> We got together all the village heads in the Mae Wang basin. Before, the forestry officials used to give us training about fire prevention and control. The villagers realized we could organize this ourselves. In 1992 or 1993 we cut the first firebreak.
>
> *– Sewa Odochao*

We Karen have always divided up the forest into different areas. The areas that are crucial for collecting water are defined as conservation forest. Then there is sacred forest which again must be preserved. Then there are village woodlots which can be used for grazing and collecting forest products under strict rules. Then there is useable forest which can be used for cultivation under a rotation which always allows the forest to regenerate.

To help others to understand this classification, we have now made maps, just like those the government offices use. We have put up signs to mark different areas. We have made a model of the whole basin with the different forest areas clearly marked, so outsiders can understand. We defined some areas as non-hunting areas to preserve the wildlife. We planted more trees in our conservation areas. We started cutting firebreaks. In the dry season we organized guards to watch for forest fires. We held village meetings and put up posters. And we held ceremonies to ordain[16] trees.

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[15] The Inter Mountain Peoples Education and Culture in Thailand Association was established in 1992 by elders of the Karen, Iumien, Hmong, Lisu, Lahu and Akha. Its main objective is to revitalise and apply indigenous knowledge in all areas of development, including natural resource and biodiversity management.

[16] Traditionally every Thai man spends some time in the Buddhist monkhood. At the ordination ceremony, his head is shaved and he puts on the distinctive ochre-coloured robe of a monk.

Photo credit: Friends of the People (FOP)

Tree ordination – Karen's belief about the spirits in the forest. The monk chanted some prayers and wrapped the tree with ochre-coloured cloth to preserve the forest.

The first ceremony in 1993 was just a small affair. Then in 1994 several villages got together to do it on a larger scale. We asked a forestry official to preside. The monks distributed the yellow cloth to the village representatives, who then went home and organized local ceremonies in each village. Altogether we ordained a million trees.

The first time it was just a simple ordination. The monk chanted some prayers and wrapped the tree with yellow cloth. The villagers did not participate. But after that we began to incorporate our own village ceremonies too.

– Sewa Odochao

We Karen have beliefs about this and that spirit in the forest. Then the environmental trend came up. We had seen trees wrapped with yellow cloth along the roadside in the lowlands. These trees were not touched when the road was widened. We thought we could adapt this idea. I heard that Phra Kru (monk) Manat had ordained trees in 1985. In our village we had a lot of Buddhists. I saw it would be useful to do the ordination here too. We mixed our own customs in with the ordination. These customs are in the blood of the Karen. But if we just followed our own beliefs, it would not be broad enough – it wouldn't make the society outside understand. So we used the Buddhist ceremony. It was like developing our own ceremonies. Also, our ceremonies are just done in the village or the household. We had never done such a thing for the whole river basin.

– Joni Odochao

Photo credit: Dr. Ken Kampe

Joni Odochao

Then we heard that the forestry department was planning to plant 50 million trees to honour the 50th anniversary of the King's reign in 1996. We decided to ordain 50 million trees for the anniversary. It was a big event. Many officials and foreigners came. The whole basin was involved. We used Buddhist, Karen, and Hmong ceremonies.

> Each time we did the ordination we became clearer about what we were doing. After the 50 million tree ordination, each village went back and held an ordination in its own forest area, and defined a conservation forest area.
>
> *– Sewa Odochao*

We adjusted some of our rituals so they are easier to understand, and we invited others to take part. We have also written our beliefs and rules down in books, such as *The Seven Layers of the Forest*, by Joni Odochao.

> Now we are encouraging the next generation in the village to know their own culture, by getting the elders to pass on their knowledge. We want to put it in the curriculum of the school and the kindergarten.
>
> *– Khun Ta villager*

Still there were some problems in getting different groups to understand one another. For instance, along the Mae Wang river there are several different communities all of whom depend on the same river for water. Sometimes there are misunderstandings. In 1994, different groups got together to discuss the problems created by the government's establishment of new national parks. They jointly organized meetings with district officials. Then when the SIF fund became available in 1998, the different groups formed a Mae Wang Network of eighteen different communities to pool their efforts in planting trees, cutting fire breaks, and sharing knowledge. There are difficulties in bringing these different groups together. But now there are monthly meetings so problems can be aired and jointly solved.

> By 1994 we were talking among ourselves that we couldn't solve all the problems within the villages. Then the NGOs got together and created NFN [the Northern Farmers Network]. We joined the NFN's protest march to Lamphun.[17] At first I didn't agree with protest marches. But little by little I realized they have a point.
>
> *– Joni Odochao*

■ ■ ■

In 1992-93 we Hmong had a lot of problems with forest fires. Some hardline environmental groups claimed we were destroying the watershed. They came and fenced off some land. In October 1993, Hmong leaders from all over the north met and formed the Hmong Network. Several smaller sub-networks were also established. But at first it was not so effective. Many people could not see why we needed this organization. Much of its time was taken up with efforts to preserve Hmong culture.

But in 1998 a forest fire broke out on Doi Inthanon[18] and again the Hmong were blamed. People said we grew too many lychee trees. In July 1998, another big meeting was held covering all the communities in and around Chiang Mai province. The meeting discussed how to revive Hmong folk wisdom for preserving the forest. Fourteen villages joined the network, and gradually it expanded to thirty-one. We began to make maps and models of conservation areas, to plant trees in the watershed areas, to cut fire breaks, to organize fire watches, to cut down usage of fertilizer, chemicals and water, and to revive our traditional ways. A big Hmong new year celebration was held in the Chiang Mai sports stadium. During the ceremony a silver mouth-organ was presented to the King as a token of the Hmong's loyalty to the nation as Thai citizens.

We also send representatives whenever there is a public event which allows us to explain these things. For example we went to give a presentation on the Hmong way to conserve and manage forests, through such rituals as Dong Cheng when we worship sacred trees.

■ ■ ■

For a time, our Karen communities lost the power which they used to have. We became much more a part of a bigger society, and we had to accept that. We were told our old ways were just superstitions and outdated nonsense. We were told to grow this and not grow that. But somehow whatever we did, it wasn't right. Eventually we came back to the idea that maybe our old ways were right after all. That was the beginning of getting our power back.

But we had to change too. We had to learn. We had to be very disciplined. We had to make sure other people could understand us. We had to write books, attend seminars, draw maps, and make models. We had to build networks – first

[17] The Northern Farmers Network includes many local groups from both highland and lowland areas along with academics and NGOs. It works on many issues, but has concentrated especially on efforts to pass a community forestry bill. In 1994 it organized a march from Chiang Mai to Lamphun to highlight problems over issues of debt, nationality, land rights, and access to forests.

[18] Doi Inthanon is the highest mountain in Thailand and very popular as a tourist destination.

with our neighbours, then with others in the same river basin, and then further afield. We had to invent new organizations like watershed conservation groups and basin networks. We had to adjust our ceremonies for honouring and preserving the forest so that outsiders would understand.

In short, we not only had to revive our local knowledge and culture but also reinvent it so that the community could recover its pride. But still there are big limits on how much we really feel empowered. The government must accept the community rights to manage natural resources in the 1997 constitution.

The Mun is the biggest river in the northeast. Its fish have always been a major source of protein for the region's people. Around 1990, the Electricity Generating Authority of Thailand (EGAT) gained approval to build a small hydroelectric dam close to where the Mun joins with the Mekong river. Protests against this dam began soon after and have continued until today. The story is told by the fishing communities who lived around the site of the dam.

EXPANDING SOCIAL SPACE TO RECLAIM THE MUN RIVER

> We know that the thing which has made us poor is not that we're idle and don't want to work. We're poor because of "development". Because the development that took place destroyed the natural resources we depended on. We live with nature – with water, land, forest. When this valuable property is seized or destroyed, it's like our own breath is seized or destroyed.
>
> *– Mun river villager*

Photo credit: Friends of the People (FOP)

A big catch after the opening of the sluice gate.

The Mun river has fed the people in the region for centuries. Every year, many fish swim up from the Mekong river to breed in the Mun. It has a rocky bed with little caves and crevices where the fish live and lay eggs. There are lots of insects and weeds for the fish to feed. There have always been fishing communities who exchange fish for rice with the local farmers.

> Our life depends on the river, on what's in the water. We have peace and contentment when we have fish. So our tradition is to protect the river, appreciate its value, give it respect like the mother who gives us life. Every year we join in ceremonies to pay our respects to the river, and to apologize for any harm we have done. We only take from the river what we need. We use equipment we know won't destroy the stocks. We pass this knowledge down from generation to generation. This is a way of life that is sustainable. Our families have always been close and warm.
>
> *– Mun river villager*

Photo credit: Friends of the People (FOP)

Mun river communities use a variety of fishing equipments.

Photo credit: Friends of the People (FOP)

The river was our bank. Whenever we needed money or food we just took our fishing equipment to the river. Some people had children in school so they had to catch more to make extra money. Many people here "sold fish to buy their children's education". Some children grew up to be government officials.

There is a legend that the fish in the Mun river would never be depleted. Before they came to the human world, the fish swore they would sacrifice themselves for humans and would never let us starve. But there is another prophecy that "all the fish and crabs will one day return to Vientiane; nothing will be left but frogs, which will also leave in the following year".

When EGAT[19] started the Pak Mun[20] dam project in 1990, we knew nothing about it. We did not have a chance to participate in the decision-making. We learned from the tambon chief and the village headman that the dam would make it possible to grow rice twice a year, bring lots of fish, and produce electricity.

> They put up posters before the construction. Only a handful of people knew that the fish would be gone. They told us that the dam would bring fish all year round. They would also introduce some expensive fish in the area.
>
> *– Mun river villager*

> They said that electricity was important for economic growth. When we had the dam, our lives would be better. Farming and fishing would be better.
>
> *– Mun river villager*

Some villagers were invited to visit other dams, but were shown only the positive side. We were fed with loads of information to make us accept the project. People who sided with the project were treated very well. They went on trips and workshops and were given good food and even money sometimes. Asphalt roads were built to the villages as a first sign of the progress that the dam would bring.

Some people began to have doubts. They knew what happened at another dam built some years ago just 20 kilometres away. We started demanding information, especially about the impact, about the resettlement plan. We talked to people who were victims of this other dam. Their communities were relocated to places where the soil was rocky and infertile. People could not adjust to the new way of life. Some left for the city. Some sold their buffaloes. Nobody seemed to care what happened to them.

At first just a few people came together, discussed issues, and searched for solutions. We passed on our concerns to others by word of mouth. We walked from village to village to talk with people. We used our network of relatives. And we were scared. We had never interfered with the authorities' work in the past. But we had to overcome our fear to protect our river and our livelihood.

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19 The Electricity Generating Authority of Thailand.

20 Named because the dam is near the mouth (*pak*) of the Mun river.

We used various methods to win acceptance from the public. We distributed pamphlets and organized meetings but it was difficult because the authorities tried to obstruct us. We approached local officials. We went to see local politicians. We gathered at the provincial office to submit our petition asking for a review of the project. But nothing happened. We asked to speak with the people in charge so we could tell them what would happen if they blocked the river. We organized some protests.

We got nowhere. We weren't allowed access to information. Not one local MP raised a hand to help us. Some people were arrested, and others were beaten – even elderly people. Thugs from other villages came to intimidate and hurt us. The community split into those for and against the dam. This conflict didn't start within the community. It was brought from outside by people with power and money.

> When development arrived so did conflict, even within families. Villagers who used to support one other and live happily together had different ideas. Some wanted to protect their land and the natural surroundings while others wanted money. Some sold their land to speculators.
>
> *– Mun river villager*

Then they started construction. When they dynamited the rapids we thought the Laotian army was invading. We knew the fish would disappear.

We came to understand that the society was being fed bad information through the media. We had to expand our alliance beyond the local communities.

> We had to explain our problems to other people. We started going out to talk to people about our lives. This made us learn how to explain ourselves clearly. We felt we were being treated unfairly and taken advantage of. We gradually became more confident in our ability to talk to journalists, academics, NGOs, environmentalists, and fair-minded people from here and overseas.
>
> *– Mun river villager*

After some protests, they gave us some compensation for the three years when we could not fish because of the construction. But they said there would be even more fish when the dam was complete. They would stock the area above the dam. They were building a fish ladder so fish could still swim up from the Mekong to breed.

But when the dam was completed in 1994, many types of fish disappeared. We could not fish downstream from the dam because strong currents damaged our equipment. We could not fish upstream because fish could not jump the fish ladder. People found they itched after bathing in the river. Sediment filled the cataracts. The river bank was covered by water hyacinth and giant weed.

Photo credit: The Nation

Fish ladder at Pak Mun Dam.

> There used to be plenty of fish, crabs, natural cataracts, and food sources. But these things are gone. We can no longer fish. We have no chance

to teach our children and grandchildren our heritage. Our culture and tradition has been swallowed just like the crabs and fish. This has created devastation, anger, hatred, and conflict. People will kill each other. How will our future generations live? How do we make the world understand about this destructiveness? Where is our old community and old way of life? Why did it disappear, and who has done this to us?

– Mun river villager

In 1995, we formed an alliance with those affected by dams all over the country, along with farmers, fishermen, and slum-dwellers affected by other government projects. These groups came together under the Assembly of the Poor.[21] Through these networks, we learned that a large number of people were unfairly affected by "development". These people also lost their livelihoods and their rightful access to natural resources. We came to realize that we could not rely on the bureaucracy. It was slow and never understood us. We had to prepare ourselves to negotiate with the government. We had to present our data well so that the government did not rely solely on the bureaucracy's data. We organized activities in the villages, at the dam site, at the provincial offices, and around Government House. We practised non-violence and had to endure misunderstanding, criticisms, false accusations, distortion.

Government still wouldn't listen to us. Finally we came up with a new way to make the society understand our problems. We went back to the site of our old community, which had been taken over as part of the dam construction and which had been dynamited. We set up a new community and called it *muban mae mun man yuen*, *Sustainable Mun Village.* Villagers from other affected places came to join us. Villagers have no way to oppose state power except solidarity, resolution, endurance, and discipline.

– Mun river villager

Photo credit: Bangkok Post

A Pak Mun protester at the Democracy Monument in Bangkok.

At first we had been asking for compensation. After all, that was what other protests demanded. But in a brainstorming session, we came to realize that what we really wanted was to have the river back. So we asked that the dam gates be opened so that fish could swim up from the Mekong river to spawn as they used to. We also demanded the rehabilitation of the cataracts and islets that were destroyed during the construction.

More and more groups came out to support us, both in Thailand and around the world. But still the authorities would not budge. We started a second *Sustainable Mun Village* at the electricity plant, but the dam staff got angry. We came to Bangkok to see the prime minister but many were arrested for climbing over the Government House fence. Finally the government agreed to open the dam gates for four months as an experiment.

[21] The Assembly of the Poor was formed in December 1995 as an alliance of local networks all over the country. It compiled the demands of all these groups into one agenda, and brought representatives of all the local groups to Bangkok to present the agenda to government.

The World Commission on Dams[22] made a study that concluded the dam should not have been built. When a new government came in, we went to Bangkok again. This time they agreed to open the gates for a year.

The islets reappeared. The cataracts came back. We caught fish again. For us, it was just like opening a bank again. Our community slowly came back to life. People forgot old conflicts. Our kids came back from the city and began learning how to fish again. We didn't need to worry where the next meal was coming from. If the gates could stay open, nature would heal itself.

Government asked two universities to do research to help decide whether the gates should be opened or closed. But why should only academics do research?

> Fish came back. Nature came back. And our life came back too. We realized we had to make a record. If others did the research, it would never be complete and correct. City people don't know about rivers, fish and rapids like we do. They would have to ask us for the information anyway. So better to do it ourselves.
>
> *– Mun river villagers in the research project*

We chose the eighteen most knowledgeable fishermen along the river. An NGO gave some help with writing. First we had to make a list of all fish and plants that used to thrive in the Mun. The list had 265 fish species. Then we recorded all that were found after the gates were opened. So far we have found 145 local fish and around 50 types of plant have come back. We call this "grassroots village research". We will present it to the government.

But we also know the struggle is not yet over. We have to find other ways of making our community stronger and more self-reliant, by reviving the nature around us. We set up twenty-one groups. One learnt how to make organic fertilizer. Another looked at ways to improve our local forests. And so on. We need to make the community stronger so we can survive and continue to demand our rights.

But in June 2002 the dam gates were closed again. The government committee recommended the gates be closed for eight months of the year. It took this decision before our research was finished, before even the universities' research was finished. Our lives are still uncertain. After another round of protest and negotiation, the government confirmed the decision in early 2003 to close the sluice gates for eight months of the year.

> We have protested against the dam for many years, but the government has continued to ignore us. We hope to go back to the old way of making a living, to have prawn, shellfish, crab, and fish in the river to catch and eat. We hope to fish everyday. So we would like to see the dam removed or the gates left open. We don't want money. Just give us back nature the way it was. We will stop our protest. That would be a beautiful end to this story.
>
> *– Mun river villager*

Over the ten years of the protest, we learnt how a community that had been torn part and almost crushed could become strong again. We became much tighter. We recovered our ability to communicate and negotiate with the government to change its development policy. We are a very peripheral group. But we learnt how to make the society understand how development damaged environment and society. We know we have to protect the environment and defend our rights to livelihood. We are proud of our knowledge about the Mun river. We

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22 The World Commission of Dams was established at the instigation of the World Bank to review dam projects all over the world. Pak Mun was one of its case studies. This case study concluded: "if all the benefits and costs were adequately assessed, it is unlikely that the project would have been built in the current context". *WCD Case Study: Pak Mun Dam in Mekong Basin, Thailand*, September 2000, xi.

are proud we can inform people in general about the impact of the Pak Mun dam on the environment, on livelihoods, and on the fish.

> In truth we have power in the community. For example, just give us one fishhook and we can catch fish to eat. A fishhook is power. All our customs and traditions are power.
>
> *– Mun river villager*

CONCLUSION: STRATEGIES OF EMPOWERMENT

The aim of this chapter was to let the communities tell their own histories, and recount their own strategies of empowerment. To conclude, we will note some of the key themes running through these accounts.

All of these communities have a sense of loss as a result of the rapid destruction of the natural environment on which they depend for livelihood. In addition, many have an ambivalent perception of "development". They acknowledge they had often gained significant benefits (education, health care). But they also feel they have been pushed around, they have been asked to "sacrifice" their livelihood, their local knowledge has been denigrated or ignored, and the result is a loss of self-confidence. In sum, they have lost the ability to control their own lives. They feel disempowered.

Communities articulate the reversal of this process in Thai as *kan fuenfu phalang amnat chumchon* (reviving community power). Whereas "empowerment" in English is imprecise, the Thai clarifies that this is the revival or recovery of something that has been lost.

This idea of revival relates to an image of the past in which resources were abundant and communities were strong because of close ties, discipline, and social ethics of sharing. In the villagers' accounts, these two elements – the abundant resource base and the community strength – are closely interrelated. Whether this image is realistic or romantic is of no importance. The memory expresses a social ideal, and acts as a guide and inspiration for future action.

Communities see empowerment as a process of learning. This process begins from studying their own problems, learning how to work together as a community, and reviving local knowledge. This initial stage then restores the community's self-confidence to search for new forms of knowledge, to build networks beyond the community, and to deal more effectively with government and with other forces in the wider society. The result of this learning process is a new body of knowledge which is based on the community's morality and which is relevant to practical everyday experience.

Photo credit: UNDP Thailand

With this body of knowledge, the communities can confront the consequences of development. They pursue three strategies which build on one another in succession.

1. **Building their community's power to solve problems independently.** Rebuilding a foundation of greater self-reliance is seen as a necessary first step. Self-reliance does not mean withdrawal or autarky. All these communities show a strong sense of having to accept the world. Rather, it means reducing forms of dependence which disempower. In Headman Wibun's approach, self-reliance at the household level is a

strategy to reduce the exposure to risk, debt, and other forms of dependence. The Bank of Life extends the same principle to the community level by providing not only financial services but also welfare and a base for other community projects. Greater self-reliance also means the recovery or re-valuation of local knowledge. The Karen and Hmong in the highlands resurrect their knowledge of the forest in order to reduce their exposure to confusing and often flawed advice from outside. Recovering local knowledge is also the beginning of reviving the self-confidence to learn, adopt, and adapt.

2. **Building their community power to negotiate cooperation with outside agencies.** Communities negotiate with government (and other centres of political and economic power) to win recognition, resources, and cooperation. To succeed in such negotiation, communities have to create some social assets with which to bargain. The Samrong canal communities reinvented themselves as anti-pollution agencies, not only to improve their immediate environment, but also to bargain with government for rights to occupy the canal bank. Another key strategy for such negotiation is to expand networks among neighbouring communities. The Karen and Hmong in Mae Wang started by getting neighbouring communities together and then gradually expanded the range.

3. **Building their community power and networks to claim and protect community rights.** Communities' ability to maintain their livelihood and way of life is limited by the power of other social forces. To overcome these barriers, communities have learnt how to claim rights, particularly rights of access to natural resources. To strengthen those claims, they need the support of others. By building networks outwards from the community to the broader society, the communities can *kayai pun thi tang sangkhom* (expand their space in the society), and try to overcome the disempowerment of their status as a minority or subordinate group. This is done in several ways. The Mae Wang hill communities and the Pak Mun fishing communities expanded their networks beyond the immediate neighbourhood to include similar communities elsewhere in the region and the nation. They tapped other resources in Thailand's growing civil society by making links with NGOs, sympathetic academics, and media professionals. To do so, they had to acquire new skills, and had to be creative in the ways they adjusted and represented their own knowledge and culture. The hill communities learnt how to reconceptualize their traditional claims on natural resources in the modern language of rights. They adapted their ceremonies honouring trees to reflect modern environmental concerns and couched them in a Buddhist idiom to appeal to the wider society. Through these strategies, these communities were able to make public their claim of the right to livelihood, the right to development.

Finally, it is worth noting something which does *not* figure in these stories from the grassroots. First, there is no sign of a "representative of the people", of an MP or elected member of local government. Second, there is no reference to the use of legal process. On the basis of these examples, we would have to conclude that formal democracy and the legal system are not effective means of community empowerment in a direct sense.[23]

In the next chapter, we place the communities' own view of their history into the wider context of the nation, and then look at how pressure from communities, their supporters, and other social forces have begun to change the institutional context.

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[23] The indirect importance of democratization will be considered in chapter 2.

CHAPTER 2

THE NEW INSTITUTIONAL CONTEXT FOR COMMUNITY EMPOWERMENT

> The democracy we have today is a forum for those with power and privilege, for the bankers and industrialists. It isn't a forum for the small farmers, the slum-dwellers, those with AIDS, and all those many others who are socially disadvantaged and deprived.
>
> – *Nithi Eiewsriwong*[24]

The late 1990s saw a series of changes in the institutional context of Thai government which have the potential to revolutionize the relations between state and society. These institutional changes have great importance for community empowerment.

This chapter is divided into four sections. The first sketches the emergence of a highly centralized state, and its adoption of top-down development planning from the 1950s onwards. The second section sets the history of local communities, as related in chapter 1, within the larger context of the nation's social and economic change, and shows how a community voice contributed to the pressure for institutional change in the 1990s.

The third section examines four main changes in the institutional context which have taken place since the mid-1990s and which have relevance for community empowerment: the "People's Constitution" of 1997; the switch to "people-centred development" in the Eighth and Ninth Economic and Social Development Plans; democratic decentralization; and education reform.

The fourth section discusses certain ways in which the potential of these reforms have not been realized. Although the environment for community empowerment has changed significantly, there is still a great degree of inertia or outright opposition carried over from Thailand's conservative traditions.

The democracy we have today is a forum for those with power and privilege, for the bankers and industrialists.

– Nithi Eiewsriwong

CENTRALIZATION AND TOP-DOWN DEVELOPMENT

The institutional changes in the 1990s are remarkable because they represent a concerted and broad challenge to the centralized, top-down, and urban-biased character of Thai government over the previous century.

The modern Thai state constructed at the turn of the twentieth century was highly centralized. The basic administrative system was adopted from neighbouring colonial territories, and remained unchanged even after similar systems had been swept away by decolonization elsewhere.[25] The absolute monarchy was converted into a constitutional monarchy in 1932, but the administrative frame was largely untouched. American academics

24 Nithi Eiewsriwong, *Khon Jon and Nayobuy Kan Tam Hai Jon Kong Rath (The Poor and the State's Impoverishment Policy)* Thailand Development Support Committee, 2000.

25 Thailand was never formally colonized and hence experienced no popular movement against colonial rule and colonial ruling systems.

in the 1960s invented the term "bureaucratic polity" to describe Thailand's official-dominated governmental system. Pressure for democratic parliaments was blocked by the rise of military dictatorship which continued into the Cold War era. Student protests in 1973-6 prepared the way for a gradual transition to parliamentary democracy in the 1980s. But there was still no significant reform of the public services. In particular, observers of rural administration in the 1990s claimed that the "bureaucratic polity" was as strong as ever in the provinces. Until very recently, the Thai state was both very centralized and undemocratic. A paternal mentality is etched into the bureaucracy.

This concern with urban growth and national security pushed other goals – such as participation, environmental protection, and equity – to the sidelines.

This centralized and bureaucratic system adopted a top-down and urban-biased approach to economic development. The first development plan was launched in 1961. This plan and all its successors until the mid-1990s put the priority on economic growth achieved primarily through the development of industry and the urban economy under private enterprise. Government's role was to develop the basic infrastructure for growth – transport, energy, irrigation – and to encourage investors, domestic and foreign, through promotional packages, strategies to lower wages, and efforts to boost investor confidence. In their own terms, these plans can be considered a signal success. Thailand achieved an average real growth rate of 7.5 per cent sustained over four decades (1957-97). The average per capita income multiplied seven times. The proportion classified below the poverty line fell from 57 per cent (1962/3) to 6 per cent (1998). Thailand was transformed from one of the more backward and agrarian countries of Eastern Asia into a candidate for Newly Industrializing Country (NIC) status.

Through the 1960s and 1970s, against the background of the Indochinese conflict and internal insurgency, economic policy-making was also geared to national security. Economic growth and the creation of a strong entrepreneurial class were seen as ways to preempt political conflict. Business organizations were formed to influence policy-making, especially the "Big Three" – the Board of Trade, Thai Bankers Association, and Federation of Thai Industries. Businessmen also gained a voice in the drafting of the five-year plans. Military rulers and business leaders became linked in webs of political and economic influence. From the early 1980s, businessmen dominated the parliaments and frequently commanded the economic ministries. Multinational companies, which entered Thailand in growing numbers, added to the trend towards centralization, urban bias, and business dominance.

This concern with urban growth and national security pushed other goals – such as participation, environmental protection, and equity – to the sidelines. In 1975, at the climax of the Indochinese war, the government launched a plan to channel money to the grassroots as a way to stimulate the economy and spread the benefits more widely. But once this crisis passed, government returned to top-down approaches. In the 1980s, poverty eradication became a more significant part of the planning agenda. The Fifth Plan (1982-86) included a poverty plan which identified the 12,555 poorest villages for special treatment inspired by the Basic Needs approach. But such efforts were handled by central agencies with little concession to participation.

Outside development agencies largely conformed to this pattern of development. They concentrated on building the capability of government agencies and other centralized institutions. They showed little enthusiasm for working with local groups or non-governmental organizations.

Development was growth-based, top-down, industry-led, and urban-biased. The high rate of growth came at a considerable cost, particularly in terms of the destruction of the natural environment, relocation of people, neglect of agriculture, and widening of the gap between rich and poor. In the 1990s, demands for greater political openness and social justice challenged both the political framework and the direction of economic policy.

COMMUNITY HISTORIES AND INSTITUTIONAL CHANGE

In many ways Thai communities are exactly like any other – groups of people which congregate for survival, defence, mutual aid, and other social benefits. But in other ways they are the product of their special history. The communities' great sense of loss from the destruction of the natural environment, which figures so prominently in the previous chapter, is best understood in this historical context. Thai communities experienced an age of great abundance and freedom which very abruptly came to an end. The memory of that era, and the contrast with the era of "development", has inspired a community role in a broader civil society movement which triggered institutional change in the 1990s.

The age of abundance

Less than two centuries ago, most of the space occupied by modern Thailand was unpopulated. Most people were settled near a few urban centres and bound by feudal ties. Over the nineteenth century these feudal ties broke down, and a newly free peasantry expanded into large tracts of unoccupied land. Siam became an exporter of rice but farmers were only loosely connected to the market. They exploited the great abundance and biodiversity of the environment. They continued to use local knowledge and local technology. No outside force – government or merchant – intruded to change production systems. Until the mid-twentieth century, even in the most advanced central region, communities still produced primarily for their own use, and sold only the surplus. They bought some goods from the expanding market, but they also retained local crafts like weaving. As the stories in chapter 1 showed, this period of abundance and independence lasted long enough to remain part of the cultural memory down to the present.

As a result of this frontier experience, most communities are very new. Many people moved to the new land frontier. Others migrated from neighbouring countries voluntarily or forcibly because of war. Several millions came from China to settle in towns and villages. The land frontier continued to expand until the late 1980s. Over 80 per cent of rural communities have been founded in the past two generations. Urban communities are even newer as the big movements from village to city have taken place since 1980.

That means very few Thai communities have a long history in the same place. There is no strong concept of an "ancestral village". But that does not mean community is not important. Indeed, people usually move in community groups. They need to cooperate for defence and survival. Communities are bound together by kin ties. In others, people simply treat their neighbours as if they were connected by blood. They have cultural techniques to define and bind people together – a central village pillar, village and ancestral spirits, annual festivals to redefine the community. These are highly portable. In the north, exceptionally strong communities are built around the cooperation needed for irrigation. In the northeast, strong communities are created by the sheer difficulties of survival in a harsh environment.

The coming of development

The communities faced big changes from the 1950s onwards. Government entered to develop agriculture for export. It promoted new technologies of seed, mechanization, and chemicals in place of local practice. It advocated monocultures in place of mixed farming. Villagers were more tied to the market, and more vulnerable to its risks.

Local communities were much more subject to government direction. Government set up new central offices to direct economic policy. The bureaucracy multiplied in size (from 75,000 in 1944 to 250,000 in 1965). Officials were posted to the villages and local towns.

Thai communities experienced an age of great abundance and freedom which very abruptly came to an end.

Communities were now subordinate to a new group of people whose difference from the villagers was symbolized by their uniforms and their grand new offices.

The communities' own knowledge was downgraded by new knowledge issuing from the government, from schools, and from radio and TV. Communities became receivers of knowledge.

This era of development coincided with the Cold War and the fear that Maoist communism would infiltrate into Thai villages. Government imposed a firm grip on rural society through police, military units, and informal means. Local leaders and local organizations were often crushed. The era of dictatorship and development cultivated a new breed of local "godfathers" or "dark influences" – robber baron capitalists who used links to the power elite to dominate new commercial opportunities, legal and illegal.

Community Thinking

Thinking about the role of the community in development practice began in the late 1970s among pioneers of grassroots development work, especially *Niphot Thianwihan.* From his experience with hill communities and other peripheral groups, Niphot argued that development strategies which imposed change on villages were wrong-headed. Development, Niphot argued, should build on the culture, history, and ethics of the community itself. In the late 1980s a historian, *Chatthip Nartsupha,* reviewed writings by Niphot and others, and dubbed it the "community culture" approach. His article, published in Thai and English, propelled these ideas into a wider debate.

Although the community approach was fiercely criticized by some for being romantic and backward-looking, its influence on development activists grew. Several prominent figures contributed to the debate. *Saneh Chamarik,* an academic who retired from the university to run local development projects, argued that the community was important because it symbolized important human values of mutual assistance and ethical conduct. Both Saneh and *Prawase Wasi,* a medical doctor involved with health NGOs, associated the community with values found in Buddhism – especially the restraint of greed. This Buddhist approach argued that communities should pursue "sufficiency" and "self-reliance".

In a different direction, *Anan Ganjanaphan,* an academic active on hill people's issues, argued that the "community culture" approach was too passive, and that self-reliance was impossible for many villagers because they lacked access to natural resources. He encouraged communities to adopt the idea of rights in order to defend or recover access to land, forests, and water. Others like *Pitthaya Wongkun* and *Narong Petprasert* promoted the idea of "community businesses" designed to enhance the well-being of the community rather than simply make a profit.

The results were very dramatic. Agriculture expanded rapidly. Population boomed. The environment was radically altered, especially by the destruction of forests and the pollution of waterways. Many villagers became more prosperous, but at the same time there was a rising level of risk. Debt increased. The land frontier ran out. The income gap between rich and poor, the cultural gap between village and city, and the power gap between bureaucracy and community, all gaped wider.

New ideas and organizations

Reactions began in the 1970s and expanded in the 1980s as the Cold War subsided, the extent of environmental and social damage became apparent, and as local people were emboldened to resist.

The first stirrings came around 1970. "Development" monks encouraged villagers to organize for self-help. A leading technocrat, Puey Ungphakorn, founded a pioneering NGO dedicated to rural uplift through self-reliance. Local activists debated whether development policy should be changed by political activism (the "political economy approach") or independent grassroots work (the "community culture approach"). Local protests arose over debt, land tenure, and access to water.

In 1973, students in the city rebelled against military rule. Some of the leaders forged alliances with the emerging rural activism. But in 1975-6, the army retook the initiative, the student movement was crushed, and several rural leaders were shot. However, the student upsurge had generated pressure for democracy which gradually gained successes in the 1980s. The decline of military dictatorship opened up space for new forms of political action.

After the experience of 1973-6, many activists sought ways to change the development strategy without provoking violent confrontation. They debated new approaches to development, formed NGOs, and sought ways to mobilize people for change.

Several of these activists seized on the idea of the community to serve as a basis for alternatives to the top-down and destructive policy of development begun in the 1950s. They argued that development should begin from the community upwards, should pay attention to local wisdom, and should respect local culture and history in order to rebuild the communities' self-confidence. These thinkers were criticized for idealizing the community and exaggerating its historical importance. Yet their ideas were powerful in inspiring a generation of local leaders and NGO activists.

Boom, crisis, and reform

From the mid-1980s, the Thai economy went on a rollercoaster ride of boom and bust. For local communities, this was like a combination punch. First, the urban boom downgraded the importance of agriculture in the national economy, ripped millions of young people out of the local communities to work in factories, intensified the feelings of urban superiority and rural subordination, and widened the income gap. Then, the economic bust of 1997 threw thousands of migrants back on the support of the village economy, collapsed agricultural prices, and added three million people – mostly rural – to the ranks of the poor.

These rollercoaster years totally changed the nature of local communities, their view of themselves, and their role in the national polity.

The boom years accelerated the decline of the natural environment with continued forest destruction and growing industrial pollution. In addition, the booming urban economy took increasing control of natural resources such as land and water which the communities needed for survival. Sometimes this was done through state power (dams, power plants). Sometimes this happened because of urban entrepreneurs' superior ability to exploit a loose regulatory environment (land grabbing). The destruction of natural resources and denial of access created a crisis for many communities, and an imperative to find new forms of political action.

The boom years also saw the growth of "money politics". Local godfathers transformed themselves into representatives of the people. Businessmen dominated parliament. The formal political system was useless for expressing community discontent. Rural people were effectively excluded from parliament which became a clearing house for business deals. Many MPs were businessmen directly involved in the destruction or seizure of natural resources. Communities sought alternate ways to express their views and defend their livelihood. The number of local movements multiplied. So did the number of NGOs.

The formal political system was useless for expressing community discontent. Rural people were effectively excluded from parliament which became a clearing house for business deals.

In the late 1980s, the NGO movement developed two streams. The first assisted people's movements and coordinated networks and protests. Through the 1990s, the number of rural protests greatly expanded. The major issues were debt, access to natural resources, and the impact of government development projects. Many new network organizations were formed such as the Northern Farmers Network, Association of Smallscale Farmers of the Northeast, and Network of Coastal Fishermen. The founding of the Assembly of the Poor (AOP) in December 1995 was a landmark. The AOP was an alliance of local communities with grievances over access to forest, the impact of dams, and similar issues. Unlike most farmers' protests, which generally aimed to obtain immediate temporary assistance from the government, the AOP organized a sustained campaign calling for a long-term reform agenda. The AOP made a clear distinction between its constituents (the local communities) and its alliance partners (NGOs and academics) in order to parry accusations that NGOs and academics were driving AOP's agenda, not the people themselves.

The second stream of the NGO movement sought to influence government decision-making at the centre. Several established figures lent weight to this stream of the NGO movement, such as *Paiboon Wattanasiritham* who left a banking career to head the Thai Rural Reconstruction Movement in 1988. Government responded by setting up bipartite umbrella organizations and by gradually drawing some NGOs into policy making. By the early 1990s, these NGOs were gaining access to policy making in areas of health, education, poverty eradication, and community development. At the same time, some senior technocrats became more concerned about the destruction of the environment, widening income gap, neglect of agriculture, and growing signs of political discontent. In the early 1990s, leadership of the planning agency passed from a keen advocate of urban growth to an enthusiast for rural uplift. The Seventh Plan (1992-96) tentatively began a shift towards a more balanced strategy.

Although the two streams of NGOs pursued different strategies, they cooperated and exchanged information. Importantly, both streams – and particularly those involved in policy-making – adopted the thinking that the local community was the important unit for changing policy-making from a top-down to bottom-up perspective. The discussion on the meaning of the community became much more complex. The importance of the community was now based not so much on its history (true or false), but rather on its ability to symbolize values which differed from urban capitalism, and its practical role as a basis for more equitable policies. The community culture approach was recognized as too passive. Leading activists joined the community idea together with human rights to make a powerful argument for community rights – particularly over natural resources. Other thinkers gave the community idea more weight by linking it with Buddhist values.

NGOs also allied with democracy activists to campaign for constitutional reform. After a military coup and another bloody pro-democracy protest in 1991-2, the combined strength of old and current student activists, NGO organizations, and business groups demanded a major

Buddhism, Economics, and Community

In the 1980s, the leading Buddhist scholar *P. A. Payutto (Phra Thammapidok)* wrote about a Buddhist approach to economics. The aim of economics, as of all human philosophizing, he argued, should be "well-being" leading to contentment. Using Buddhist texts about the importance of avoiding greed and excess, he criticized the acquisitiveness built into the discipline of economics. In Buddhist economics, he argued, "in contrast to the classical economic equation of maximum consumption leading to maximum satisfaction, we have moderate or wise consumption, leading to well-being".

From this Buddhist approach came the importance of the concepts of sufficiency and self-reliance. Sufficiency *(pho yu pho kin)* summarizes the Buddhist concept of moderation as an antidote to acquisitiveness, by asserting that well-being can be achieved by limiting desires rather than expanding production. Self-reliance (*phung ton eng*) expresses the freedom gained by the lack of any dependence, both material and mental.

By the 1990s, several thinkers (including Payutto and Prawase Wasi) had integrated these concepts into thinking about the role of the community, by arguing that the community was the social unit within which these concepts could be realized. An economics professor, *Apichai Puntasen,* began teaching a course on Buddhist economics, and published a large treatise on the subject which thoroughly criticized the mainstream discipline, expanded on Payutto's use of textual references to give weight to concepts of sufficiency and self-reliance, and offered models of business enterprise designed for social gain rather than private profit.

Royal Speech*

"... In fact, I have often said to such audience as this one that to be a tiger is not important. The important thing for us is to have a self-supporting economy. A self-supporting economy means to have enough to survive. About this, I have often said that a self-sufficient economy does not mean that each family must produce its own food, weave and sew its own clothes. This is going too far, but I mean that each village or each district must have relative self-sufficiency. Things that are produced in surplus can be sold, but should be sold in the same region, not too far so that the transportation cost is minimized. Doing so might prompt some distinguished economists to criticize that it is out-of-date. Some other people say that we must have an economy that involve exchange of goods that is called "trade economy", not "self-sufficient economy" which is thought to be unsophisticated. However, Thailand is a country that is blessed with self-sufficient productivity. ..."

"... I repeat myself again and again on the subjects of trade, goods consumption, production, and sale because I think that everyone is concerned with the crisis. All people – from the have-not to the well-to-do – are in trouble. But if the situation can change back to an economy that is self-sufficient – it does not have to be a hundred per cent, or even fifty per cent, but perhaps only twenty-five per cent – it will be bearable. The remedy will take time; it will not be easy. Usually one is impatient because one suffers, but if it is done from this moment on, the recovery is possible. ..."

"... Thailand will be able to pull through the crisis better than many other countries because this land is still a good land to live in, as I said some years ago that this land is suitable for sustaining life. Anyhow, we must not be extravagant. We must live within our means and in the right way. ..."

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* Revised and translated by His Majesty the King.

Remarks: *An excerpt extracted from the Royal Speech, given to the audience of well-wishers on the occasion of the Royal Birthday Anniversary at the Dusidalai Hall, Chitralada Villa, Dusit Palace, on Thursday, December 4, 1997.*

Royal Speech*

"... As we are in the "globalization" era, we also have to conform to the world because, if we do not comply with the existing agreements, they could be discontented. Why should they be unhappy? It is because they themselves also have a crisis. As Thailand's neighboring countries in this region are also facing crisis, it will be more difficult for us to recover from our own crisis. Furthermore, it is not only that the countries in this region are affected, even countries that still seem prosperous will also become entangled. If the problems are not solved in any corner of the world, other parts of the world will also be affected. We have to strive to support our people so that they have work to do, and have an income. In this way, we will be able to surmount the crisis. But the original policy of placing too much emphasis on the production of industrial goods will not succeed as the local market has been reduced because the people now have a lower purchasing power. ..."

"... However, more importantly, the economists say that we must export other countries, but those countries also have their own difficulties and will not buy our products. If there are industrial products and there are no buyers, the efforts will be of no avail. We may be able to produce good quality goods, but many countries in this region have industries that are of top quality too. This crisis originates from the fact that there has been an overproduction and no purchasers because nobody has enough money to buy. Take the car I drove here, the manufacturer still have cars in stock but they cannot sell them. It is not that there are no buyers, but those who want a car have no money. If all cars are bought on credit, the company cannot survive either. That is why they slowed down their production, and they built this car for me using more than two hundred workers. This is one way to cope with the crisis. But those who like modern economics would perhaps not appreciate this. A careful step backwards must be taken; a return to less sophisticated methods must be made with less advance instruments. However, it is a step backwards in order to make further progress. If no such action is taken, the crisis will be difficult to surmount. ..."

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* Revised and translated by His Majesty the King.

Remarks: *An excerpt extracted from the Royal Speech, given to the audience of well-wishers on the occasion of the Royal Birthday Anniversary at the Dusidalai Hall, Chitralada Villa, Dusit Palace, on Thursday, December 4, 1997.*

Mainstreaming the Community

In the mid-1990s, community thinking moved from the NGOs and activists to the mainstream. Many people helped to achieve this shift. But one seemed to represent it in the public eye. Mo [doctor] *Prawase* had won the Magsaysay award[26] for his work with health NGOs in the 1970s. He wrote and spoke often on a modern Buddhist approach to life. In the late 1980s, he worked with the Local Development Institute which spearheaded the pressure to gain an NGO role in policy-making. He began to advocate a "holistic" approach to development which supplanted "growth" with a Buddhist concept of "well-being" achieved by developing "learning communities". In the early 1990s, NESDB absorbed this approach into its plan-making. In 1994, Prawase publicly challenged the prime minister to initiate reform of the constitution, and lobbied for the inclusion of community concerns. In 1997, he blamed the economic crisis on the misguided approach to development, and spoke loudly and often on the need to mobilize "social energy" in order to rebuild a "moral economy" on the basis of learning communities.

constitutional revision to move Thailand finally beyond dictatorship. Community advocates played a part. A network of 461 NGOs submitted a platform of recommendations to the constitutional drafting committee. This NGO lobby focused on five areas: community's rights of access to and management of local natural resources; rights of ethnic minorities to preserve their language and culture; government's duty to pay equitable compensation to those affected by development projects; government's duty to promote self-reliant agriculture; and government's duty to support alternative local approaches to education. The "People's Constitution" was approved in October 1997.

The economic collapse of 1997 punctured the faith in the superiority and reliability of the urban economy, and refocused attention on the countryside and the rural community which cushioned the social shock. The King's speech in December 1997 (see box) highlighted ideas of sufficiency and self-reliance, which were important parts of community thinking, as strategies to survive the crisis. Debate on the role of the community was thrust into the mainstream. In devising anti-crisis programmes, government chose to rely more than ever before on local communities, and often to by-pass its own administrative channels (see chapter 3). Ideas of community empowerment gained much greater acceptance, not in all ministries, but certainly in several which had to mobilize rapidly to counter the social impact of the crisis.

In sum, over the 1990s the idea that the community could serve as the basis for reversing the inequitable top-down development strategy moved firmly into the mainstream. The significance of the economic crisis was not that it stimulated thinking along these lines. That had been developing for some time. Rather, in the crisis such thinking gained a much wider audience among the urban middle class, and some government (and international) agencies adopted a community-based strategy in devising relief strategies.

By the early 1990s, the combined efforts of grassroots community protests, pro-democracy organizations, and sympathetic technocrats had created powerful pressures for change in both the political framework and the orientation of development policy. Over the late 1990s, the pressures forced four institutional shifts of importance for community empowerment. The first of these was the "People's Constitution" promulgated in October 1997.

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26 Sometimes dubbed the "Asian Nobel Prize", this award, named after a former president of the Philippines, is given in recognition of outstanding social contribution.

INSTITUTIONAL SHIFTS I: THE 1997 CONSTITUTION

Previous constitutions had been drafted with no significant public participation. The process for the 1997 constitutions was very different. A total of 19,335 candidates stood at the first stage of elections of 76 members of the Constitution Drafting Assembly (CDA) membership. The CDA set up a publicity committee which claimed 600,000 people gave their opinions on the initial proposals, while over 120,000 attended public hearings on the final proposals and 87,000 responded by questionnaire. As already noted, NGO groups lobbied for community interests.

New rights for the community

The Constitution enshrines many rights which are important for community empowerment.

The Constitution enshrines many rights which are important for community empowerment. The Chapter on the Rights and Liberties of the Thai People is much longer and more wide-ranging than previous charters. One main result of NGO lobbying is Section 46 which for the first time guarantees community rights, including rights of access to natural resources.

> **Section 46.** Persons so assembling as to be a traditional community shall have the right to conserve or restore their customs, local knowledge, arts or good culture of their community and of the nation and participate in the management, maintenance, preservation and exploitation of natural resources and the environment in a balanced fashion and persistently as provided by law.[27]

A later section expands on the rights of communities with respect to natural resources and the environment.

> **Section 56.** The right of a person to give to the State and communities participation in the preservation and exploitation of natural resources and biological diversity and in the protection, promotion and preservation of the quality of the environment for usual and consistent survival in the environment which is not hazardous to his or her health and sanitary condition, welfare or quality of life, shall be protected, as provided by law. Any project or activity which may seriously affect the quality of the environment shall not be permitted, unless its impacts on the quality of the environment have been studied and evaluated and opinions of an independent organization, consisting of representatives from private environmental organizations and from higher education institutions providing studies in the environmental field, have been obtained prior to the operation of such project or activity, as provided by law. The right of a person to sue a State agency, State enterprise, local government organization or other State authority to perform the duties as provided by law under paragraph one and paragraph two shall be protected.

Other sections in this chapter attempt to empower the individual or community by specifying the "the right to get access to public information in possession of a State agency, State enterprise or local government organization", (Section 58); "the right to receive information, explanation and reason from a State agency, State enterprise or local government organization before permission is given for the operation of any project or activity which may affect the quality of the environment, health and sanitary conditions, the quality of life or any other material interest concerning him or her or a local community and shall have the right to express his or her opinions on such matters in accordance with the public hearing procedure, as provided by law" (Section 59); and "the right to participate in the decision-making process of State officials in the

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27 All excerpts from the 1997 Constitution are taken from the official translation by the Council of State, available at www.krisdika.go.th/law/text/lawpub/e11102540/text.htm.

performance of administrative functions which affect or may affect his or her rights and liberties, as provided by law" (Section 60).

New directives for greater participation

Equally innovative is the Chapter on "Directive Principles of Fundamental State Policies" which mandates the state to strengthen local communities and promote community participation in national decision-making.

> **Section 76.** The State shall promote and encourage public participation in laying down policies, making decision on political issues, preparing economic, social and political development plans, and inspecting the exercise of State power at all levels.
>
> **Section 78.** The State shall decentralize powers to localities for the purpose of independence and self-determination of local affairs, develop local economics, public utilities and facilities systems and information infrastructure in the locality thoroughly and equally throughout the country as well as develop into a large-sized local government organization a province ready for such purpose, having regard to the will of the people in that province.
>
> **Section 79.** The State shall promote and encourage public participation in the preservation, maintenance and balanced exploitation of natural resources and biological diversity and in the promotion, maintenance and protection of the quality of the environment in accordance with the persistent development principle as well as the control and elimination of pollution affecting public health, sanitary conditions, welfare and quality of life.

In addition this Chapter contained several directives to alter the direction of national economic policy.

> **Section 83.** The State shall implement fair distribution of incomes.
>
> **Section 84.** The State shall organize the appropriate system of the holding and use of land, provide sufficient water resources for farmers and protect the interests of farmers in the production and marketing of agricultural products to achieve maximum benefits, and promote the assembling of farmers with a view to laying down agricultural plans and protecting their mutual interests.

Also, for the first time a Thai constitution mentions human dignity.

> **Section 4.** The human dignity, right and liberty of the people shall be protected.

New institutions for democracy

The Constitution also founds several new institutions designed to act as checks and balances on the action of administrators and politicians, and to strengthen the individual or community in dealing with the state. These include a strengthened National Counter Corruption Commission, new Constitutional Court, Ombudsman, and Administrative Courts which will hear cases against government bodies.

Amongst these new institutions, the Constitution established a National Economic and Social Council as a means to increase participation in national development planning and policy-formulation. The council is "charged with the duty to give advice and recommendations to the Council of Ministers on economic and social problems" and specifically to review the five-year plans. Members of the Council are nominated and selected from different sectors of society, including local communities, in a representative and participatory manner. Even though this Council has only an advisory function and no real decision-making authority, its views and recommendations will be widely disseminated to the government and public. The council thus has the

potential to serve as another channel by which the people can take part in the national planning process.

More significant is the National Human Rights Commission (NHRC). **Section 200** of the Constitution prescribes wide powers:

> (1) to examine and report the commission or omission of acts which violate human rights or which do not comply with obligations under international treaties to which Thailand is a party, and propose appropriate remedial measures; (2) to propose to the National Assembly and the Council of Ministers policies and recommendations with regard to the revision of laws, rules or regulations for the purpose of promoting and protecting human rights; (3) to promote education, researches and the dissemination of knowledge on human rights; (4) to prepare an annual report for the appraisal of situations in the sphere of human rights in the country.

The first president of the NHRC, selected in 2000, is *Saneh Chamarik,* a senior academic and long-time social activist who has written extensively on the human impact of development and the importance of the community. Before his selection to the NHRC, he had launched a large-scale project of research on issues of human and community rights throughout Thailand. Many young activists participated in the project which covered labour, slum-dwellers, hill peoples, small fishermen, community control over forests, and gender. On his appointment, Saneh predicted that the NHRC would have to become involved in "biodiversity issues, community rights and rights to traditional lifestyles and local wisdom".

Finally, the Constitution for the first time allows citizens to submit a bill for the consideration of parliament. The bill must be supported by the signatures of 50,000 eligible voters. The first such bill submitted was a Community Forest Bill.

INSTITUTIONAL SHIFTS II: THE EIGHTH AND NINTH PLANS

Eighth Plan: people-centred development

The Eighth Plan (1997-2001) marked a dramatic break from its predecessors, both in content and creation. The National Economic and Social Development Board (NESDB) held nine regional seminars inviting local NGO leaders, development workers, academics, businessmen, community leaders, monks, and bureaucrats. The results were then summarized in a tenth national seminar, compiled by the NGO side into a People's Development Plan, and refined by technocrats into the final version accepted in March 1996.

The Plan aimed to shift "from a growth orientation to people-centred development" through "measures to promote self-reliance in local communities and the creation of relatively secure community economies". A chapter on "Promoting Popular Participation and Upgrading the Capabilities of Communities to Play Active Roles in Local Development" included proposals for training courses on community leadership, tax and funding changes to create community budgets, promotion of community schools with appropriate curricula, community management of natural resources, funding to NGOs to devise community-based social protection, and fiscal incentives for businesses to work with communities.

However, the Eighth Plan was launched into the storm of the 1997 crisis. Much of its ambition was blunted by the imperatives of short-term crisis management.

Ninth Plan: sufficiency economy

The Ninth Plan (2002-2006) was prepared after a process of national consultation, though less extensive than its predecessor. The Plan retains the commitment

to people-centred development, and repeats many of the same aspirations of the Eighth Plan. However, the Plan is also formulated with much greater sensitivity to the influence of the outside world, especially to the impact of free trade, the trend to regional economic groupings, the consequences of financial liberalization, and the impact of new technologies. The Plan is also heavily focused on restoring economic growth after the 1997 crisis, largely by marshalling national resources to improve Thailand's competitiveness in the world economy.

The Plan attempts to balance the aspirations for people-centred development with the realities of recovering from the nation's worst-ever economic crisis within the context of globalization. The Plan adopts H.M. the King's "philosophy of sufficiency economy" as "the guiding principle of national development and management".

Philosophy of Sufficiency Economy

The principle of sufficiency economy implies moderation in all human endeavour. If practised, the philosophy will lead to a Thai society that is developed, economically, socially and politically, based on self-support and self-reliance. Furthermore, such a society will be highly resilient, even when exposed to the forces and risks of globalization. A sufficiency economy will be one in which the Thai are well-educated, engage in life-long learning, and possess high moral standards, especially honesty, and integrity. Such a society will be a knowledge-based learning society which incorporates local wisdom and retains Thailand's cultural identity. The society will be caring and united, and proud of its cultural heritage. In sum, a sufficiency economy will be characterized by balanced, sustainable, and just development.

Ninth Plan, chapter 1: National Development Vision

Empowerment of Communities and Development of Livable Cities and Communities

Emphasis should be placed on the development of processes that empower communities so that they can serve as strong foundations of society. Mobilizing participation of all stakeholders in community development is a priority target. Livable cities and communities should be achieved through the creation of enabling environments conducive to the development of a way of life which is tranquil, convenient, clean, safe, and well disciplined. This development process will lead to the creation of bodies of knowledge that are consistent with local wisdom, as well as the development of strong grassroots economies which are more self-reliant, and support sustainable development of livable cities and communities.

Ninth Plan, chapter 4: Economic and Social Development Strategies

Community empowerment is an explicit theme of the Plan, particularly in proposals to alleviate poverty, improve environmental management, and generate sustainable rural development. Following the rise in poverty during the economic crisis, "Poverty alleviation efforts should be holistic in approach, not just focused on income. To this end, empowerment of the poor should be a priority".

The main role of communities in the Ninth Plan is in efforts to revive agriculture and promote rural growth in order both to reduce the gap and strengthen the linkages between the rural and urban economies. The Plan stresses the importance of developing local communities' capacity to manage their own economic and social development in partnership with the public and private sectors. It aims to support community enterprises, strengthen communities' capacity to manage revolving funds and small credit schemes, establish community information centres, and increase networking between community organizations. In addition it encourages communities to develop appropriate local education consistent with local wisdom and culture, to have participative community planning, to exchange knowledge with development partners, and to take a larger role in managing natural resources and developing networks to preserve the environment.

INSTITUTIONAL SHIFTS III: DEMOCRATIC DECENTRALIZATION

From centralization to contractors' councils

The administration of provincial Thailand has been highly centralized. The Ministry of the Interior heads an administrative pyramid which extends down through provincial governors, district heads, sub-district (tambon) heads and village heads. Line ministries such as education, agriculture, and community development post their own officials in the provinces who are coordinated and overseen by the provincial governor.

Elected provincial councils were introduced in 1955. In theory they were allotted wide-ranging powers over policy-making, supervision of the provincial administration, and approval of the budget. In reality they were not able to challenge the provincial bureaucracy. Instead they became clearing houses for contracts to build local infrastructure such as roads, bridges, schools and government offices. By one estimate, some 80 to 90 per cent of all provincial councillors are construction contractors, and the councils are often called "contractors' councils".[28]

The share of local government's revenue will rise to 20 per cent in 2001 and 35 per cent in 2006.

Emergence of the TAO

Demands for decentralization increased in the early 1990s, resulting in an Act passed in 1994. This Act made the tambon (sub-district) the main site for decentralization. At the time there were 7,159 tambon with an average population of around 8,000 people. The act enabled tambon to be transformed into Tambon Administrative Organizations (TAO or *oboto* in Thai) with legal status, enhanced fund-raising powers, the right to make by-laws, and the duty to "develop the tambon economically, socially and culturally".

Over the following years, most tambon were upgraded. However the kamnan (sub-district head) and village heads remained ex-officio members of the TAO councils, with the kamnan as chairman. District officials still took a close supervisory role. The TAO seemed to be developing as an extension of the local bureaucracy.

The 1997 Constitution demanded further change. It included decentralization among the directive principles of state policies (Section 78), and prescribed the shape of further reform in some detail (Sections 282-290). In particular it entrusted local government bodies with powers of policy-making and fund-raising, allocated them duties to "conserve local arts, custom, knowledge or good culture", directed them to protect the environment and natural resources, and mandated that all councillors in future be elected. It mandated new legislation to implement these principles, including the establishment of a committee to draw up and implement a decentralization plan.

The legislation was passed in 1999, the implementation committee established in 2000, and its plans approved in 2001. The goal is to transfer power within four years to those local administrative bodies that can demonstrate their readiness, and within ten years to the remainder. The kamnan and village heads lost their ex officio membership of the TAO councils between 1999 and 2001. All TAO members are now elected by the same electorate as members of parliament (all over 18). The term is four years. Each village (as officially defined) elects two TAO members, and each tambon consists on average of 9-10 villages. The share of local government's revenue will rise to 20 per cent in 2001 and 35 per cent in 2006. The plan also establishes a mechanism for gradually transferring 245 responsibilities from 50 departments in 11 ministries to the local authorities.

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28 This estimate was made in 1997 by the director of the division responsible for policy on PAOs, see Daniel Arghiros, *Democracy, Development and Decentralization in Provincial Thailand*, Richmond: Curzon, 2001, p. 24.

This is a dramatic change in the framework of local government. The TAOs are close to the base of the governmental structure. They are now elective bodies with considerable powers and significant budgets. There are of course considerable problems to be faced. But the potential of this decentralization for community empowerment is very significant.

INSTITUTIONAL SHIFTS IV: EDUCATION REFORM

Critiquing the system

Modern education spread rapidly beyond the urban areas from the 1960s onwards. Almost everyone entered four years of primary education, and by the 1980s almost everybody had basic literacy. As reported in the stories in chapter 1, community members were ambivalent about the result. Despite its obvious benefits, education was disempowering. It placed less emphasis on local knowledge and wisdom. It made communities passive recipients of new knowledge. The sharp division between traditional knowledge and modern education disrupted any learning process within the community.

From the 1970s onwards, a broader critique of the education system gradually rose. Learning was by rote. Textbooks were standardized, narrow, and dogmatic. Administration was centralized. Education was stifled by bureaucracy. In sum, the system was a reflection of the era of centralization and authoritarianism. It needed an overhaul. A reform plan was drafted in 1974, but there was no political will to implement it.

Efforts to reform education were ineffective until the boom which began in the mid-1980s revealed the system's basic inadequacy. Thailand did not have enough secondary school graduates, enough engineers, enough research capacity, and enough creativity to keep up with the pace of economic growth. By the early 1990s, these failures were widely seen as a major constraint on future economic growth. In parallel, another critique related the corruption, excessive consumerism, selfish values, and poor business ethics which seemed to mushroom in the boom, to the narrowness and moral inadequacy of curriculum content and pedagogical style. The bust, when it came, was quickly read as proof of these propositions. The preamble of the 1999 National Education Act positioned the legislation as response to "economic, political, cultural and social crisis".[29]

From critique to reform

The campaign for education reform ran in parallel with the campaign for constitutional reform and shared many of its features. In 1994, an independent group of activists, including technocrats, educators, and businessmen, formed a "Commission on Thailand's Education in the Era of Globalization" with support from a leading bank. The Commission recruited experts, held public consultations, and drew up a framework of comprehensive reform in the educational system. It then lobbied for government to accept these proposals as basis for the reform enacted in 1999.

The activist group was overwhelmingly urban, but it included some prominent advocates of community strength. Hence one principle of the Commission's proposals was that "the community must be capable of maintaining itself not only as a strong and dynamic unit of the economy, but a proud and lively part of the social and cultural life of the country as well". This would include the ability "to preserve and pass on to their future generations their cultural identity".[30]

The sharp division between traditional knowledge and modern education disrupted any learning process within the community.

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29 *National Education Act of B.E. 2542 (1999)*, Office of the Education Commission, Office of the Prime Minister, 1999, p. i.

30 *Thai Education in the Era of Globalization: Vision of a Learning Society*, A Synopsis of the Report of the Commission of Thailand's Education in the Era of Globalization: Towards National Progress and Security in the Next Century, 1996.

The changes over the past decade in both the institutional context and the national agenda have been dramatic.

The 1999 Education Act aimed to achieve four main goals: to widen access to education; to change from rote learning to "child-centred" education; to improve quality standards; and to decentralize administration and control.

The Act widened access by extending compulsory schooling up to 9 years and free schooling up to 12 years, as well as making more space for specialized forms of learning. It established child-centred learning through a new curriculum, and retraining of teachers. It planned to upgrade quality by forming a professional institute for teachers and education officials, and a new body to monitor performance. It decentralized the administration by converting the Ministry of Education into a policy and planning body, setting up local area boards, giving more independence to schools, and encouraging greater parent and community participation. Together, these measures amounted to a revolution in the education system.

Education reform and the community

The reformers' intention to bring local communities into a national learning process is enshrined in the Act's section 29:

> Educational institutions in cooperation with individuals, families, communities, community organizations, local administration organizations, private persons, private organizations, professional bodies, religious institutions, enterprises, and other social institutions shall contribute to strengthening the communities by encouraging learning in the communities themselves. Thus communities will be capable of providing education and training; searching for knowledge, data, and information; and be able to benefit from local wisdom and other sources of learning for community development in keeping with their requirements and needs; and identification of ways of promoting exchanges of development experience among communities.

On its final reading, the act was passed unanimously by both houses. An Education Reform Office and three sub-commissions were formed to restructure the ministry, retrain teachers, redesign curricula, revise financing, and guide the supplementary enabling legislation.

PROBLEMS AND ISSUES

The changes over the past decade in both the institutional context and the national agenda have been dramatic. The 1997 Constitution is an ambitious attempt to remap the relations between state and society. The Constitution and the decentralization scheme have begun to change the shape of government. The Eighth and Ninth Plans have brought a new social and cultural agenda into the planning process. The Education Act aspires to lay the human foundations for success in the age of globalization. The cycle of boom and bust has sensitized society to issues of environmental damage, social justice and community strength, preparing the way for pioneer attempts to strengthen rights, direct government policy, and decentralize power.

Yet change is difficult. New administrative structures threaten old power relations and break old ricebowls. Planning for social change is easier than achieving it. Policies hatched in the heat of crisis can easily be forgotten when conditions ease. Thailand's traditions of centralized government, bureaucratic authority, and top-down planning will not be quickly or easily overthrown.

These four institutional changes have enormous potential to support community empowerment. But they also have very real limitations, mainly because the legacies of centralized government, top-down thinking, and paternalist attitudes are not easily removed. In this section, we look at some of the problems and complications in these four areas, and lay out some of the challenges which community empowerment will confront in the future.

The 1997 Constitution's unfinished business

Chapter 3 of the Constitution establishes many new rights for individuals and communities. However, in reality these exist on paper only. There is as yet no tradition in Thailand for using the judicial system to activate constitutional rights, though some attempts are currently being made and such a tradition could eventually emerge. Unlike past charters, the current Constitution goes beyond the guarantee of rights to stipulate that these rights and freedoms can be invoked directly in the courts to question actions violating the Constitution.[31] But this requires a change of judicial practice which will not be quick. At present, the only reasonably firm way to substantiate such rights is through legislation. Yet this, of course, is time-consuming and difficult.

Section 46 is of great importance to community empowerment as it enshrines the right of communities to "participate in the management, maintenance, preservation, and exploitation of natural resources and the environment in a balanced fashion and persistently as provided by law". Yet in reality, the modern state over the last century has effectively appropriated rights over most natural resources, often overriding pre-existing community arrangements. Thailand's legal system, based on the Roman law tradition, has no avenue for claiming customary rights. Moreover the state's rights have been enshrined in various bits of legislation such as those which define the operations of the forestry and irrigation departments. Hence the phrase "as provided by law" appended to Section 46 annuls much of the Section's force. This can only be rectified by legislation.

This is far from easy, as the experience with the Community Forestry Bill demonstrates. This bill provides a framework for designating areas as community forests where management will be shared between communities and officials under strict principles. The bill has been under discussion for over a decade but has faced considerable opposition, especially from the Forestry Department which would have to cede its exclusive control over areas designated as community forests. The bill was revived after the Constitution was passed and was the first bill submitted to parliament under the Constitution's provisions for a "people's bill" backed by 50,000 signatures. As of the time of writing this report, the bill had reached the Senate where an amendment had, according to the bill's drafters and supporters, undermined the legislation's purpose. A way is being sought to end this deadlock.

The Community Forestry Bill carries the weight of a fierce controversy over the fate of people who are living in areas which have been defined as national park or protected watershed. Many of these people were settled before the areas were so defined, but proof is sometimes difficult. The fate of these people involves complex questions over historical rights, social equity, and environmental management. Other aspects of community management of natural resources – waterways, sea, underground – will be equally controversial.

The Community Forestry Bill carries the weight of a fierce controversy over the fate of people who are living in areas which have been defined as national park or protected watershed.

Of similar importance for the validation of community rights is the question of public hearings. The constitution enshrines the right of people to express an opinion before the approval on any project which will affect the community "in accordance with the public hearing procedure, as provided by law". At present the government's monitoring of environment issues is covered by the Enhancement and Conservation of the Environment Quality Act of 1992. It is widely recognized that the intentions of this Act are good, but the implementation has been ineffective. The legislation is built around the "polluter pays" principle, but the courts have refused to accept cases by quibbling over who is the affected party when pollution occurs. The legislation also lays down procedures for environmental impact assessments (EIAs)

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31 Vitit Muntarbhorn, *Human Rights and Human Development: Thailand Country Study*, UNDP Occasional Paper 36, 2000, p. 3.

but again these have fallen short of expectations, mainly because they are commissioned by the project proponents, not by an independent body. Further, the legislation does not mandate social impact assessment (SIA) and public participation in the impact assessment process.

In 1996, government introduced a Prime Minister's Office Regulation on Public Hearings. In the opinion of many, this also falls far short of an adequate law on public hearings, and far short of the requirements of the Constitution. So-called public hearings have been called on projects which have already been approved but which face local opposition. Opponents have perceived these as attempts to legitimize prior decisions and have either refused cooperation or used the events as sites of protest. Hence the potential to introduce a proper procedure for public hearings as a way to negotiate among the rights and aspirations of different parties is being damaged by the lack of adequate legislation.

Project proponents still view an EIA as the way to approve a project, rather than a mechanism for deciding whether or not a project should be built in the first place. Even some government officials think that way.... If we did it [the Enhancement and Conservation of the Environment Quality Act] over, I would demand that public hearings be carried out at the beginning and according to an established procedure.

– Kasem Snidvongs, former Permanent Secretary, Ministry of Science, Technology and Environment

There is a special problem over projects which were designed before social and environmental conditions changed, and approved before the new constitution and new regulations came into force, but have not yet been implemented. Opponents of these projects argue that the principles enshrined in the Constitution should be applied to these projects, implying proper social and environmental assessments and community participation. Proponents argue that approvals were made under the laws operating at the time, and that no review is needed. Projects of this nature (the Thai-Malaysian gas pipeline, Bo Nok and Hin Krut power projects, etc.) have occasioned some of the bitterest disputes of the past five years. As yet, there is no mechanism, no framework, no principles for managing such issues.

Ninth Plan: sufficiency economy vs. growth

While the Ninth Plan features people-centred development and community empowerment, in practice the Plan places great emphasis on a return to stability and economic growth. The main strategies to achieve these objectives are to upgrade human resources, corporate competitiveness, and public administration in order to make Thailand both more self-reliant and more successful in a globalized world.

The role of the community is much diminished from the Eighth Plan. In effect it is more or less confined to rural development. Given the emphasis on crisis recovery, this is not surprising and may in fact be realistic. However, the language and tone of the Plan as a whole is a reversion to more traditional style, not only in its emphasis on economic growth, but also in its calls for discipline and unity in the task of recovery.

The scope and range of the Ninth Plan is very ambitious. There is some risk that implementation will focus on measures to restore growth, and neglect the aspirations towards community empowerment.

Decentralization: patronage or participation?

As long as there is no complete transfer of management from central government mechanisms to local self-administration, true development may not occur, and all roads will still lead to Government House as they always do.

– Dr. Kowit Puang-ngam, lecturer in community development, Thammasat University

Are we getting "TAOs of the state" or "TAOs of the people"?

– Northeastern villager

The rapid rollout of decentralization has led to a large number of concerns. The choice of the tambon, a relatively small unit, theoretically increases the potential for effective community participation. But will such a small unit be able to find the necessary managerial talent, escape continued subordination to officialdom, evade capture by powerful local interests, and achieve sufficient scale in areas such as health and education?

These concerns have already sparked wide-ranging debate. Some critics suggest that the Ministry of the Interior is trying to retain bureaucratic supervision over the TAOs. Shortly before the 1999 act, it appointed a special officer to oversee each TAO. Provincial and district officials instruct TAOs on government policies which the TAOs must implement. Efforts have been made to coopt TAO members into the culture of the bureaucracy.

Equally, some fear that the TAOs will be captured by local "dark influences" or become clearing houses for local contractors in the same way as the provincial councils.

Some go further and charge that this decentralization has been "designed to fail". The choice of the tambon as the level for decentralization came about because of fierce opposition from the Ministry of the Interior to effective democratization at the provincial level. The tambon units may in many cases prove too small both in terms of budget size and human resources.

While TAOs have found it easy to take over the management of infrastructure provision, it is not clear what they will do with the budget expansion planned over coming years. Education is flagged in the constitution as a priority area, but teacher organizations have expressed reservations about TAOs ability to manage local education.

How committed is the government to seeing the project through? The Thaksin Cabinet inaugurated in 2001 launched a pilot project of "CEO governors" in five provinces. These governors have additional powers, report directly to the prime minister's office, and are supposed to catalyse local development. This innovation appears to contradict the trend towards democratic decentralization. With the central government facing strong budget constraints in the wake of the economic crisis, the increasing fund allocation to local government may well come under threat.

These concerns show that the next five years will be critical for the success or failure of the tambon-focused decentralization scheme.

Environment and Participation

In 1999, a TAO in a mountainous and forested area of the north approved a concession to a quarry company. Local people objected, formed a protest movement, petitioned the TAO, and then demonstrated outside the provincial headquarters. They claimed:

- the quarries were located in a watershed forest, and would affect both drinking water supplies and irrigation;
- the quarries would disrupt popular tourist spots and religious places;
- the TAO had not consulted people, not allowed participation in the decision, and not acted transparently.

The TAO members were forced to resign. At new elections, members of the protest group gained a majority. The new TAO held a public meeting, inviting the quarry company and relevant officials. Villagers found that the concession agreement had false data (e.g., overestimating the distance between quarry and village as 5 rather than 2 kms), and that the concession payment to the TAO had somehow been reduced by two-thirds. After these revelations, local people took a close interest in the operation of the TAO, and particularly in its management of the environment so important to the residents of a forest area. Meetings had to be moved to a bigger building to accommodate observers.

– Case from a research study supported by the National Counter Corruption Commission

Education reform: a long struggle?

As with the other reforms, the aspirations of the education reformers have run up against the realities of bureaucratic inertia, social conservatism, and political self-interest. The education reform is especially vulnerable because it aims to change

Our fate is in the hands of both the officials and ourselves. But more in the hands of officials.

– Villager in a community project

the lives of a large and influential social group – the teachers – and because it tries to disempower a well-entrenched section of the bureaucracy.

Teachers are respected and influential figures within local communities. For that reason, they have long been recruited into the networks of elective politicians. In return for their political service, they can demand repayment. Since passage of the National Education Act, 1999 some teachers have lobbied to adjust the implementation. Ministers, who have to think of their party's political base, have been vulnerable to this lobby. The teachers have been particularly uncomfortable about the new bodies to oversee quality, and about the switch from rote to child-centred learning.

Similarly, the education bureaucracy has resisted the Act's drastic decentralization of education administration. It has tried to influence the supplementary legislation, in particular to retain budgetary control. It has tried to assimilate the new local boards with its existing structure of 76 provincial offices, rather than establishing a new and more localized network of 295 zones. Eventually, a compromise of 175 zones was agreed.

These and many other issues are the subject of debate and political wrangling. But from the angle of communities, there is a further concern. The intention of the reform lobby to bridge the gap between local learning and school learning is clear, and Section 29 of the Act provides an enabling framework. But there is no institutional mechanism to ensure this opportunity will be taken. In effect, it requires a separate effort in each community. Many communities have innovated, even in advance of the Act. But it is likely that these efforts will be sporadic in the absence of any mechanism to generalize them.

CONCLUSION

> Our fate is in the hands of both the officials and ourselves. But more in the hands of officials.
>
> *– Villager in a community project*

Community empowerment is difficult to imagine outside a context of democracy. Between the 1970s and 1990s, Thailand made a transition from military dictatorship to parliamentary democracy. This created the political space within which activists, NGOs, academics, and others pioneered experiments in strengthening communities, and demanding more democratic approaches to economic policy-making.

In the mid-1990s, these efforts achieved sufficient scale to drive through some important changes in the institutional environment. Community rights were written into the 1997 constitution. Community strengthening and participation featured prominently in the Eighth and Ninth Plans. Decentralization legislation created democratic local government at a low level of the state pyramid. Reforms set out to improve the quality, accessibility, content and social relevance of education.

These changes have not taken place without reaction. The previous era of state centralization and top-down development has created many vested interests which resist such changes. The institutional changes themselves are incomplete in many ways. There is a serious risk that the reform trend will falter before these new institutions can be truly effective in aiding community empowerment. There are struggles to come.

We will return to consider ways to continue reform in the institutional context in chapter 4. But first we will look more closely at how in reality community empowerment has developed from the bottom up over the past two decades.

CHAPTER 3

PROMOTING COMMUNITY EMPOWERMENT

In the past when we wanted to say something, we were afraid. Now we're not afraid.

– Villager on an education project

A LEARNING PROCESS ON A NATIONAL SCALE

Community empowerment is a learning process on a national scale. It cannot be conceived as something which happens only within communities, or as part of the relations between communities and government agencies. It is part of a broader change from dictatorship and control to democracy and humanism. This change faces barriers in the form of old institutions, entrenched mentalities, and vested interests. To be successful, community empowerment must command understanding, acceptance, and support in the society at large. The previous chapter showed how international changes and domestic pressures combined to change the institutional environment. This chapter looks at how the practice of community empowerment developed in very practical ways from the bottom-up as a learning process involving the communities themselves and outside actors including NGOs and activists, businesses, research agencies, government departments, and international agencies.

The movement began from the efforts of local communities to develop innovative ways to grapple with problems thrown up by social and economic change. The first section of this chapter notes two of the most widespread and successful examples: credit schemes and environmental campaigns. Gradually outside agencies became more involved in assisting, sponsoring, or initiating such projects. The second section of this chapter looks at key examples of cooperation between communities and business organizations, and between communities, NGOs, international agencies, and government bodies.

The possibility to accelerate this bottom-up movement depends on accumulating learning at both the local and national levels. This function was initially undertaken by NGOs and development agencies. The third section looks at how, from around 1990, government agencies began to sponsor research aimed at both understanding the community and promoting its social and economic roles. By the late 1990s, these efforts had resulted in a considerable body of learning.

One important initial application of this learning was in efforts to replace top-down methods of planning by bottom-up procedures. The fourth section reviews the thinking behind these procedures, and their adoption by some government agencies.

The 1997 economic crisis increased the urgency to identify those most affected by the crisis and deliver schemes of social protection and income generation. The fifth section reviews how more government and development agencies looked to communities to perform these roles. The most important of these was the Social Investment Fund (SIF) which devised innovative methods to provide funds directly to community groups for projects of building social capital.

To be successful, community empowerment must command understanding, acceptance, and support in the society at large.

COMMUNITY SCHEMES FOR EMPOWERMENT

From the 1970s onwards, several hundred thousand community-based organizations and networks developed in Thailand. These groups and networks were created to cover a wide range of issues such as livelihood, environment, culture, alternative farming, natural resource management, micro-finance, basic industrial management, eco-tourism, health care, and education. Some originated wholly within the village. Some were started by "development monks". Some were promoted by NGOs. Among the variety of examples, two particular types were widespread and successful – credit schemes and environment projects. This reflected that growing debt and declining access to natural resources were two of the key problems faced by communities in the "age of development".

Savings and credit

Savings groups have been one of the most widespread and successful forms of community enterprise. Often they are formed in an attempt to control the rising level of debt to banks and money-lenders. They provide low-cost finance for local enterprises. In some cases they have expanded into providing various kinds of welfare and social protection. Many examples are associated with local religious institutions (temples, mosques, or churches). While they help the community members to participate in the market economy, they are often not run on strict market principles, but are devoted to maintaining the community, its ethics, and its way of life. In some cases they have opened community shops, or become the base for other kinds of community activity.

According to a study by *Poladet Pinprathip,* in 1999 there were 51,667 community financial groups with almost 7 million members and assets of 16,810 million baht. Many are over twenty years old. The key features are:

- the initial reason for the scheme confronts a major community problem, namely the growth of debt dependence,
- the fund is not a simple replacement for a bank, but extends into social protection,
- cooperation on this scheme provides a basis for other community projects,
- these schemes are not covered by any law,
- in the absence of law, the principles and authority come from elsewhere – often from the local religious leadership, Buddhist, Muslim or Christian communities. Elsewhere they come from the collective moral authority of the community itself.

Protecting the environment

In many places, communities were mobilized to protect natural resources on which their livelihood depended. In particular the rapid decline of the forest area prompted communities to find ways to preserve what remained. The increasing pollution of rivers and decline of fish stocks prompted similar attempts.

In certain instances they were able to negotiate cooperation with government agencies to put in place systems for

The Power of Unity

The Honesty Savings Group Network in Trat province, consists of 152 small savings groups and has over 30,000 members. Each group asks members to come and deposit the same sum on the same day each month, so the members meet together regularly and interact on a basis of equality.

The network negotiated with a cooking gas wholesaler to reduce the wholesale price of his product. The wholesaler, in acceding to this reduced price, remarked, "I have just come to understand the power of unity". The Network then distributed the cooking gas directly to the savings groups at the purchase price, thus bypassing the middleman.

The profits were used for welfare or community projects. The network plans to negotiate similar deals with other suppliers of goods and services.

protecting the local environment. Often these efforts began when resources on which the community depends came under threat from outside forces.

Analysis of such local environmental projects concludes that there are two main criteria for success:

- Community organizations must be the most prominent actors; official organizations such as tambon administrative organizations (TAOs) may be supporting actors.
- Effective community regulations are those that are based on and built from the community's traditional values and norms. Kinship, local network, and community participation provide additional guarantees for a sustainable natural resource base.

Community versus Loggers

The Krongkram watershed in Surat Thani province was threatened by new agricultural settlers, by logging under a legal concession, by an irrigation scheme, and by a Forest Industry Organization reforestation project. Three hundred villagers from Tambon U-tae protested against the reforestation proposal but were powerless to halt logging. Then the National Park Authority proposed to enclose the villagers' own farmland. The community felt that they could not handle the situation alone. They formed a Krongkram Watershed Environment Group in alliance with other villages and NGOs. The group submitted plans to the Regional Forest Office which resulted in cancellation of the irrigation project, and some cooperation to halt illegal logging. The community then established a set of rules under which community members use the forest. The Krongkram watershed is now thriving. It is home to over 3,000 species of trees, many of great size and value. Each family earns 2,000 to 3,000 Baht per year from forest produce. The forest has become a vital resource to the community, while still functioning as a valuable watershed.

Protecting Forests and Fish

In 1967 the leaders of Silalaeng village, Nan province, prohibited logging in the forest along a 50-metre strip beside the river. The area was expanded to 150 metres the next year. Six years later, a total ban was put in place. In 1975, the Silalaeng Conservation Group was established to look after the forest by creating a set of regulations. The forest management scheme was financed through other community projects such as a savings group, youth society, and weaving club. The Group was able to expand its activities to regulate fishing areas in the rivers, and to ban fishing using electric devices, explosives, or chemicals.

COMMUNITIES AND OUTSIDE AGENCIES

In the 1980s, other outside agencies turned to community projects. Those involved included business corporations, international development agencies, and government departments. In this section we highlight a few key examples.

Business and community

The Population and Community Development Association (PDA) was formed in 1976 by a former official of NESDB, *Mechai Viravaidya,* to promote family planning. PDA later extended into refugee work and HIV/AIDS prevention, and established good relations with both the health ministry and international donors. From the early 1980s it devoted more attention to community uplift – through credit schemes, water supply, income-generating schemes – as an integral part of its health objectives. In the late 1980s – against a background of rising social tension, increasing rural-urban migration, continuing recruitment of village girls into the sex trade, and steeply rising corporate profits – Mechai began to involve corporations in community schemes.

His TBIRD[32] scheme encouraged companies to donate towards community schemes and to relocate some business activity into the villages. A pioneer case was Bangkok Glass which first sponsored

[32] Thai Business Initiatives for Rural Development.

community activities in a northeastern village, and later founded a small factory there to make brushes to clean glass moulds. Bata Shoes followed. The company initially opened one village-based factory, and later added six others which operate as cooperatives selling their output to Bata. Another shoe manufacturer copied the same model. With these successes, PDA was able to gain assistance from the Ministry of Industry, support from international development agencies, and participation by over 130 firms, Thai and multinational. Mechai presented the scheme as a way to impart new skills, raise incomes, reduce rural-urban migration, diminish the income gap, and offer companies a chance to participate in community development.

A different strategy was pursued by Bangchak, a state enterprise involved in oil refining. Bangchak promoted communities in three ways. First, it encouraged community groups to take up franchises to start Bangchak gas stations as a way to increase community income. Second, it opened a chain of stores inside urban gas stations which sold products produced by community enterprises. Third, Bangchak donated to NGOs, grassroots organizations, and public campaigns which promoted community causes. Executives of the company presented Bangchak as a model of socially responsible capitalism.

Community, NGO, international agencies and government

The HIV/AIDS pandemic afflicted Thailand from the late 1980s. Government responded in the early 1990s, but at the time knowledge about the condition was poorly developed on a worldwide scale. Parts of rural northern Thailand were especially badly affected.

The first HIV/AIDS patient in Mae Chan district of Chiang Rai province was identified in 1988. Within the next three years, the district had the highest infection rate in Thailand. The local hospital was swamped with cases.

The head of the hospital responded by mobilizing the community. A coordination centre was founded, and the community involved from the start in planning its activities. The regional health authorities became involved. So too did new NGO networks such as the Northern NGO Coalition on AIDS and the Network of People Living with AIDS. International agencies piled in with funding, training, and support for networking between the community, government, and NGOs. Australia provided support for four years, and then the European Commission took over.

The centre coordinated work between the hospital, patients themselves, their families, NGOs, youth groups, and monks from the local temple. The monks visited a Lopburi temple which was already involved in HIV/AIDS care, and were given training by the hospital. Then they set up a day-care centre beside the temple, educated the community about the pandemic through sermons at the temple and over local radio, served as counsellors to patients, and used their expertise in herbal medicine to treat secondary infections.

Patients formed self-help groups to raise income through handicraft production. NGOs helped to form youth groups which spread education about AIDS prevention through the schools and through puppet dramas. Community meetings were held to educate families about the pandemic, emphasize the need for compassion, ease the resistance to disclosure, and persuade families to care for patients at home.

> What makes Mae Chan special is that it is the first time in the history of the epidemic that so many sectors of a community have banded together to fight against HIV/AIDS.
>
> *– Lee-Nah Hsu,*
> *Manager of UNDP's Southeast Asia*
> *HIV and Development Project*[33]

The Ministry of Health adopted the model for use elsewhere in Thailand. In 2000, a workshop was held to disseminate the Mae Chan model as "good practice" for the Southeast Asian region.

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[33] See www.hiv.development.org.

The violence of the HIV/AIDS prompted many innovations. The cooperation between the local community, health officials, international agencies, and NGOs at Mae Chan was just one small example. It was expensive. But it provided inspiration for other cooperative experiments, particularly in community health care.

UNDERSTANDING COMMUNITY EMPOWERMENT

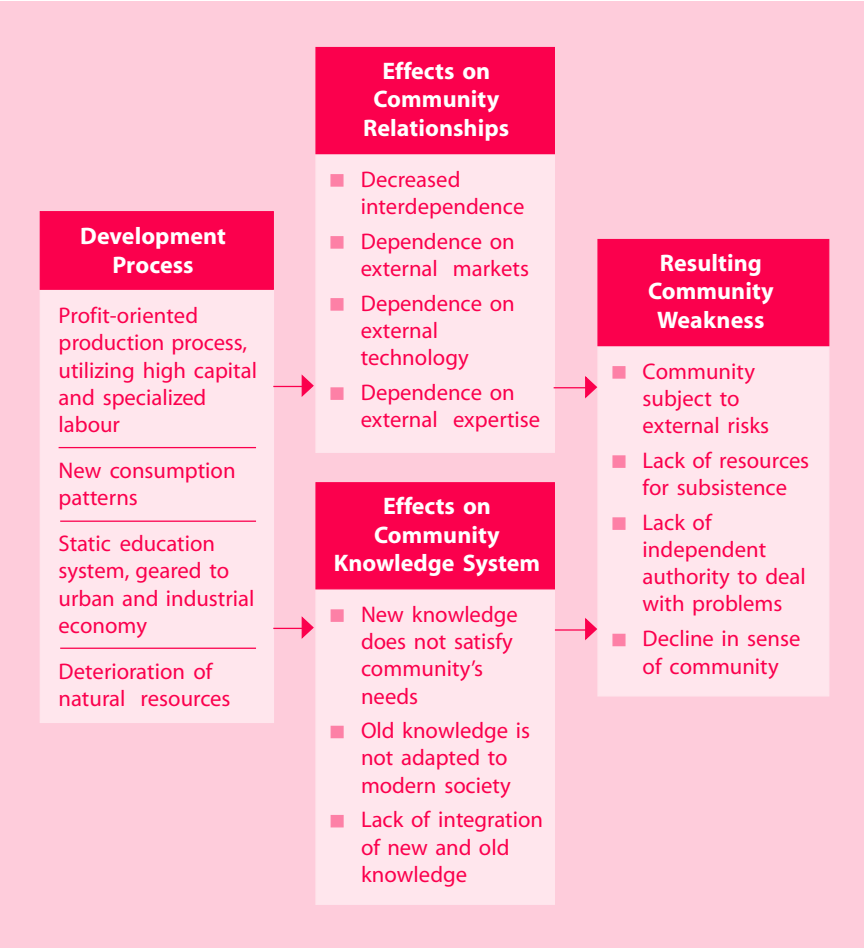
Until recently, such examples of community projects and cooperative schemes were scattered and rather isolated. Some NGOs and development agencies helped to network local groups, and multiply groups by publicizing successful examples. But these efforts were piecemeal and often limited in funding.

Researching the community

In the early 1990s, as NGOs and new development activists began to have a voice in policy-making, some government bodies began to sponsor research on community issues. The Office of the National Education Commission conducted research into local wisdom and learning networks. The Office of the National Culture Commission investigated the role of local wisdom and culture in rural development.

A major advance came in 1993 with the foundation of the Thailand Research Fund (TRF), a government funding body for research. TRF identified research "to build community strength" as one of its seven priority areas. TRF funded projects geared to practical issues such as what constitutes community strength, how participation can be encouraged, what means can be used to develop community economies, and how schools and communities can cooperate to enhance community learning.

As recounted in chapter 1, communities contend that their capacity for self-reliance and self-help has been severely weakened by the government's past development policies of economic liberalization. In one TRF project, *Napaporn Hawanon* maps the causal relationship between the government's development process and the resulting community weaknesses as follows:



The project also identified the characteristics of communities which tended to be empowered.

1. self-sufficient communities (e.g. mixed farming communities),
2. mono-crop communities with strong production base, high bargaining power, and marketing advantages,
3. communities with diversified sources of income,
4. communities that rely on natural resources and are able to preserve the resource base,

5. communities that have a good savings and funding mechanism and do not have to rely on external banking and informal loan systems,

6. communities that are able to cultivate civic consciousness so that members live peacefully and look after one another,

7. poor communities that successfully improve their conditions due to external intervention, e.g. development projects,

8. communities which are affected by industrial expansion but can adjust to take advantage of the dual economy,

9. politically strong communities in which members participate actively in local affairs and are able to advocate their demands to local governments.

Napaporn summarized the learnings from the research sponsored by TRF on community empowerment as follows.

- Community empowerment policies should recognize that there are various ways and means to achieve community empowerment, and allow each community to choose the most appropriate option.
- Local wisdom is valuable, but communities also have to learn new knowledge such as business management, production, and marketing techniques. Communities have to learn to apply both sets of knowledge. Research and education institutions should facilitate the integration of knowledge for the communities.
- Many communities are adjusting themselves to the commercial economy. Capital accumulation is important and communities can mobilize funds within specific occupational groups, or through community enterprises and savings groups. Policy to support community capitalization should take account of this diversity.
- The community learning process is another important component. Communities should be able to manage their own database and assess their own strength. A general guideline can be developed, and external facilitators provided for this purpose.

These conclusions show that a community's strength is a function of how well it can deal with the outside forces of government and market, and this in turn depends on the community's body of knowledge, ability to cooperate, and access to natural resources.

Learning and planning

This research clarifies that community empowerment must be conceived as a *learning process,* which has two parts. First, communities must retain or recover their own knowledge and their confidence that this knowledge has value. However, on its own this is not enough for them to deal effectively with the outside world and its constant and rapid change. Second, communities must also develop the capacity to import and absorb new knowledge from outside. There are many examples of communities which have created their own knowledge system by integrating old and new knowledge, prompted by the desire to survive and prosper. Some communities are able to find ways to function successfully in the modern economy, while at the same time practising local methods to conserve the natural environment and maintaining the social and cultural practices which give the community strength and value. Such communities are able to survive and continuously build their own stock of social capital.

Community empowerment is a continuous learning process. The communities learn how to cope with risk, how to seek, preserve, and capture the resources necessary for subsistence, how to cope with problems, and how to create a sense of community awareness. This process involves problem-solving, decision-making, development of human skills, and a capacity to plan and implement.

Another TRF project headed by *Supasit Lakong* looked at prospects for community planning. It found that people wanted to participate in planning and that participation yielded positive results. Plans that arose from highly participatory community forums were different from the community plans devised by village leaders alone. They were more oriented towards self-reliance. Communities which participated in planning exercises were more likely to cooperate with the local administration, and the local administration in turn was more likely to work to satisfy the needs of the community.

PLANNING FOR COMMUNITY EMPOWERMENT

The old community development paradigm rested on the assumption that rural communities needed guidance and motivation to upgrade their living conditions to the "national standard" which was itself tied to an international standard. Under this strategy, government agencies supported communities by transferring knowledge and technology to these communities and then expecting them to apply these new techniques to "improve" their communities.

New problem-solving paradigm

Some government departments have embraced a new development paradigm which starts by inspiring communities to solve their own problems. This is very different from the past use of external incentives. The thinking and decision-making approach is not based on international practices and standards, but varies according to the community's environment and current situation. Knowledge is not externally determined and then "imported", with the presumption that the community will adopt and adapt this information. Instead, knowledge begins with what exists within the community. Knowledge generation and accumulation largely happens through community exchanges, which require extensive participation by community members. It is more of a "learning process" than a "knowledge transfer" or "training process". Often, the result is a new body of knowledge, a new consciousness, and a new value system that gives priority to self-reliance and mutual self-help.

Comparison of the Community's Old and New Problem-Solving Paradigms

Key Characteristics	Old Development Paradigm	New "Community Empowerment" Development Paradigm
Dynamics	External motivation and material incentives	Inspiration from within, goal of sufficiency
Standard, norm	National/international	No fixed standard; depend on individual situation
Knowledge generation	■ Exogenous transfer of knowledge generally disconnected from the community's traditional wisdom	■ Participatory and holistic learning process ■ Build on community's existing experience ■ Focus on learning, awareness and common consciousness

Exercises in community planning

Recently, government agencies have accepted that communities should take on greater responsibility in planning local development. The Local Administration Department issued a directive asking every district throughout the country to prepare an "Action Plan" and a "Vision for Development" over the next five years (2002-6). These plans are to be based on a participatory process.

In the opinions of some, however, this directive did not recognize many of the processes involved in creating and promoting a strong community. These "Community Development Plans" did not encompass actions that communities were already undertaking to empower themselves. The directive was therefore widely criticized and rejected by many village, tambon, and district organizations.

Those "Community Development Plans" that were drafted under the directive often did not truly reflect the mobilization of people's power that enhances community development. They were merely a checklist of the community's problems and needs.

In contrast, some government agencies have been able to work more successfully with communities by providing technical, advisory, and financial support. One case in point is the "Project for Increasing Capacity for Sustainable Agriculture" undertaken by the Ministry of Agriculture and Cooperatives in collaboration with agricultural community networks from over 120 tambon in 21 provinces, with budgetary support from UNDP. In this project, "community master plans" are developed based on the principle of self-reliance. Communities plan to utilize their own potential, in addition to learning from other communities within the network. The public sector and NGOs participate in this learning process by providing support in those areas where the community needs assistance. The process of developing such community plans involves six stages.

- *Arena 1: Brainstorming.* "Examine the problem and start with the things we already have. Dream of things we are capable of doing and gradually work towards that dream in a steady manner." Community representatives from every village of the tambon join together to consider their past experiences, the results of development projects in rural communities, and their visions concerning sustainable development.

- *Arena 2: Information Collection.* "If we are to start solving our problems using the tools already at hand, using local resources and knowledge within the community, how should we begin?" This arena aims to gain an understanding of communal values and awareness; it attempts to increase self-reliance, interdependence, and the search for local potential. Upon leaving Arena 2, village volunteers begin the process of finding information about the community, such as information concerning the village's history, leaders, debts, culture, local know-how, and resources.

- *Arena 3: Information Exchange.* In this arena, the village's history, values and unique identity is related, and the villagers learn about the "good things" that they have within their community. They find out what skills and expertise different community members possess. They become aware of the changes that have impacted their lives as well as the problems facing them. Such information not only triggers a sense of love, affection, and loyalty to one's community, but it also encourages villagers to ponder how they can remain together and solve communal problems, rather than going their separate ways.

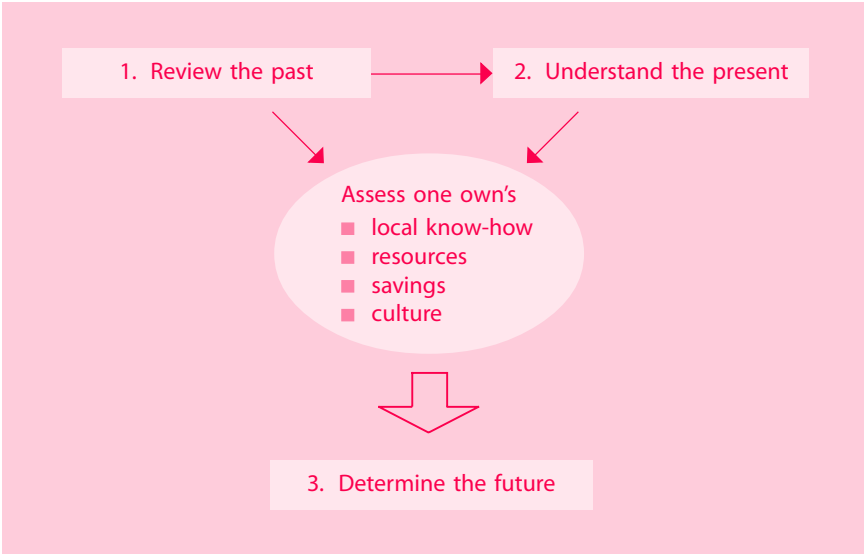
- *Arena 4: Analysis of Options.* Here is where villagers study all options arising both from the ideas of the community itself and from the experiences of other communities that have successfully dealt with similar problems. Study tours are conducted to visit model communities, stimulating new and innovative ideas, which can supplement the community's body of knowledge. New contacts and friendships are also made within the larger community network.

- *Arena 5: Creating Plans.* "What can we do to have enough to live on and to have a sustainable income for raising our families?" In this arena, problems particular to each family are expanded to represent the common concerns of the people in the community. The ideas conceived and the knowledge acquired in the previous arenas is used to create plans for solving the community's problems in a viable way that will provide benefits to all the villagers. The community master plan begins to take

"Examine the problem and start with the things we already have. Dream of things we are capable of doing and gradually work towards that dream in a steady manner."

shape, linking the community activities together in a mutually reinforcing manner. NGOs and officials from the government sector play an important role in analysing and linking the information to ensure that the plans from all the villages are feasible and can be implemented in a systematic manner.

- *Arena 6: Drafting and Implementing a Plan.* Master plans are presented to the communities at the tambon level in the form of public hearings. All interested villagers have the right to participate and to express their views. The drafting of a master plan for self-reliance within the community is illustrated in the chart.



Some NGOs had experimented with similar community planning techniques on a smaller scale in the past, particularly the Village Foundation (*Mulnithi muban*) of *Seri Phongphit.* The technique begins by compiling a rough picture of the community's accounts, both internal and external. These accounts then guide a search not only for opportunities to increase production, income, and well-being, but also to reduce outlays by greater self-reliance. This strategy aligns with H.M. the King's emphasis on sufficiency.

The National Economic and Social Development Board (NESDB), with cooperation from SIF, has adopted these techniques of community planning for developing plans at the tambon level. In many TAOs formed since 1997, the first development plans were simply lists of infrastructure projects. NESDB and SIF promoted a framework of participative plan-making along the lines of the community-based model. The result was new plans with fewer construction projects, and more schemes to strengthen the local economy or extend social protection. As of January

The Community Master Plan

Community master plans for self-reliance and poverty alleviation often begin by *cutting expenditures* as well as by *reducing production costs.* Expenditure cutting may involve simple activities such as reducing soft drink consumption by substituting herbal drinks or soybean milk. Production costs may be cut by similarly simple methods: animal feed produced by the communities themselves using local materials; herbs that are readily found in the locality used in treating livestock diseases. Production costs may also be cut by encouraging group investments; for example, having community members co-invest in raising livestock. For community expenditures such as building schools, local materials and voluntary labour can reduce costs.

The master plan also involves *increasing earnings* in diverse ways that are within the potential of the community. For example, a group of landless farmers in Tambon Wang Daeng, Uttaradit province, produced cement blocks using materials available in the locality and their own labour. The Ministry of Science, Technology and Environment helped them both in examining the quality of the soil used as raw materials and in acquiring equipment.

As a part of increasing earnings, the master plans often involve *community businesses* for processing and increasing the value added to the community's products. Examples of such businesses include projects for processing dried betel nuts, projects for improving the quality of mangosteen for export, and community mill projects. The community must concurrently implement plans for *managing its natural resources* so that the production process does not destroy the resource base of the community.

– Learnings from the Social Investment Fund (SIF)

Not the Document but the Process

"People don't understand what community plans are because they are used to the idea of plans that take the shape of a thick volume of papers. I am not looking for a pile of documents. I don't want plans that are based on expertise outside the communities."

– Anek Nakabutra, Director of SIF

2002, the "Self-Reliance Community Master Plan" has been applied to over 1,700 tambon.

From the experience of those involved in these experiments in community planning, certain characteristics are critical to success:

- Data must be updated and the learning process must be continuous.
- Implementation must be continuous.
- There must be regular meetings for the exchange of problems, information, and experiences.
- There must be cooperation among members of the public and private sectors and the villagers.
- Members of the younger generation must be recruited to participate in the plan in order to ensure future continuity.

COMMUNITY-BASED CRISIS RELIEF

The 1997 economic crisis placed the community at the centre of efforts to alleviate the social impact of the downturn, and to find ways to recover. The crisis increased the acceptance among government departments and other development agencies of the importance of community empowerment.

At the outset of the 1997 crisis, government and the IMF envisaged a relatively mild crisis, confined mainly within the urban economy. By early 1998, however, it was realized that the crisis would be deep and far-reaching. The World Bank warned: "economic and social structures are under strain, and decades of unparalleled social progress are under threat.... The poor are being severely hurt. Widespread economic hardships are tearing at the fabric of society". The IMF supported plans for a "social safety net".

The speed with which the crisis drove more people into poverty emphasized the weakness of schemes of social protection. The attempts to create a "social safety net" which could accurately identify and effectively assist those impacted by the crisis proved to be very difficult. The poor are often almost invisible and very difficult to reach from the national capital. However, recent innovative research has shown that communities are well aware of who the poor are and what kinds of assistance they need.

Experienced Thai observers warned that, on past experience, the impact of the crisis would fall heavily on rural society. Community activists took the opportunity to urge government to base its crisis relief strategies on support for local communities. Some government projects adopted this localized approach.

"Sufficiency Economy" projects

H.M. the King's royal initiative on the Sufficiency Economy aimed to combat the impact of the crisis in the short term, and to alleviate poverty in the longer term, by two associated strategies.

- *Self-reliance:* Community self-reliance can be demonstrated in several ways: replacement of external production materials with local ones, use of local experts instead of external experts, use of local wisdom to create income-generating activities instead of adopting new and unfamiliar techniques, reliance on local sources of funds instead of external borrowing, community self-management in lieu of reliance on external support, hands-on and take-charge actions instead of waiting for government assistance, as well as more emphasis on building social capital along with economic capital.
- *Sufficiency:* Communities regard sufficiency as the key poverty reduction strategy. They opt to produce commodities that are readily marketable. They focus on reducing expenses rather than increasing income. In addition, communities ensure that there is adequate production for household consumption.

The Ministry of Interior adopted the strategy of a Sufficiency Economy and gave support to 50,093 vocational groups with 531,989 members, 3,425 community business groups, 11,247 self-reliant groups, 1,833 groups creating new designs and improved packaging, and 359 groups receiving certification for their production standards.

One major strand of the Ministry of Interior's strategy, also supported by other agencies and the private sector, was to develop and upgrade community businesses such as small community rice mills, rubber-processing plants, noodle factories, food and beverage making, small petrol stations, and community shops. Assistance and advice was given to upgrade the quality of products, to reduce production costs, to create new designs, to improve packaging, and to plan marketing strategies.

Community participation

The Community Development Department expanded the scope of community participation in the Tambon Development Project and the Poverty Alleviation Project. In the past, only members of village committees were involved in submitting projects to seek funds from the Tambon Development Project, and approving loan requests from the Poverty Alleviation Project for poor people seeking investment loans. Procedures for both projects were changed so that forums involving all the stakeholders in the community have an opportunity to take part in the decision-making process.

The Eighth Plan had championed the concept of partnership building and networking among public offices and private organizations. This had resulted in the formation of "civic assemblies" in some provinces to debate strategies of local development. In this context, the National Social Policy Committee (NSPC) was founded in 1998 to recommend strategies to help people cope with the social impact of the crisis. It was the first national committee where representatives from the private sector and civil society outnumbered bureaucrats. It identified community empowerment not only as an important way to mitigate the social and economic impact of the crisis, but also as a key social reform strategy.

By 1999 it was evident that government agencies had difficulty in identifying and targeting those most affected by the crisis. NSPC drew up the Community Empowerment Response to Crisis Action Plan (CERCAP) designed to enhance the community capacity to help with identification and targeting. It helped improve the community's ability to identify solutions to their problems. With a minimal budget, CERCAP facilitated community civic assembly processes and bottom-up planning. It also helped mainstream community plans into the government's regular programs.

The Rural Development Fund (RDF) was expanded to provide credit directly to community-based organizations. In 1999, 2,722 community-based organizations benefited from RDF loans totalling 831 million Baht. In 2001, the government merged the RDF and the Urban Development Fund to establish the Community Organizations' Development Institute (CODI), which supports community empowerment on a continuous basis. CODI is an autonomous public organization with a nationwide community organization network and total funding of Baht 2,700 million.

Social Investment Fund (SIF)

The largest crisis relief measure was initiated by the World Bank and the Japan Bank for International Cooperation. In initial debate on this project, representatives of Thai civil society urged "Don't give money to the government and bureaucracies" as it would result only in leakage and delay. The agencies in fact decided to channel part of the funding through government offices (mainly into employment generation schemes), but to channel the major part directly to community-based projects. This included a Regional Urban Development Fund (RUDF) of $30

million for loans to municipal governments, and the Social Investment Fund of $120 million for grants to community organizations.

The Social Investment Fund (SIF) was managed through a new Social Fund Office (SOFO) placed under the Government Savings Bank (GSB), headed by Paiboon Wattanasiritham, the former banker turned community activist. The primary objective of SIF was defined as:

- Transforming the economic crisis into an opportunity for social reform at the urban and rural grassroots levels. This reform should start with the social capital that is inherent in each locality and join forces with them to assist in the development of their learning processes and the strengthening of their capabilities in order to empower those communities to be self-reliant in the long run.

The objectives also included "Strengthening the rural economic base by emphasizing economic self-reliance as a new alternative for Thai society" and "Strengthening the society through the establishment of civil society networks". The management of the fund was placed under a 16-member board including academics, NGO workers, officials, and six community representatives. Project proposals were solicited directly from "community organizations", roughly interpreted to mean any grouping which had existed for one year. Funding was dispersed directly to community organizations through the GSB. Monitoring and evaluation were carried out by academics.

From 1998 to early 2002, SIF supported over 7,200 projects with total funds of 4,100 million baht. Half the funding was channelled to projects for immediate welfare. The remainder was distributed over a broad range of projects to build social capital. The number of beneficiaries (according to the application forms) was over 12 million. It was the first time a large sum of public resources was transferred to support community-led initiatives where the funds were directly managed by grassroots organizations.

A full evaluation of the impact of SIF funding is not yet available. But SOFO has compiled reviews of learnings from the *process.*[34]

The project started slowly because many NGOs were reluctant to cooperate in a project funded by the World Bank, and because the World Bank was so worried about corruption and leakage that it imposed strict working guidelines under central control. Eventually however, the SIF executive persuaded the World Bank to allow the work of screening and monitoring projects to be decentralized to eleven regions; and eventually NGO workers understood that the scheme was valuable and accepted that the immediate management was controlled by the Thai board not the World Bank. The SIF board was then able to establish regional and provincial committees manned by "doctors, lawyers, social activists, business-

The Objectives of the Social Investment Fund

- To encourage social reform through the decentralization of authority to include community participation in development;
- To strengthen the capacity-building of local communities and local organizations, especially in decision-making and management to be self-reliant in the long run;
- To promote local self-reliant economic systems;
- To promote multi-party partnership between the government and the people;
- To stimulate local participation in social development including the promotion of civil societies and the concept of good governance;
- To support investment in community assets such as necessary social and economic infrastructure to communities through the development of human, social and natural resource capital.

The SOFO will thus combine short-term objectives of employment, income generation and social welfare with the long-term objective of strengthening local management capacity through participatory decision-making at the community level. While addressing short-term social and economic problems, a long-term objective of this program is to use the process of allocating funds as a means to strengthen local community capacities.

34 SOFO, *999 Days of Learning: Social Investment Fund*, February 2002; and *37 Months of Social Investment Fund Operations: Volume I, Development of the Social Investment Fund*, April 2002.

persons, religious and spiritual leaders, community leaders, journalists, teachers and professors" which screened, appraised, and monitored projects. The incidence of corruption was low and was managed by local consultation.

The main problems then lay in working with the old power structure:

- Local and national politicians schemed to gain access to the funds.
- Officials in central agencies endorsed the scheme, but local officials did not necessarily follow central directives.
- Local officials often questioned the legitimacy of the SIF scheme, or saw it as a rival to their own work. "Many officials were keen to work for the public benefit, but they ran up against the fact the bureaucracy is not used to working with others."
- Some SIF volunteers were equally reluctant about working with officials.

SIF pioneered a new method of funding community projects resulting in significant learnings both for the communities themselves and for the civil society organizations involved. "The process of applying for SIF is already a learning process that is a part of community capacity building" (*Ammar Siamwalla,* chairman of SIF). Communities had to come together and learn how to write a project proposal. NGOs helped. "It really stirred things up", reported one villager involved. The SOFO report lists some of the indirect benefits as follows:

- Learning about the rights and responsibilities of the individual and of government organizations to the community.
- Learning about community power in self development and community development.
- Participation in every stage of the implementation process resulting in a sense of ownership and the desire to maintain the activity or structure that was created.
- Emergence of the process of identification and application of *social capital* that in some cases is personal expertise that will soon be lost.

The direct benefits are difficult to quantify since the funding mostly went into projects to build social capital which is difficult to measure. However, those involved in SIF identified certain projects as of special interest:

- Projects to build child-care centres where SIF imposed conditions to ensure community participation in such things as funding teacher costs, providing lunches.
- Projects of immediate social welfare which involved people in the community devising ways to assist children, the elderly, the sick, and those affected by HIV/AIDS. In some cases SIF pioneered ways to fund social protection in a self-reliant way from the profits of community businesses and credit schemes.
- After two years, SIF adopted the technique of participative community planning, and in retrospect would have institutionalized this from the very beginning.

The volunteer bodies formed to screen applications subsequently took on other tasks, such as participating in consultations on the Ninth Plan. The Community Organizations' Development Institute tried to build on the momentum of SIF. It set up a network of community-level activists to develop regional plans, and to provide help to weaker communities in their dealings with government and other agencies.

Thai Rak Thai government's village projects

In January 2001, a new government came to power headed by the Thai Rak Thai party of Thaksin Shinawatra. The party succeeded at the elections in part because of an innovative appeal to voters on a platform of popular measures: debt relief for farmers, a million-baht revolving fund for each village, and a 30-baht-per-visit health care scheme. The party won a near-majority at the polls, and built a

Social Investment Fund: Menus, Projects, Budget and Evaluation

Subproject menu	Total Projects Approved	Budget (Mil. Baht)	Evaluation: Strengths	Evaluation: Weaknesses
1. Capacity and Learning Development in Community Occupation and Community Economy such as recycling, eco-tourism, community enterprise demonstration centres, agricultural demonstration centres, integrated agriculture, agricultural service centres, savings group networks, agricultural processing and community markets.	3,181	778	Communities process and add value to local resources, learn production management and some have secondary occupations and generate increased income.	Problems of product development, marketing, communities are uncertain about consuming community products, lack of revolving funds.
2. Community Welfare and Safety such as self-reliant alternative medicine treatment or herbal treatment centres, senior citizens' health centres, child development centres and halfway houses for HIV/AIDS patients.	1,207	354	Communities are united, provide high levels of community counterpart contribution; highest level of attainment of objectives and highest level of management efficiency.	Some communities lack maintenance plan, utilization plan and participatory learning resulting in charity and the status of provider-receiver within some communities.
3. Restoration, Protection, Management and Promotion of Culture, Environment and Natural Resources such as reforestation, forest management, forest fire prevention, flood prevention and drainage, waste management and folk museums.	789	194	Communities are conscious of the need to protect natural resources and arts and culture, to mobilize funds, create networks and continue other development work.	Disadvantaged community members lack the opportunity to participate because they have to concern themselves with making a living, in addition, these activities do not provide results instantly.
4. Group and Network Capacity Building such as development and processing of local products, establishment of information centre, production of newsletters, community announcement centre/tower, community radio, observation/study tours, seminars and information systems.	1,533	819	Created networks and responds to community communities are empowered in determining future emergence of new generation of leaders.	Some communities lack coordination of body of knowledge and community lifestyle, community members have not benefited fully, creation of community facilitator does not match community needs.
5. Immediate Community Welfare Project for the Needy (Menu 5) which emphasizes the provision of immediate assistance directly to beneficiaries that have been severely impacted upon by the economic crisis.	457	2,016		
Total	**7,167**	**4,161**		

Projects and budget for September 1998 to January 2002, from SOFO, *37 Months of Social Investment Fund Operations: Volume II, Progress Report*. Evaluation from *Executive Summary End of Project Reports*, June 2001.

coalition commanding around 350 of the total of 500 parliamentary seats. In its first year in office (from February 2001), the government implemented all its main election promises.

The scheme to provide a revolving fund of 1 million baht for each of the nation's 70,000 villages was inspired by the ideal of community-based development, and developed in conjunction with grassroots

NGOs. The new government also launched a People's Bank by creating a new window for small loans from the Government Savings Bank, and launched a scheme of "one tambon, one product" based on the model from Oita prefecture in Japan. The village fund was launched and distributed to most of the nation's villages in 2001.

Like SIF, the village fund is managed and allocated by a village committee, not a government entity. Unlike SIF, however, there is no emphasis on building social capital or providing social welfare. The same one million sum is provided to each village, irrespective of size or need. The sum is a loan (as a revolving fund), not a grant. The government monitors the repayment record, but has less interest in the process whereby the fund is allocated, or the results achieved.

These schemes have become both popular and controversial, for several reasons. First, the objectives seem to be mixed. The prime minister, Thaksin Shinawatra, has explained that the schemes are intended to "solve the problem of poverty of the majority" and "reduce the socio-economic gaps between the poor and the well-to-do, and, especially between the rural and urban sectors". This is needed "to ensure social cohesion and political stability, which will enable economic recovery and growth". In addition he has said that the plans are attempts "to encourage Thais to be more entrepreneurial".

Second, the schemes are also part of an attempt at fiscal stimulus. Hence some fear that disbursing the money quickly may be more important than ensuring it is well spent.

Third, some believe that the large sums of money being given to villages may tear the community apart. The practice of easy handouts by the government could jeopardize the community's financial self-discipline and thereby weaken the community's self-reliance. One grassroots organizer noted that it commonly took five years for a village credit fund to accumulate assets of one million baht – with the managers and members learning by the process – but with the new scheme a million baht appears in an instant. Another commented that this was just another temptation to debt, which eventually forced villagers to migrate in search of work. Another complained that the scheme was unsystematic, and failed to learn from SIF.

These schemes are promoted by a government with a dominating parliamentary majority. The amount involved in the government's village projects surpasses any previous attempt to provide funding for local community projects and hence has the potential to have an enormous impact. As yet there is no publicly available independent evaluation (except of the repayment). But the launching of these schemes has created a new facet in the debate on the true meaning of community empowerment.

CONCLUSION

Community empowerment is a learning process on a national scale. The motive force must come from within communities themselves. But success requires understanding and acceptance by government and civil society.

Among the many community groups which had emerged by the 1990s, largely under their own steam, two types stand out. The first are savings and credit groups. The second are groups trying to manage the local environment. These reflect the two main problems facing local communities in the midst of rapid economic and social change, namely the vulnerability to debt, and the importance of the community's natural resources. Groups formed to confront these two issues often served as the basis for other community projects, including social protection, health care, and education.

Some experiments in cooperation between communities and outside actors emerged from the 1980s onwards. Companies sponsored income-enhancing projects. Donor agencies began to channel funds direct to community groups.

The amount involved in the government's village projects surpasses any previous attempt to provide funding for local community projects and hence has the potential to have an enormous impact.

The HIV/AIDS pandemic prompted a pioneer example in coordination between government agency, community, and NGOs.

The broader social effort to understand community empowerment took a major step forward in the early 1990s when officially sponsored research agencies set out to understand the community and promote its strength. A key finding of their research is that community empowerment is not a technique or administrative structure but a learning process that blends old and new knowledge, is continuous, goes through many stages, and may involve struggle.

This insight was applied through bottom-up planning techniques which aimed to facilitate and accelerate the learning process, and eventually to institutionalize it within the community. The first reaction of some participants in these exercises was the admission that they had forgotten how to learn.

The 1997 crisis led many agencies to adopt community-based strategies. The crisis context in particular enabled some civil society leaders and a large number of volunteer activists to experiment with community-based attempts to build social capital under the SIF scheme. This experiment showed the huge potential for community action. It also revealed some of the remaining barriers. Some officials perceived it as a threat to their authority and their role. This reaction is another reminder that community empowerment is a learning process involving the whole society.

Over the past decade, the movement towards community empowerment in Thailand has progressed from two directions. On the one hand, there has been a rapid increase in community-led initiatives. On the other hand, some government and other outside agencies have become positive and pro-active about the need to promote community empowerment in order to stimulate economic growth, build social capital, and enhance well-being. The marriage of these two forces has enormous potential. At this stage the *process* of community empowerment is more important than the specific *outcomes.* This is a transitional stage in which new techniques and new forms of government-community cooperation are being developed whose full potential will only be realized in the future.

The Community and the Rest

A debate which has raged among community theorists from the 1970s to the present revolves around the relations between the community and other social actors – particularly government, the business sector, and the urban middle class. This debate has sharpened with the recent proliferation of community-based schemes, backed by organizations (government, World Bank) with significant funding.

At one end of the spectrum are schemes designed to integrate communities with the urban economy. Often these schemes are designed to promote entrepreneurship, and come with strong financial backing.

The Thaksin government schemes represent this end of the spectrum. So do several schemes launched by corporations and NGOs to involve local communities with specific business operations. The TBIRD scheme, for example, links local community businesses to multinational companies as subcontractors. The Bangchak oil refinery encourages communities to operate gas stations on franchise, and sells community products through its store network.

Critics from the other end of the spectrum argue that such schemes do not truly strengthen communities but rather make them dependent. They argue that the promotion of entrepreneurship and urban values threatens the intrinsic community values which are worth preserving. They believe that community empowerment must emerge bottom-up, not from showers of money.

Activists like *Seri Phongphit* and *Phittaya Wongkun* are sceptical of business patronage of community schemes because they see no concrete basis of common interest over the long term. They are sceptical also of government financial patronage as it contradicts the principles of sufficiency and self-reliance. Instead they advocate networking to increase communities' strength in bargaining with the urban economy and the government.

Community rights advocates like *Saneh Chamarik* and *Anan Ganjanaphan* agree with the need for local strength, but also believe that claims for community rights provide a stronger basis for communities to bargain from a position of moral strength.

Activists like *Prawase Wasi* stand at the mid-point of the spectrum. They argue that political reality (the dominance of the urban economy and society) means communities must gain the political support of the urban middle class and of government. Prawase also constantly urges business and the middle class to recognize the value of local communities ("Don't let us think that they are enemies like communists, we must think in terms of allies."), and has advocated various "partnership" schemes to institutionalize the linkage.

CHAPTER 4

COMMUNITY EMPOWERMENT AT THE CROSSROADS

> People like us need endurance. We need to build a model community so others can understand and follow. We know if we understand one another, care for one another, work for one another, and have discipline in our actions, then we will get justice.
>
> *– Mun river villager*

Thailand is now at a crossroads. As the country moves beyond the crisis, the national agenda has begun to shift again. The prospect of renewed growth has redefined national priorities. The changes in the institutional framework now face a process of review in which arguments for minor improvements became confused with movements for serious weakening of the new Constitution. The Constitution and crisis have ushered in a new government with an explicit commitment to "think new, act new". Much is now fluid. The extent to which community empowerment will guide and assist development will be determined by decisions made over the next few years.

In this synthesis chapter, we first widen the scope and place the concept of community empowerment in its international context, historical context, and theoretical context in debates on development. We then look at the different interpretations of community empowerment in Thailand and show that, while there is a great deal of disagreement on detail, the various interpretations fit within a single framework – moreover, this framework comes from the communities themselves. On this basis we suggest what can be done in terms of public policy to develop community empowerment in Thailand as a strategy to further the goals of human development.

WHY EMPOWERMENT?

Human development is about more than income. It is about widening people's choices to lead lives they value. This means expanding the capabilities of people to live long, healthy and creative lives, to acquire knowledge, to have access to the resources needed for a decent standard of living, and to enjoy dignity, self-respect, and the respect of others. Policies in support of human development goals try to create an environment in which these capabilities can be enhanced.

The globalizing trends of recent decades have made these goals both more important and more difficult to attain. The wealth of the world has increased rapidly, but the division between rich and poor, powerful and powerless, protected and unprotected, knowledge-rich and knowledge-deprived have become wider and often more rigid. At the same time, globalizing trends have changed the ways in which these human development goals must be pursued. While reports on the decline of the nation-state may be exaggerated, there has been growing acknowledgement of the role of other actors – unofficial, local, international – in the task of human development.

Human development and human rights

UNDP has long been committed to a participative, bottom-up approach to human development. However, UNDP responded to the new conditions of the globalization era with an important innovation – realizing the powerful synergies

The local communities' view of this "age of development" is highly specific. It highlights how environmental destruction affected their way of life. It stresses that "development" brought both material gains but also disempowerment.

between human *development* and human *rights*. This shift of thinking is the background to the importance of empowerment. A human rights-based approach to human development is not only about expanding people's choices and capabilities but about the *empowerment* of people to decide how this should be achieved.

Rights lend moral legitimacy to human development goals, and bring in legal tools as means to achieve them. Claims to rights are ways powerless and marginal groups can enlarge their political space. Development becomes a right not a gift – including the right to food, the right to good health, the right to housing, the right to education, the right of access to the means of livelihood, the right to have rights, and the right not to be poor. Governments may respond that there are barriers to meeting certain claims to rights because of lack of resources, conflicting claims, or institutional constraints. But the language of rights sets up a dialogue over how and when such barriers may be overcome.

In sum, empowerment is a primary strategy to achieve the human development goals of poverty alleviation, equity, participation, and sustainable development.

WHY COMMUNITY?

Community activists in Thailand arrived at the same conclusion in response to the same international context but with some cultural influences that are quite distinctive.

The background lies in the development era that stretched from the 1960s to the 1990s. By the post-war era, the centralized nation-state created in the colonial era was under the control of military dictators with strong external backing. Power was highly centralized and civil society suppressed. Through top-down development policies geared to industrialization, this powerful state achieved exceptionally high rates of growth, but with considerable costs including growing inequality of income and various entitlements; disruption of local communities; environmental destruction; and persistent poverty among certain groups.

Development and disempowerment

The local communities' view of this "age of development" is highly specific. It highlights how environmental destruction affected their way of life. It stresses that "development" brought both material gains but also disempowerment. This is how this view was expressed by the communities contributing to this Report:

- In the past, villagers' livelihood depended on resources of land, water, forest. They accumulated knowledge of using resources by experiment and practice. They valued coexistence with nature and with their community neighbours. They produced primarily for themselves. They overcame insecurity by mutual sympathy and sharing. These values were expressed and reinforced by customs and ceremonies. The memory of this past remains an ideal which shapes aspirations for the future.
- For the villagers, development had two sides. On the one hand, government provided social and economic infrastructure, new social services, agricultural support, credit, education, and access to information. In some respects, life changed for the better. But on the other hand, development also made agriculture more subject to the market and its risks, and more reliant on imported inputs of technology, capital, and knowledge which the villagers do not control. Many fell into debt, lost land, and had to migrate to the city. Besides, the city enclosed more natural resources to support the urban economy (such as for power generation) and destroyed others (such as through pollution). Villagers were often asked to "sacrifice" their access to resources for development in which they did not participate or benefit. They lost the power, the foundation of values, and the knowledge base to manage their own lives.

– From the conclusion agreed among the community contributors to chapter 1

Civil society and community

From the mid-1970s, the collapse of external support for dictatorship and the gradual emergence of civil society began a trend towards formal democratization. But with the overhang from the feudal and dictatorial past, this democracy was highly exclusionary. Paternalism was etched into the mentality of the bureaucracy. Businessmen nurtured under the urban-biased development policy dominated the parliamentary system by exploiting the power of money. In response, excluded groups adopted a "people's politics" of protest and negotiation, and began to seek "direct democracy".

In the emerging civil society opposition to both centralized power and top-down development policy, the idea of the community played an important role. The community was upheld as both a repository of values different from those intrinsic to industrialization, and a foundation for opposing or neutralizing centralized power. This thinking began among grassroots development workers, was then processed by academics and intellectuals, who handed back concepts and strategies to grassroots activists. By the 1980s, there was a "language" of community thinking which facilitated debate across villagers, development workers, and intellectuals. By the 1990s, advocates were able to push this language and its concepts into the halls of policy-making.

By the time of the 1997 Asian crisis, the community idea in Thailand had the weight, complexity, depth, and sophistication which comes from a generation of debate and practice. The crisis moved it further into the mainstream. Advocates took the opportunity to blame the crisis on past development policy and to present community strategy as an alternative. Government and international agencies grasped onto community empowerment as a means to deliver social protection against the impact of the crisis. A wide-ranging debate on self-strengthening took on some of the language and perspective of community thinking. Concepts of "sufficiency" and "self-reliance" were adapted to national-level policy and written into the five-year plans.

Inside the community

This Report pays little attention to divisions and inequalities within communities. Partly that is because local variety defies generalization. But there is also a reason based on Thailand's political economy.

In many societies, the divisions within rural communities arise from differential access to land – the classic rural society of landlord, tenant, and landless labourer. But Thailand's rural society developed very differently because of the existence of an open land frontier. Until very recently, most households had access to land. When the land-man ratio started to deteriorate from the 1970s, urban growth drew much of the excess population off to the city. Still today, around 87 per cent of all holdings are owned and only 13 per cent rented. Many of the rentals are inside a family, and others are absentees. Rural Thailand is a society of smallholders. It is hard to find a village in Thailand dominated by the house of the big landlord. But, in recent decades, the ranks of landless and land-poor have increased.

Power in Thai rural society derives not from landholding as much as from connections to bureaucracy and capital. In local vocabulary this is termed *itthiphon*, influence, a different word from the *phalang* and *amnat* in "empowerment" because it is seen as a very different force. People inside the community draw on this influence. But its origins are outside the community. Combating this influence is part of community empowerment.

Before the crisis, growing civil society pressure was bringing changes in state-society relations and development policy orientation. Over the late 1990s, this pressure resulted in a substantial shift in the institutional context of development policy-making, namely a new Constitution enshrining new rights, a commitment to people-centred development planning, a programme of decentralization to local government, and an ambitious overhaul of the education system. In the urgency to cushion the social impact of the crisis, government departments and international agencies launched bold experiments to build social capital through community projects.

Empowerment as a learning process

The Thai version of community empowerment has been created in the same international context as the international agenda, and hence they have many similarities in concept, though great differences in the form of expression. The Thai community advocates make the whole approach revolve around "learning

communities". In essence this is the same as the Human Development concept of "expanding capabilities". In the 1990s, the Thai advocates explicitly adopted the language of human rights because they understood its capacity to empower.

> To empower themselves again, communities need to remake a learning process. This begins with mobilizing the human resources of wisdom and leadership in the community to join together to identify and confront problems. The next stage is to recover local knowledge about using resources in an ethical and sustainable way. This knowledge may have to be adjusted and publicized so that the wider society understands and appreciates its meaning. The community may have to build networks outward from the community in order to gain space in the society, and secure access to the resources needed for livelihood and well-being. The community will gain the confidence and ability to learn from outside in ways which expand rather than destroy local capabilities.
>
> *– From the conclusion agreed among the community contributors to chapter 1*

For many communities, the focus of their problems is the deterioration or loss of the natural resources which were the basis of their livelihood. The strength of the community is inseparably bound up with access to natural resources.

The rapid deterioration of natural resources and the limited results of attempts at revival have impacted on the quality of life and well-being of the people, and have weakened the foundations of the society.

– Ninth Plan summary (Thai version), chapter 3

WHAT IS EMPOWERMENT?

The English word "power" combines two different meanings. The first is the power which is intrinsic to something, such as the power of a fuel. The second is the authority to command, such as the power of a government office or law. This ambiguity is repeated in many other languages, including Thai. The first meaning is expressed by *phalang* which is used in such contexts as "electric power". The second meaning is expressed by *amnat* which is used in such contexts as "to seize power". Often the two words are used together as *phalang amnat*. This was the form which the communities contributing to this project chose in the translation of "empowerment". This acknowledges that community empowerment is not only about mobilizing internal resources, but also about confronting external power relations. One of the community representatives on this project commented: "Power (*amnat*) belongs to us; it doesn't come from the government".

The community representatives who contributed to this project summarized their approach to community empowerment as three strategies:

1. *Building their community power to solve problems independently.* Central plain farmers developed "sufficiency" systems of farming to escape the insecurity of market-oriented agriculture. The U-taphao communities developed the Bank of Life, not only to provide appropriate credit, but to fund social protection and to cultivate virtues such as sharing and sympathy.

2. *Building their community power to negotiate cooperation with outside agencies.* Samrong canal communities became anti-pollution activists – not only cleaning up the canal but gathering data on the sources of pollution – in order to negotiate with state agencies and business groups to accept and support their right of residence.

3. *Building their community power and networks to claim and protect community rights.* Communities in the northern highlands and along the Mun river lost access to the resources basic to their livelihood. To reclaim rights of access, they built networks of support in the society and beyond by reviving their local knowledge in managing resources, and finding ways to make other groups understand and support their claims.

– From the conclusion agreed among the community contributors to chapter 1

Importantly, the community representatives see these three strategies as successive stages of a single approach. Let us now look at each of these three strategies in more detail.

1. Building their community power to solve problems independently

> In the past it was difficult to mobilize our own resources. Now it's not.
>
> *– Community leader*
>
> I've seen how they do it on their own. So I've left them alone... they're doing fine on their own.
>
> *– Community Development Officer*

UNDP has defined empowerment as "the ability of people to gain understanding and control over personal, social, economic and political forces in order to take action to improve their life situations". Outside agencies (NGOs, government offices, private sector, international agencies) can encourage, guide and facilitate the process, but essentially it is internal to the community. It begins with consciousness of the problems and the possibility of solution. It requires a learning process to analyse the problems, to revive relevant local wisdom, and to seek new knowledge. It moves then to the mobilization of social resources, and participative decision-making. The process, as well as the result, is empowering.

This model corresponds closely to the example of the Bank of Life described in chapter 1. It is worth noting that this example of local micro-credit has been repeated – successfully – many times all over Thailand in the last two decades. SIF projects, and the current government's village funds, are based on similar principles. Empowerment of this sort cannot be prescribed. It has to be learnt from practice.

2. Building their community power to negotiate cooperation with outside agencies

This is an extension of the first strategy with the addition of government and other outside agencies as actors involved in both negotiating the solution and achieving the outcome. Outside agencies may provide budget funds, administrative resources, specialized knowledge, or authority to achieve the outcome. Communities have to learn how to deal with these outside agencies, and how to increase the assets they can bring to the negotiation. This may involve a further process of learning, and some building of networks with other groups in a similar situation, or with NGOs and other allies.

Some departments of government have responded to this approach with enthusiasm. This is the model underlying the experiments in community planning described in chapter 3.

However, the example of the Samrong canal communities adds an extra element. The Samrong communities began from a situation of disempowerment. They had no rights of residence and they were blamed for pollution of the canal. They were able to overcome these disabilities by cleaning up the canal, by identifying the sources of the pollution, and by creating a network of support among the various communities and some outside allies (NGOs, local business). The outcome was successful for all: the government's task was eased, the canal was cleaned up, the communities were not evicted. The communities created a situation in which they could make a claim for the right to residence and the right to assistance from government. This example involves power not only as intrinsic power (*phalang*) but also as authority (*amnat*). It introduces questions of rights and the negotiation of claims to rights which are more prominent in the third strategy.

Our idea of struggle is that farmers need to join together to have power. The network across seven provinces in the North was created so that we have bargaining power.

– Somchai Sirichai

3. Building their community power and networks to claim and protect community rights

Communities may be unable to solve their own problems for various reasons including: lack of access to the resources needed; blockage by powerful groups; bureaucratic opposition or inertia.

Phalang (intrinsic power) comes up against *amnat* (authority). This is where the language of rights comes into play. Rights are claims on other people – on government, on neighbours, on society as a whole. The Mae Wang hill peoples and Mun river fishing communities were unable to achieve their goals of defending their livelihood and retaining their way of life because they did not have the power and resources to resist official agencies. They had to learn how to express their goals in terms of claims to rights. They had to create the social space in which those claims could be heard and understood by learning how to explain their problem to others, creatively adapting their local cultural practice, building wide-ranging networks of support, and being persistent.

The language of rights is important because it sets up the framework for achieving a solution. Not all claims to rights will be met. A claim may conflict with the rights of other peoples. It may impose too high a cost on the society as a whole. It may be impossible to fulfil because the resources required are not yet available, or have been depleted. Equally the claim may be just, reasonable, and attainable, but is being blocked by vested interests or inertia. The language of rights defines the problem and makes it possible to negotiate a solution which is just for all parties concerned.

But the solution requires an institutional mechanism in which claims to rights – and especially conflicting claims – can be negotiated. In essence, this is the function of the central institutions of a democracy – representative assemblies and legal systems. However, such institutions hardly figured at all in the communities' accounts of problem-solving and empowerment in chapter 1. Thai communities perceive parliament as dominated by business people and business concerns. As in many countries, the poor find it difficult to gain access to legal systems. Community participants in this project perceived law as "something which belongs to the state".

The failure of these key democratic institutions – elective representation and judicial process – to work for communities is the major impediment to community empowerment in Thailand.

These disabilities shape the way communities currently attempt to negotiate their rights. In the histories in chapter 1, communities made their claims for rights by building social support and petitioning government. They first went to local officials, and finally worked their way right up to the prime minister. In their own accounts, they presented themselves as *luk* (children) asking for the consideration of *pho* (father). They still feel obliged to couch these appeals in the language and

Access to Justice

Judicial systems can also be undermined, providing little protection to ordinary people, especially poor people. Judicial systems are often inaccessible. They use official language that many people cannot speak or write. And too often they are open to bribes.[35]

In a national survey conducted on behalf of Thailand's Civil Service Commission in 2000, almost a third of those involved in a court case over the previous two years had been solicited for a bribe. The total amount of such payments was estimated at over 3 billion baht a year. Delay in judgements and lack of objective decisions were given as the two main reasons for rejecting legal process as a means to settle a dispute.[36]

We are not clever at politics and we don't know about law.

– Community participant in this project

35 UNDP, *Human Development Report 2002, p. 66.*

36 Pasuk Phongpaichit et. al., *Corruption in the Public Sector in Thailand: Perceptions and Experience of Households,* report submitted to the Civil Service Commission, Political Economy Centre, Chulalongkorn University, 2000.

style of paternalism. In the Mun river case, the issue was projected right up to the international level with the involvement of the World Council of Dams. Whatever the wrong or right of the Mae Wang and Mun river cases, the accounts highlight the weakness of institutions to negotiate claims to rights.

This weakness imposes a special responsibility on government to undertake the difficult task of listening. Elective democracy and judicial process do not function well in a society where paternalistic traditions remain strong. Official agencies must cultivate the ability to listen.

This weakness of institutions also demands reform. Both these cases concerned access to natural resources. As such they were representative of a large number of other cases in Thailand over the past decade. There have been attempts to strengthen the institutional framework for managing natural resources. The Enhancement and Conservation of the Environment Quality Act 1992 imposed stricter conditions on the performance of environmental impact assessments (EIAs). A Prime Minister's Office regulation of 1996 introduced a procedure for public hearings. Section 46 of the 1997 Constitution defines the community's right to participate in decisions on natural resources. The Community Forestry Bill attempts to substantiate these rights in one critical area.

But these institutional initiatives have problems. A sequence of contentious projects has led to widespread concern that the environment act should be reviewed. There has yet to be an effective public hearing. The Community Forestry Bill is still blocked by controversy. The rights defined in the Constitution cannot yet be substantiated in reality. Several projects were approved under old rules but not yet implemented, and there is no mechanism to review these projects in the light of changed conditions.

This remaining weakness in the institutional framework for adjudicating claims of rights of access to natural resources is the root of many lingering social conflicts.

ENHANCING COMMUNITY EMPOWERMENT

What can be done to enhance community empowerment? Thailand now has a great deal of experience. Unofficial agencies have promoted community empowerment projects for at least two decades. Government bodies have become increasingly enthusiastic in recent years. The 1997 crisis witnessed a wave of experiments. The task now is to build on the learnings of that experience, and to borrow learnings from elsewhere. In this task, there are roles for government, civil society organizations, development agencies, and the communities themselves. In sketching the tasks, we shall retain the three-level approach identified by the communities themselves.

1. Solving problems internally: accelerating learning from experience

There has been a great deal of experimentation with local schemes. The task now is to extract the practical learnings from these experiments, and find better ways to disseminate them. There is already considerable activity of this sort, undertaken by both government agencies and NGOs. But the effort could be greatly expanded.

The Social Investment Fund (SIF) scheme has been the largest-ever attempt to fund communities to enhance social capital in Thailand. The learnings about such matters as project types, reasons for success and failure, management systems, and so forth are considerable.

SIF's internal evaluation emphasizes five areas where the learnings from the project should be carried forward to other schemes: 1) SIF has learned a lot about budget management, transparency, verification, and horizontal relations; 2) community learning has to be gradual and additive with new inputs at appropriate stages; 3) participative exercises in

Elective democracy and judicial process do not function well in a society where paternalistic traditions remain strong. Official agencies must cultivate the ability to listen.

community planning are effective in defining problems and setting out the routes to practical solutions; 4) SIF has created many new assets of social capital which need to be catalogued and managed; 5) some organization should continue the task of promoting community strength and social capital with appropriate funding, and proper procedures for evaluation.[37]

SIF personnel tried to pass their experience onto the new government's million-baht village fund, especially the importance of beginning from a community planning exercise. But the planning would take time which would conflict with one aim of the new scheme – to deliver a rapid fiscal stimulus. Besides, the SIF approach to planning stresses self-reliance, while the million-baht scheme leans towards increasing production and strengthening village linkages with the urban economy. By the time this report is published, the SIF project will have ended.

Providing funding directly to communities can be more efficient and cost-effective than working through government agencies.

There are several ways in which government and international agencies can help the internal learning process within communities by networking information and experience.

- The Thailand Research Fund has sponsored a great volume of research on community issues. The practical learnings need to be extracted from TRF's considerable body of research, compiled in an accessible form, and widely distributed.
- Among specific local initiatives, one of the most successful and widespread has been community savings schemes or micro-credit. The learnings should be similarly compiled and disseminated in a "how to" form. The same approach may be applied to other schemes.
- The Social Fund Office (SOFO) which oversees SIF has begun to catalogue the learnings from SIF in a series of accessible booklets.[38] This effort needs to be extended, and the booklets widely distributed.
- The Community Organizations' Development Institute has taken steps to maintain the momentum of SIF, by encouraging networking and mutual assistance among community leaders. This deserves support.
- The experience of SIF has implications for development agencies. Providing funding directly to communities can be more efficient and cost-effective than working through government agencies. The SIF experience offers considerable learning on how such support can be administered and monitored. Development agencies who believe in community empowerment should begin by listening to communities rather than relying on government agencies and other intermediaries.

2. Negotiating cooperation with outside agencies: making decentralization work

In fact, far from strengthening local democracy, decentralization can actually reinforce the power and influence of local elites.... Decentralization helps poor people most when local politics are democratic, with strong structures and open participatory practices. Only if accompanied by strong support to community groups can decentralization empower ordinary people.

– Human Development Report 2002, p. 67-8

[37] Adapted from *37 Months of Social Fund Operations: Volume I, Development of the Social Investment Fund*, April 2002, p. 33.

[38] SOFO has three series: Knowledge for the Community (*Chut khwam ru pue chumchon*), Learnings from the Community (*Chut botrian jak chumchon*), and Social Management (*Chut kan jat kan thang sangkhom*). Each booklet is around 40 pages with the emphasis on practical examples and illustrations.

The most important arena for empowering communities to work effectively in cooperation with government is in decentralized and democratic local government.

Thailand has selected the tambon as the level for democratic decentralization. The selection of such a relatively small unit (average population c. 8,000) has the advantage that communities may become closely involved. But it also has the risk that the Tambon Administrative Organization (TAO) may become ineffective because of weak management resources, ease of capture by sectional local interests, or subordination to the bureaucracy.

These risks are well understood and widely discussed. The government has established programmes of training. There are already projects launched to research the performance of TAOs and expose shortcomings. However, as democratic decentralization is a very new departure in the context of the Thai governmental system, conditions are likely to change very rapidly, and the learning process will take some time. This points to the need for continuous monitoring, and a readiness to adjust the system to reflect changing realities.

Enhancing the TAOs' potential to empower communities will depend on some basic principles.

- *Maintain the commitment to make the TAOs work.* Early studies on TAO performance have already revealed considerable problems. However, these problems should not become an excuse to diminish the momentum of decentralization, including the transfer of budget and responsibilities.
- *Encourage participation to avoid capture by sectional or bureaucratic interests.* Early studies show that many TAOs, like the PAOs before them, have been captured by contractors. Also, local officials sometimes try to guide the TAOs excessively, and to discourage local participation. If these trends persist, communities may see the TAOs as just another example of old forms of influence, and lose faith in their capacity to respond to local needs. The solution is greater participation. Research shows TAOs work better in areas where people are already organized for communal action. Building communal activity (savings groups etc.), totally separate from the TAOs, is one way to make the TAOs more effective.
- *Guide TAOs into policy areas which will impact on the poor.* Communities will be keen to participate if the TAO's work impacts on them directly in a positive way. Many TAO members are uncertain how to utilize their growing budgets beyond the infrastructure provision which has hitherto been the focus of local government. TAOs must be guided to undertake pro-poor policies.
- *Guide TAOs to be active in management of local resources.* Management of natural resources is a vital issue everywhere, and a great opportunity for TAOs to serve community needs and hence increase community participation.
- *Extend community planning and integrate with TAOs.* The experiments in community planning technique have been successful in encouraging participation. This is an important method to integrate TAOs with the local communities.
- To achieve these principles will need a great effort to a) research and monitor the actual performance of TAOs; b) disseminate the practical learnings; and c) foster community activity. To be most effective, these tasks should be undertaken outside the government framework. This is an opportunity for international agencies to work with local civil society organizations.
- Democratic decentralization is a worldwide trend. There is a great deal of practical learning accumulating about the process, its problems,

Research shows TAOs work better in areas where people are already organized for communal action.

and how to overcome them. Thailand must continually tap this learning in order to increase its chance of achieving success in this historic shift in administration.

- Perhaps the most common request from communities participating in this project was simply that government should listen more, and pay greater respect to opinions, demands, and expertise that comes from the grassroots.

3. Claiming community rights: improving the institutions

In the past we were made to think that the poor were the nation's leftover jumble, its stumbling point. This thinking is a barrier to understanding how to create policies to help the poor. Quite the other way round, we should understand that the poor are the nation. Eradicating poverty is eradicating the real enemy of the nation, and is more important than "national wealth" which concentrates in a handful of people.

– Nithi Eiewsriwong, Historian and Social Critic[39]

Communities have learnt how to claim rights to defend their livelihood and way of life. This is a fact of life. It is an outcome of the growing worldwide interest in rights issues over the past decade, and the strengthening of Thailand's civil society.

Because of its history, Thailand is weak on institutions to negotiate rights. This is not unusual. Many developing countries have similar weakness. Moreover, Thailand has a strong positive trend towards democratization which is the first prerequisite for any changes to strengthen the institutional framework. The 1997 Constitution has put the major principles in place. The task now is implementation. But this has to overcome barriers of opposition, inertia, and knowledge deficits.

The first task is to complete the unfinished business of the Constitution, particularly where it deals with the rights of access to natural resources which are of critical importance to local communities.

- Pass a law on public hearings so that public hearings following best international practice will be required before decisions on all major projects.
- Reform the Enhancement and Conservation of the Environment Quality Act 1992 so that EIAs will help to implement the principles of Sections 56 and 79 of the Constitution. Include and highlight the significance of social impact assessments (SIAs) and public participation in impact assessment. Create an independent body to improve the check-and-balance of the assessment process. Move beyond compensation payments as the way to manage the impact on communities.
- Pass the Community Forestry Bill. Similar legislation to implement Section 56 will be needed to cover other natural resources such as waterways, land, and coastal sea.
- There are many projects such as dams and power plants which have been planned and partially or fully approved in the past when conditions – legal, environmental, and social – were very different. Disputes have arisen over the implementation of some such projects. Some mechanism is needed to manage these disputes. This mechanism should approach these disputes using a framework of rights. Acknowledging the rights of various parties to articulate and claim their rights sets up the possibility of open and transparent negotiation. The National Human Rights Commission can play a role in defining appropriate procedures.

BUILDING AN ENABLING ENVIRONMENT FOR COMMUNITY EMPOWERMENT

Community empowerment, as chapter 3 argued, is a learning process on a national scale. It will only advance within a national environment which is enabling and conducive. Thailand's democratic

39 Nithi Eiewsriwong, *Khon Jon and Nayobuy Kan Tam Hai Jon Kong Rath (The Poor and the State's Impoverishment Policy)* Thailand Development Support Committee, 2000, p. 124.

advances over the past two decades were a necessary precondition to the progress made so far. The future potential is similarly framed by the extent to which the current momentum of reform can be maintained.

Over recent years, Thailand has launched on a wide-ranging process of reform. The movement for constitutional change in the early 1990s, the search for solutions to the 1997 economic crisis, and the "think new, act new" commitment of the new government elected in 2001 have begun a wide range of reforms covering budgeting, public service, education, health, and much else. The commitment to reform is impressive. But there is a problem of finding the human resources to plan and implement such an agenda. There are conflicting views over the priorities of different projects. And there is a very real risk of "reform fatigue" among policy makers and among the population as a whole.

The extent to which community empowerment can progress and can contribute to the goals of human development depend on other reforms creating an enabling environment and specific synergies in many areas. Some of the key areas are considered below.

Maintaining the momentum of political reform

The recent elections and change in government affirm the flexibility of Thailand's democratic system. The appearance for the first time of parties fighting elections on a platform of popular measures including commitment to fight poverty and schemes of social protection are a positive sign.

Yet communities feel that Thailand's parliamentary democracy represents the interests of the rich much better than those of the poor. There are many social and cultural reasons for exclusion, and these have their own momentum of change. But there is also one very precise barrier.

- According to Section 107 (3), a candidate for election to the House of Representatives must have "graduated with not lower than a Bachelor's degree or its equivalent". This rule excludes around 90 per cent of the total adult population; over 95 per cent of the people in rural areas, and over 99 per cent in the agricultural sector. It should be considered whether this is an appropriate rule for a democratic country.

Political reform means more than adjustments to the parliamentary structure. The prospects for community empowerment are also affected by such things as the access to information and the free operation of the media. Communities have often complained about the difficulty of gaining access to information about projects which directly affect their lives and livelihoods (see the cases of Samrong and Pak Mun in chapter 1).

Section 58 of the Constitution confers the right of access to information. The Official Information Act of 1997 provides the machinery for enforcing this right. But the Act was passed prior to the Constitution, and some feel that it fails to reflect the Constitution's spirit.

- The Official Information Commission charged with implementation of the Act is not an independent body, like others mandated by the Constitution, but comes under the Prime Minister's Office and is vulnerable to executive control. Government should consider revising the Act and making this important body independent.

Both individuals and media have made enthusiastic use of the Information Act. Many official agencies have responded positively. But full realization of the concept of "freedom of information" requires changes in the systems and culture of official bodies. The Official Information Commission charged with implementation must work steadily to ensure that the momentum is maintained.

The prospects for community empowerment, however, depend a great deal on the responsiveness, effectiveness, and accountability of the lower levels of the bureaucracy.

Ensuring the provision of public goods is responsive to people's needs

The 1997 Constitution introduced many new systems through which popular voices can penetrate into the halls of policy-making. The National Economic and Social Council is "charged with the duty to give advice and recommendations to the Council of Ministers on economic and social problems" (Section 89). The National Human Rights Commission has the duty "to propose to the National Assembly and the Council of Ministers policies and recommendations with regard to the revision of laws, rules or regulations for the purpose of promoting and protecting human rights" (Section 200). Section 170 has provision for the submission of "People's Bills" to parliament.

These and other measures increase the number of ways in which communities and civil society organizations can influence the provision of public goods which cannot be created by the communities themselves. However, the effectiveness of these channels still depends on how responsive governments and government agencies are to them. The Constitution has attempted to multiply the channels through which a popular voice can be heard, and this concept it not always easy for those in power to understand and accept. It would be a pity, for instance, if the reaction to the submission of "People's Bills" were to be a turf war waged to defend the prerogatives of parliament and the Council of State.

- Over the long term, government has to develop better capacity for listening to popular demands for public goods, and responding appropriately.

Reforming the public sector for empowerment

After a long period of inconclusive debate and persistent delay, Thailand has finally committed to reforms of the public sector. The government has laid out a major plan of reorganization. The Civil Service Commission has proposed many reforms in practices and procedures. Many offices have adopted a new service mentality.

This is just a beginning. The initial phase will mostly affect the overall structure and especially the upper ranks of the public services. The prospects for community empowerment, however, depend a great deal on the responsiveness, effectiveness, and accountability of the lower levels of the bureaucracy.

- Maintain the commitment to public sector reform long enough to complete the task, and ensure that ideals of responsiveness, effectiveness, and accountability guide the reform.

Reforming education for empowerment

After many years of debate, Thailand in 1999 passed the National Education Act. This Act increases access to education, initiates mechanisms to improve quality, decentralizes management, and changes the pedagogical approach to child-centred learning.

This is an ambitious reform which faces considerable opposition, not least among some of the teachers and education officials whose lives and careers will be directly affected. But the success of this reform is crucial for the future of Thailand as a whole, as well as for the progress of community empowerment.

- Maintain the commitment to education reform, especially reform of the curriculum and of the pedagogical style to create an educational system appropriate for a flourishing and sophisticated democracy.
- Extend support to community education projects which aspire to bridge the gap between local wisdom and learning, and the national education system.

Putting judicial reform on the national agenda

The judiciary has not yet figured prominently in Thailand's agenda of reform. This is understandable given the emphasis to date on political reform, decentralization, education, health, and the reorientation of development policy. However, there are good reasons to bring judicial reform more firmly onto the agenda.

In Thailand there is a very strong impression that the police and the courts tend to reinforce the existing power structure, and offer little opportunity to challenge its injustices. In the histories recounted in chapter 1, judicial process never worked in favour of the communities' efforts to empower themselves, and sometimes worked against them. Innovative legislation such as the 1992 Enhancement and Conservation of the Environment Quality Act has failed to live up to expectations because of the judiciary's failure to uphold the spirit of the legislation.

The new Constitution, with its emphasis on rights, increases the importance of the judicial system as a means to make such rights effective. For Thailand's communities, there are special concerns over the courts' attitude towards customary rights which are not codified in statute.

- Judicial reform is a mammoth subject. It will be vital to the success of community empowerment in the long run that the subject is tackled before too long.

Refocusing on poverty alleviation through empowerment

Until the economic crisis of 1997, Thailand had an impressive record in reducing the proportion of the population below the poverty line. The crisis reversed this trend and increased the number of poor by three million people. This reversal forced a rethink about poverty alleviation policies both within international agencies and within Thailand. The World Bank identified empowerment as a major strategy for poverty alleviation. Research in Thailand showed that the increase in poverty during the crisis was almost wholly in the rural areas. It also revealed the existence of "persistent poverty" among certain groups even at times of high economic growth. These findings emphasised the need for new methods to identify the poor, and for new strategies – including empowerment – to tackle persistent poverty.

The NESDB has reinstated poverty alleviation as a major focus of its efforts under the Ninth Plan, and has placed an emphasis on developing poverty alleviation strategies based on community empowerment experiences.[40]

- Plans to tackle poverty must absorb the considerable learnings from projects of community empowerment over recent years. They must address not only income poverty but the broader definition of poverty which is held by the communities themselves and which broadly coincides with the Human Development approach.
- Poverty policies should endeavour to build on the investments in social capital and community strength made during the crisis. They must recognize the importance of improving access to land and other natural resources as a key strategy of poverty alleviation.

Tackling gender bias

Gender bias is one of the most basic forms of disempowerment. In Thailand over recent years, trends in gender bias have been mixed. On the one hand, women improved their access to education at all levels. On the other hand, the change and instability of the economy increased pressures on women in their

For Thailand's communities, there are special concerns over the courts' attitude towards customary rights which are not codified in statute.

40 Office of the National Economic and Social Development Board, *"Yuthasat Kae Kai Panha Kham Yak Jon" (Poverty Alleviation Strategies),* June 2002.

dual roles as provider and nurturer. Moreover, the systematic disempowerment of women in the formal political system – as shown by the gender ratios in parliament, senior bureaucracy, and the TAOs – has scarcely changed. The 1997 Constitution has boldly stated that "Men and women shall enjoy equal rights", but gender bias is still built into many laws and institutions.

- Community empowerment can contribute to gender equity by improving women's access to credit, income-earning opportunities, and social protection within the bounds of the local community. But this will depend on women gaining a voice in community management, both within the official structure of the TAOs, and in more informal gatherings.
- Above the locality, there are still important gender issues in the areas of family law, safety in the workplace, and access to technical and vocational training.

Decentralization and Gender

Women in Thailand have considerable power – in the family, in businesses, in the local community. Yet in anything connected with political power, they suffer from discrimination and exclusion. They are not only underrepresented in parliament (45 out of 500 MPs) and the higher bureaucracy, they are even rare among the ranks of the top political commentators. However, in NGOs, protest groups, and civil society organizations in general, women play a prominent role.

Daniel Arghiros, who made a detailed study of Thailand's electoral system, observed that the contractors and local officials who were the chief agents and beneficiaries of electoral manipulation were exclusively male. He argued that one way to lessen the capture of TAOs by old power centres might be to reserve a large number of seats for women.[41] Women's groups lobbied for reservation but failed.

In India, *panchayat* local government bodies were reformed in 1992-3, reserving one-third of seats for women and giving proportional representation to marginalized groups. In two of the poorest states literacy rates increased 20 per cent over the next decade.[42]

41 Daniel Arghiros, *Democracy, Development and Decentralization in Provincial Thailand*, Richmond: Curzon, 2001, p. 250.

42 UNDP, *Human Development Report 2002*, p. 74-5.

Managing the environment

As stressed many times through this report, the deterioration of the environment is a major force in the disempowerment of local communities. The shortcomings of the 1992 Enhancement and Conservation of the Environment Quality Act are now well understood, and reform of this important legislation is now overdue. But much more than legislation is needed to tackle Thailand's environmental problems.

The relationship between poverty, empowerment, and the environment is complex and subtle. In some cases poor people become the agents of environmental destruction because they have nothing to exploit but themselves and nature. But in other cases, poor people are the most sensitive monitors of environmental decline, and the most committed proponents of environmental defence. As shown in chapter 1, the fishing communities were the fiercest defenders of the Mun river against the destruction needed for a dam project of questionable utility. Similarly, all along Thailand's coasts, small-scale fishermen have protested against the destruction of the marine environment by commercial fishing interests which blatantly defy the law. In these and similar cases, the poor protest because they are the most vulnerable to environmental decline.

- The challenge for policy makers is to embrace popular movements which defend natural resources so that poverty alleviation and environmental defence work in synergy.
- The Ninth Plan rightly identifies that Thailand's environmental problems must be tackled under the heading of good governance. It stresses that "existing mechanisms for natural resources and the environmental management should be adjusted to emphasize local participation". Community empowerment should be both a means and end of good environmental governance.
- Government agencies must be more vigilant in enforcing existing laws such as pollution controls on industries.

Managing globalization for empowerment

Globalization presents both challenges and opportunities. The opportunities will only accrue to countries who actively manage the processes of globalization. These benefits include more jobs and more trade. In the past, Thailand – and other East Asian countries – benefited greatly by engaging more with the global economy.

The 1997 economic crisis revealed many downside vulnerabilities. In responding to the 1997 economic crisis, the Thai government has taken a much more active role in managing the country's engagement with globalization, as a passive role courts the risk of disempowerment at many levels.

But managing the country's engagement also means grasping the opportunities. The Doha trade negotiations showed a much greater concern for the needs of developing countries than previous trade rounds. Future talks will scrutinize economic policies in developed countries that adversely affect the developing world. Forces pushing for this need support. In particular, the whole topic of agrarian trade and government subsidy is now open for debate on a world scale. The importance for Thailand and especially for Thailand's poor cannot be underestimated. Thailand has more people dependent on agriculture, and lower levels of agrarian subsidy, than most countries. Changes in crop prices are one of the most sensitive forces affecting the numbers in poverty.

Many of the issues which fall heaviest on the poor – climate change, pollution, crime, human trafficking, corruption – are transnational or global issues. The issues, priorities, and solutions are increasingly being defined at the global level. Being left out will mean being disempowered.

One reason people feel uneasy about globalization is because they feel powerless before it. Partly that is because governments often engage with international institutions without involving the wider society in the debate and the decisions. They sign international treaties and conventions without public consultation. In the last decade, NGOs have become more vigilant on these matters. But government needs to take the initiative to bring these matters to public debate, so that civil society can review trade-offs and help shape global public policy. After all communities in Thailand are part of a much larger global community. They have much to offer as well as much to gain.

- An aggressive approach to the forthcoming negotiations on agrarian trade and subsidies is one way to empower the poor.
- Thailand must be an active participant in supporting and shaping the global efforts to grapple with issues such as climate change, pollution, crime and human trafficking.
- Government should make greater efforts to encourage public debate on issues arising between government and international institutions.

CONCLUDING REMARKS: LOOKING AHEAD

Varieties of empowerment

There are many, many different views on community empowerment – what it means, how it is done, what it achieves. This should not be cause for surprise or disappointment. To begin with, communities themselves are very different, one from another. Next, empowerment is a rather ambiguous term with connotations of internal strength as well as external authority. Finally, there are many different views on the economic, social, and political ideals that community empowerment might help achieve. In particular, there is a fundamental division among community activists between those who believe that communities must learn how to become

One reason people feel uneasy about globalization is because they feel powerless before it. Partly that is because governments often engage with international institutions without involving the wider society in the debate and the decisions.

more commercial in order to survive in the globalizing world, and those who feel that it is precisely the communities' agrarian economy and distinctive morality which are valuable and need to be preserved.

The first step towards empowerment is recognizing this variety of real-world situations and opinion, and acknowledging the right of communities to determine their own very varied futures.

Community and globalization

Both at an international level and within Thailand itself, the importance of the community has risen in reaction to the growing force of globalization. While there are many different views among community members and community advocates on the relationship between community and globalization, there are few if any who believe that the community could or should be isolated totally from the forces of globalization. Rather, there is a general consensus that communities need to erect some barriers against outside forces in order to strengthen their internal resources and hence be better equipped to deal with the outside world. There is then varied debate over the nature and height of the barriers, the priorities for internal strengthening, and the strategies for re-engaging with the outside world. But the basic idea – barriers to permit self-strengthening – commands sufficient consensus that it was adopted as a national agenda in response to the 1997 economic crisis.

The insight that community empowerment is a matter of rights helps us to understand that the other main contribution of other actors is to help build systems and institutions through which claims to rights can be negotiated in a fair and transparent way.

Empowerment as learning process

This Report has tried to reflect the many different voices and the many different experiments in community empowerment.

The important insight of the communities which contributed to this project is that community empowerment is a learning process which has successive steps: learning how to *realize their potential* as a community; learning how to *negotiate cooperation* with government and other outside agencies; learning how to *claim rights* within the society.

This chapter has argued that this three-level learning process provides a framework for understanding community empowerment. It has identified three priorities for promoting community empowerment corresponding to these three levels:

- networking the learnings from the many experiments and experiences of community projects of recent years,
- making decentralization work for the communities by maintaining the momentum of change, fostering participation, and improving management,
- strengthening procedures and institutions for negotiating claims to rights, particularly rights over natural resources, by changes in the 1992 environment act and other legislation to implement the spirit of the 1997 Constitution.

The insight that community empowerment is a learning process indicates that the main contribution of other actors in community empowerment is to assist that process – by providing information, by accelerating the exchange of information among communities, by breaking down barriers to learning, and by supporting legitimate claims for rights.

- Donor agencies which believe in community empowerment must look more to the communities, rather than official agencies, as sources of information and targets for funding.

The insight that community empowerment is a matter of rights helps us to understand that the other main contribution of other actors is to help build systems and institutions through which claims to rights can be negotiated in a fair and transparent way.

Community empowerment in social context

Community empowerment takes place within a larger social context. This chapter has identified several areas of reform and policy-making which are important for community empowerment and human development:

- maintaining the momentum of political reform including the full implementation of the freedom of information,
- ensuring the provision of public goods is responsive to people's needs, in particular through utilizing new channels such as the National Economic and Social Council, the National Human Rights Commission, and the submission of "People's Bills",
- reforming the public sector right down to the lower levels whose responsiveness is critical for the success of community empowerment,
- sustaining the intention of the National Education Act 1999 to overhaul the education system, with particular attention to curriculum change and pedagogical style,
- bringing judicial reform more firmly onto the national agenda so the judicial system may become more effective for enforcing rights, particularly those of the poor,
- refocusing economic policy on alleviating poverty in all its forms, and building on the learnings from community empowerment projects to devise specific plans,
- tackling gender bias, particularly within the local power structures which are rising in importance,
- managing the environment so that poverty alleviation and environmental improvement work in synergy,
- managing globalization for empowerment, particularly through an aggressive approach to WTO negotiations on agrarian trade.

Opportunity and risk

Thailand is now emerging both from the economic crisis and from a period of extraordinary soul-searching and debate. There is a very wide acceptance of the view that community empowerment is a strategy to achieve human development which reflects people's real needs, which is sustainable, and which achieves national objectives of social justice, peace, and unity. The problems facing community empowerment are considerable – problems of understanding, opposition, and inertia. But the potential gains are large, and the risks are small.

Communities have no wish to reject modernity, oppose globalization, and cling to the past. But they want the power to determine the direction of development based on their own body of knowledge, their own values, the principle of sustainable balance between man and nature, and the community's rights to manage resources.

– From the conclusion agreed among the community contributors to chapter 1

PART II

MEASURING HUMAN DEVELOPMENT

CHAPTER 5

HUMAN DEVELOPMENT INDICES

INTRODUCTION TO HUMAN ACHIEVEMENT INDEX (HAI)

Human development indices have played a vital role in establishing UNDP's contribution to the debate and advancement of human development worldwide. Experiences confirm that indices that capture progress and disparity in human development among countries, regions, and groups, serve as an excellent stimulant and provide a good forum for policy advocacy and public participation at both the global and national levels.

This Report, although focusing on community empowerment, does not attempt to develop community empowerment indices. Several government agencies and research institutes are producing good results on that front. In any case, nationwide community-level data collection and data analysis is an enormous task which is beyond the scope of this Report. This chapter will therefore present some examples of such effort and devote the latter part of the chapter to continuing the work on the **"Index of Human Deprivation – IHD",** a composite index introduced by the First Thailand Human Development Report.

With provincial ranking and maps, the IHD clearly depicts the progress and disparity in human development situations of all 76 provinces. IHD received enthusiastic support from the government, development institutions, and the academia. It was the first time that a composite index was developed to assess an overall human development situation and the first time that provincial-level data concerning human development was used in an integrated and comprehensive manner. IHD has important policy implications and a potential to become a useful policy analysis instrument. Further improvement and refinement of IHD becomes an important task of the Second Thailand Human Development Report.

From the Index of Human Deprivation (IHD) to the Human Achievement Index (HAI)

The IHD has 8 components – health, education, employment, income, housing and environment, transport and communication, consumer's goods, plus a women index. Within 8 components, there are 48 indicators. For each indicator, provinces are divided into three groups – those that perform above the median are assigned a penalty score of 0, those in the worst quartile a penalty score of 1, and those in between a penalty score of 0.5. Each indicator weighs equally within the component, and each component weighs equally within the composite index. The result is the IHD that highlights overall and specific deprivation at the provincial level.

The IHD shows that people in the lower Chao Phraya Basin are the most well-off, and those living in the border areas are most deprived. Living in Bangkok Metropolis does not guarantee a good life as Bangkok fails to achieve a top ten ranking. Singburi, a small province situated in the middle of the country's rice bowl, is recorded as having the best human development condition.

On technical aspects, it should be noted that the IHD methodology treats all the scores above the median equally and focuses on the lowest and second quartiles because IHD is meant to highlight deprivation, not excellence. With this focus, IHD cannot capture differences among the above-the-median provinces. It penalizes poor performance but does not recognize or award excellence. Provinces that perform well on IHD are those that manage to stay above average on all indicators, but may not be exceptional on any one.

When the NESDB-UNDP task force commenced a review of the IHD with participation from various agencies, no leaf was left unturned. While the new index retains some of the key characteristics of the IHD, it features several major changes including its name.

Some indicators are omitted, namely indicators that are relevant to only a few provinces, those that are considered irrelevant to the socio-economic situation of the country, those that do not express disparity among provinces and those without updated data. New additions are indicators that reflect the new social development.

In addition, HAI features different components, and a new methodology that should be more useful for policy decisions.

The result is a new composite index – the **"Human Achievement Index – HAI" .** HAI aims to reflect the rate of change in human development in 76 provinces rather than zeroing in on basic deprivation. Hence, this index is in line with the state of human development in Thailand today, as the country has become a middle income, medium human development country. This, however, does not mean that deprivation no longer exists, or that it is no longer a legitimate concern. HAI can reflect stagnation or slow progress in deprived areas, but it allows room for more advancing provinces to show their stride.

HAI CHARACTERISTICS

In general, HAI has the following characteristics.

Multidimensionality. The index captures the multidimensional character of human development and seeks to express in systematic ways as many of these dimensions as possible.

Policy relevance. The index suggests policy implications and can serve to support informed decision-making on strategies and programmes aimed at addressing inequalities.

Spatial disaggregation. The index seeks to map uneven progress; it disaggregates the nation's regions, which are too broad in character and too few in numbers to serve as the focus for policy purpose, to the provincial level which can be a strategic point of convergence between nationally-driven policies, and local initiatives.

Temporal comparison. By measuring progress against an established "goal post", the index can assess whether human development situation in a selected province improves or regresses over time.

Transparency and replicability. The methodology used for the construction of the index is simple and replicable, thus facilitating others to undertake comparable exercises.

HAI CONCEPT AND STRUCTURE

HAI is composed of 8 essential phases/components in a human lifecycle – starting with the first essential thing that everyone must have on the first day of his/her life – *health,* followed by the next important step for every child – *education.* After schooling, one is expected to get a *job,* to secure enough *income,* to have a decent *housing and living conditions.* Then a person moves beyond him/herself to have a quality *family and community life,* to maintain *contacts and communication* with others, and last but not least, to *participate* as member of a society. To sum up, the 8 components are:

- Health
- Education
- Employment
- Income
- Housing and living conditions
- Family and community life
- Transportation and communication
- Participation.

Under these components are 40 indicators as shown in Table 1.

HAI METHODOLOGY

The HDI methodology, used in the UNDP global Human Development Reports, is used to calculate HAI. For each indicator, the following calculation is used for each of the provinces:

$$\frac{\textit{Actual value} - \textit{Minimum value}}{\textit{Maximum value} - \textit{Minimum value}}$$

The minimum and maximum values are set for each indicator to serve as "goal post" which covers a range that can accommodate all possible values for that indicator in the next ten years. The goal post set for each indicator is shown in Table 1.

Table 1. Structure of the Human Achievement Index – HAI

HAI Indices	Components	Indicators	Minimum	Maximum
1. Health Index	1. Length of life	1. Life expectancy at birth (years)	50	95
	2. Quality of life	2. Incidence of first degree mulnutrition in children under five (%)	0	20
		3. Incidence of AIDS (per 100,000)	0	65
		4. Incidence of mental illness (per 1,000)	0	100
	3. Health promotion	5. Population with unhealthy behavior (%)	15	55
	4. Health infrastructure	6. Population per physician (persons)	600	20,000
2. Education Index	5. Stock of education	7. Mean years of schooling for people age 15 years and over (years)	3	12
	6. Flow of education	8. Lower secondary school gross enrolment (%)	30	100
		9. Upper secondary school gross enrolment (%)	20	95
	7. Quality of education	10. Average marks of lower secondary students (%)	30	65
		11. Average marks of upper secondary students (%)	20	55
	8. Educational infrastructure	12. Upper secondary students per teacher (students)	10	37
		13. Upper secondary students per classroom (students)	20	60
3. Employment Index	9. Unemployment and underemployment	14. Unemployment (%)	0	8
		15. Underemployment (%)	0	30
	10. Labour protection	16. Employees covered by social security (%)	1	100
4. Income Index	11. Income level	17. Household monthly income (Baht)	4,000	30,000
	12. Income change	18. Change in household monthly income (1998-2000) (%)	–50	40
	13. Poverty level	19. Incidence of poverty (%)	0	60
	14. Household debt	20. Households with debt (%)	20	90
5. Housing and living conditions index	15. Housing quality	21. Households with permanent building materials (%)	70	100
		22. Urban households in slum (%)	0	100
	16. Living quality	23. Households with access to refrigerator (%)	30	100
		24. Households cooking with fuel gas or electric stove (%)	10	100
6. Family and community life index	17. Family life	25. Female-headed households (%)	10	50
		26. Elderly-headed households (%)	5	50
		27. Working children aged 15-17 (%)	0	60
		28. Incidence of divorces (per 1,000 marriages)	50	600
		29. Disable persons (%)	0	6
	18. Safe community	30. Violent crimes reported (per 100,000)	0	40
		31. Drug-related arrests (per 100,000)	60	1,250
7. Transportation and communication Index	19. Transport infrastructure	32. Villages with convenient access to nearest district during rainy season (%)	30	100
		33. Personal vehicle registration (per 1,000)	80	950
	20. Communication infrastructure	34. Households with access to TV (%)	40	100
		35. Population per telephone (persons)	1	65
		36. Population with access to internet (%)	1	20
8. Participation Index	21. Political participation	37. Vote turnout (%)	30	100
	22. Civil society participation	38. Community groups (per 100,000)	4	450
		39. Households participate in local groups (%)	35	100
		40. Households participate in social services (%)	70	100

Another Endeavor to Measure Human Development: Community-level Well-being Indicators

A Thailand Research Fund project aims to develop community-level well-being indicators. The research team led by *Amara Pongsapit* of Chulalongkorn University's Social Research Institute, identifies and works with 8 categories of community, namely riverine communities in Nan, mixed agricultural-industrial communities in Chiang Mai, coastal communities in Songkhla, industrial communities in Rayong, border and tourist communities in Chiang Rai, slum communities in Bangkok, Chao Phraya Basin communities in Ayutthaya and mixed farming communities in Buri Ram.

The team applies participatory action research to identify 4 development goals, namely self-reliance, strong people's organizations, participation, and equity, and 9 clusters of indicators that the people feel are most relevant and genuinely reflect the state of their well-being: personal/household economic situation, education, health, information, environment, basic infrastructure and natural resources, family life, culture and morality, community life and community strength, social security and safety net.

Example of environment indicators from Chiang Mai communities

Development goal	Indicators
Self reliance	Households engaged in alternative agriculture.
People's organizations	Community has forest management system. Community has soil, water and forest preservation system. Community has drug-free project.
Participation	Households with proper garbage disposal arrangement. Community does not have illegal drug trade.
Equity	Households with adequate water supply all year round.

This represents an attempt to develop a community-based self-management tool for information collection, situational analysis, community planning, monitoring and evaluation. The team also attempts to identify common indicators from 8 communities that would be useful for planning at the national-level. Although data for these indicators are not presently available, the research provides a useful guidance for the development of national and community data collection and analysis.

An Ambitious Attempt to Measure Another Aspect of Human Development: Happiness Indicators

Another TRF research study led by *Apisit Thamrongwarangkool,* a medical doctor and community development activist at the Khon Kaen Hospital, focuses on the subjective aspect of human development. The team uses the focus group technique to work with 10 nationally revered community wisemen and 190 villagers in 4 North-eastern provinces (Buri Ram, Nakhon Ratchasima, Khon Kaen and Surin) to develop "happiness indicators".

The team identifies 8 important factors as shown below, and proposes that the learning process changes people's conception of happiness, and therefore can be used as an important tool in rural development. The research team acknowledges that, due to the limitation of the areas and participants selected for this study, the findings are probably most suitable in the North-eastern farming context.

Happiness component	**Happiness indicators**
Life security	Sufficient land Permanent house Sufficient food
Physical and mental health	Healthy body Healthy mind
Good family	Living with all family members and having a job Love and understanding without quarrels and jealousy
Strong community	Group learning Informal leader and leadership development Group activities
Good living environment	Fertile soil, plenty of water and animals Toxic/chemical-free environment Road, pipe water, electricity
Freedom	Ability to do anything that does not incur negative impacts on others Debt-free
Self-pride	Successful family Successful career
Access to dharma	Peaceful life Self-content Merit-making or helping others

For some indicators, i.e. unemployment, divorce incidence, the data reflects a "negation in human development". Hence, HAI uses the inverse value (1-calculated value) to show the degree of progress.

For example, the 3.4% *unemployment* rate in Bangkok Metropolis is calculated to be a 0.3256 index score for unemployment, which is expressed as 1 – 0.3256 = 0.6744 index score for *employment*.

HAI does not divide the provinces into predetermined groups. It allows 76 provinces to fall into varying positions, hence there can be as many as 76 positions on each indicator. The variation at the high and low ends are captured and treated in the same manner. As a consequence, a very good performance on one indicator can offset a very poor performance on another.

Weighting is not applied at any level of the calculation. Hence, the health index is an expression of an average of all 6 indicators within the health index. Likewise, all 8 indices carry equal weight in calculating the composite HAI.

In many ways, the real value and validity of the HAI comes from the use of the 8 individual components. There is more analytic and diagnostic value in looking at variations in the health component or the education component alone than in averaging each with all the others. Policy priorities and choices are clear for each component, but not for the combined index. And averaging of averages across such diverse measures means that the overall ranking of the provinces must be understood as indicative of levels of overall development, not definitive.

DATA SOURCES

Data is the most formidable challenge. Data used to calculate HAI must have national coverage with provincial disaggregation. Several indicators are abandoned because provincial data is not available, not reliable, or is systematically biased.

HAI uses secondary data that do not entail labourious data processing. This is to ensure both the economy and the sustainability of the index.

HAI data is from a) national sample surveys, e.g., socioeconomic survey, labour force survey, health and welfare survey; b) registration systems, e.g., divorce incidence, personal vehicle registration; and c) administrative records, e.g., school enrolment, persons per physician, malnutrition in children under five, etc.

Data collection for these surveys is conducted in varying years. Some surveys are conducted every two or five years. Most registration systems and administration records are updated every year. A small portion of data used in this study is from five-year surveys, and this is data that does not change rapidly.

Not all data collected are available in readily accessible format. Some are downloaded from web sites, some are kept as internal databases, some have to be calculated from various databases, some are in ASCII files. These databases are made available by responsible agencies, or through the National Statistical Office or the Office of the National Economic and Social Development Board. The data tables in the annex are processed and calculated from these databases.

GENDER DISAGGREGATED DATA

The "Women index" is one of IHD's eight indices. It compares human development situations of women across provinces and is therefore not a "gender index". HAI does not have a similar component. This is a trade-off to avoid the problem of double-counting.

Although HAI was originally planned to be a gender-disaggregated index, data was an insurmountable problem. Some of the HAI indicators use household-level data that does not allow for gender disaggregation. Nonetheless, efforts are made to obtain gender-disaggregated data when relevant and possible. This data is presented in the data tables.

HAI'S EIGHT INDICES

1. Health Index

Health is the first and foremost constituent of people's well-being. The health index is composed of:

- length and quality of life (life expectancy and first-degree malnutrition in children under five),
- physical and mental illness (AIDS incidence, mental illness),
- health promotion (unhealthy behaviour, namely smoking and/or alcohol consumption),
- access to health service (persons per physician).

By and large, the health index is composed of indicators that are commonly used to indicate a general health situation. It also reflects a shift towards a new health care approach – health promotion. However, relevant data is not available, with the exception of smoking and alcohol consumption.

The health index ranges from 0.506 to 0.815. The following map shows the distribution of all provinces in five groups according to their health index scores, with green representing best performance and red representing worst performance.

Map 1 shows that health conditions vary across the country. Chachoengsao has the highest achievement in the overall health index, followed by Bangkok Metropolis and other provinces in the Bangkok vicinity, e.g., Samut Sakon, Samut Prakan, Samut Songkram, Nonthaburi. Other high performers are Songkhla, Chon Buri and Uttaradit. In general, health situations in the Central Plain, the West, and the East are better than the rest of the country.

Northeastern provinces are the worst performers with less access to health services and a relatively high incidence of first-degree malnutrition among children.

NRDC-2C and Basic Minimum Needs (BMN) Indicators

National Rural Development Committee – 2C is a set of rural development indicators that use village census. It was developed in 1984, went through a series of piloting and testing, and was undertaken biannually since 1990. About 40 indicators cover the aspects of (1) infrastructure, (2) production, income and employment, (3) public health, (4) consumption and agricultural water, (5) education and culture, (6) natural resources and environment.

The continuity of the available census data makes the NRDC-2C database a unique instrument for measuring changes and trends in Thailand's rural socio-economic infrastructure. NESDB and the Community Development Department have used these indicators to classify and target villages that have relatively poorer development in order to initiate special rural development projects. NRDC-2C data covers only rural areas and the indicators are designed to reflect the welfare and needs of Thailand's rural communities.

Since 1985, under the umbrella of the National Rural Development Committee, the household-level Basic Minimum Needs (BMN) indicators were developed and household data was collected every year. BMN has approximately 40 indicators, divided into 9 groups – (1) nutrition, (2) housing, (3) education and health, (4) family safety, (5) income, (6) family planning, (7) participation, (8) culture and religion, (9) environment.

After every five-year national plan cycle, the benchmark for each indicator is adjusted to reflect the new national socio-economic development targets. The BMN indicators are then used to monitor and evaluate the Plan's development results.

After serving as key rural development instruments for over a decade, the NRDC-2C and the BMN indicators are being reviewed to reflect the national development strategy to integrate "rural" and "urban" development.

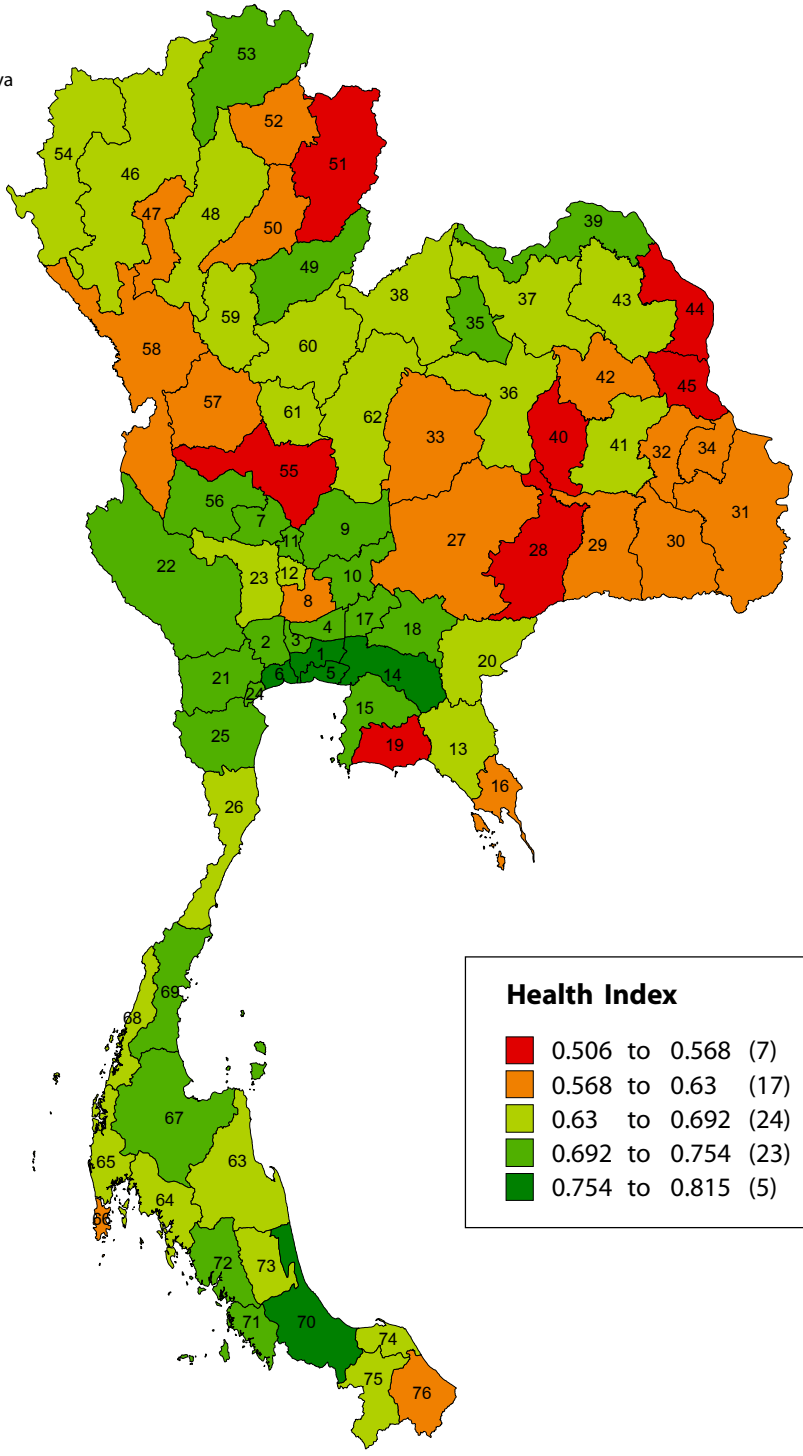
Noteworthy among poor performers is Rayong – the industrial hub in the Eastern Seaboard where AIDS and unhealthy behaviours are jeopardizing public health. Phuket, despite its high standard of living, is among the bottom fives for cigarette and alcohol consumption, and mental health.

Individual indicators also tell interesting stories.

- Life expectancy is relatively highest in southern provinces, while lowest in the North.
- Malnutrition is still a problem in remote areas in Mae Hong Son and Nan, and some poverty-stricken lower northeastern provinces.

Map 1. Provincial Distribution of the Health Index

1. Bangkok
2. Nakhon Pathom
3. Nonthaburi
4. Pathum Thani
5. Samut Prakan
6. Samut Sakhon
7. Chai Nat
8. Phra Nakhon Si Ayutthaya
9. Lop Buri
10. Saraburi
11. Sing Buri
12. Ang Thong
13. Chanthaburi
14. Chachoengsao
15. Chon Buri
16. Trat
17. Nakhon Nayok
18. Prachin Buri
19. Rayong
20. Sa Kaeo
21. Ratchaburi
22. Kanchanaburi
23. Suphan Buri
24. Samut Songkhram
25. Phetchaburi
26. Prachuap Khiri Khan
27. Nakhon Ratchasima
28. Buri Ram
29. Surin
30. Si Sa Ket
31. Ubon Ratchathani
32. Yasothon
33. Chaiyaphum
34. Amnat Charoen
35. Nong Bua Lam Phu
36. Khon Kaen
37. Udon Thani
38. Loei
39. Nong Khai
40. Maha Sarakham
41. Roi Et
42. Kalasin
43. Sakon Nakhon
44. Nakhon Phanom
45. Mukdahan
46. Chiang Mai
47. Lamphun
48. Lampang
49. Uttaradit
50. Phrae
51. Nan
52. Phayao
53. Chiang Rai
54. Mae Hong Son
55. Nakhon Sawan
56. Uthai Thani
57. Kamphaeng Phet
58. Tak
59. Sukhothai
60. Phitsanulok
61. Phichit
62. Phetchabun
63. Nakhon Si Thammarat
64. Krabi
65. Phangnga
66. Phuket
67. Surat Thani
68. Ranong
69. Chumphon
70. Songkhla
71. Satun
72. Trang
73. Phatthalung
74. Pattani
75. Yala
76. Narathiwat



- The AIDS epidemic has moved from northern provinces to the industrial areas where there is a large concentration of workers who migrate from various parts of the country, e.g., Rayong, Pathum Thani, Lampang. Also notable are provinces on the eastern border, i.e. Chanthaburi and Trat.
- There is no discernable pattern of distribution for mental illness and unhealthy behaviour. High incidence is found in both well-to-do and poor provinces, and across regions.
- Something stays the same – Bangkok Metropolis has the highest concentration of physicians per population. The ratio is 24 times that of the most deprived province – Si Sa Ket.

Table 2. Five Best and Worst Performers on Health Indicators

Life expectancy at birth (years)		1st degree malnutrition in children under 5 (%)		AIDS incidence (per 100,000)		Mental illness (per 1,000)		Unhealthy behaviour (%)		Population per physician (persons)	
Top 5 provinces											
Nonthaburi	79.8	Ratchaburi	0.0	Nonthaburi	0.0	Phayao	3.5	Samut Songkhram	23.7	Bangkok Metropolis	793
Narathiwat	78.7	Chiang Rai	0.0	Chachoengsao	0.0	Trang	3.6	Loei	24.5	Chon Buri	1,876
Nakhon Si Thammarat	78.7	Nong Bua Lam Phu	0.8	Phattalung	0.0	Krabi	3.6	Uttaradit	24.6	Chiang Mai	2,082
Pattani	77.6	Samut Prakan	1.0	Ubon Ratchathani	0.1	Chanthaburi	4.2	Songkhla	24.7	Phuket	2,103
Ranong	77.1	Nonthaburi	1.6	Nakhon Phanom	0.4	Nakhon Pathom	4.9	Samut Sakon	24.8	Pathum Thani	2,261
Bottom 5 provinces											
Phrae	65.2	Amnat Charoen	13.3	Lampang	24.7	Phuket	49.3	Rayong	47.4	Nong Bua Lam Phu	13,731
Lamphun	65.1	Buri Ram	13.4	Pathum Thani	25.0	Nonthaburi	49.4	Phitsanulok	50.5	Chaiyaphum	13,759
Chiang Mai	62.9	Khon Kaen	13.9	Trat	36.6	Ubon Ratchathani	54.9	Phuket	51.6	Kalasin	14,261
Phayao	61.7	Nan	15.2	Chanthaburi	39.5	Nakhon Phanom	62.5	Maha Salakam	51.8	Phetchabun	14,629
Chiang Rai	61.6	Mae Hong Son	15.9	Rayong	51.3	Nakhon Sawan	74.5	Mukdahan	55.8	Si Sa Ket	19,007

2. Education Index

Education helps people obtain other skills, and enables people to function effectively in a society. The education index is comprised of:

- stock of education (mean years of schooling),
- flow of education (lower and upper secondary gross enrolment),
- educational achievement (lower and upper secondary students' performance in national test),
- educational infrastructure (upper secondary students per teacher, upper secondary students per classroom).

The indicators reflect the philosophy of the National Education Act 1999 that emphasizes both the quantity and quality of education. Since the national mean years of schooling is 7.3 years, and primary education has been compulsory for quite some time, the education index focuses on secondary education, which has become a top national agenda. (Now, compulsory education is 9 years.)

The education index ranges from 0.383 to 0.649. Apart from a few exceptional cases, education is relatively equitable across the country. Most outstanding provinces are Chon Buri in the East, Phuket in the South, Lamphun, Lampang and Chiang Mai in the North, Nakhon Pathom and Phra Nakhon Si Ayutthaya in the Central Plain.

Special attention should be given to certain northeast provinces, i.e. Nong Bua Lam Phu, Roi Et, Buri Ram, Si Sa Ket, and lower northern provinces, i.e. Phetchabun and Kamphaeng Phet. Border provinces in the far North and South, i.e. Mae Hong Son, and Narathiwat are also among the worst performers.

Individual indicators suggest that:

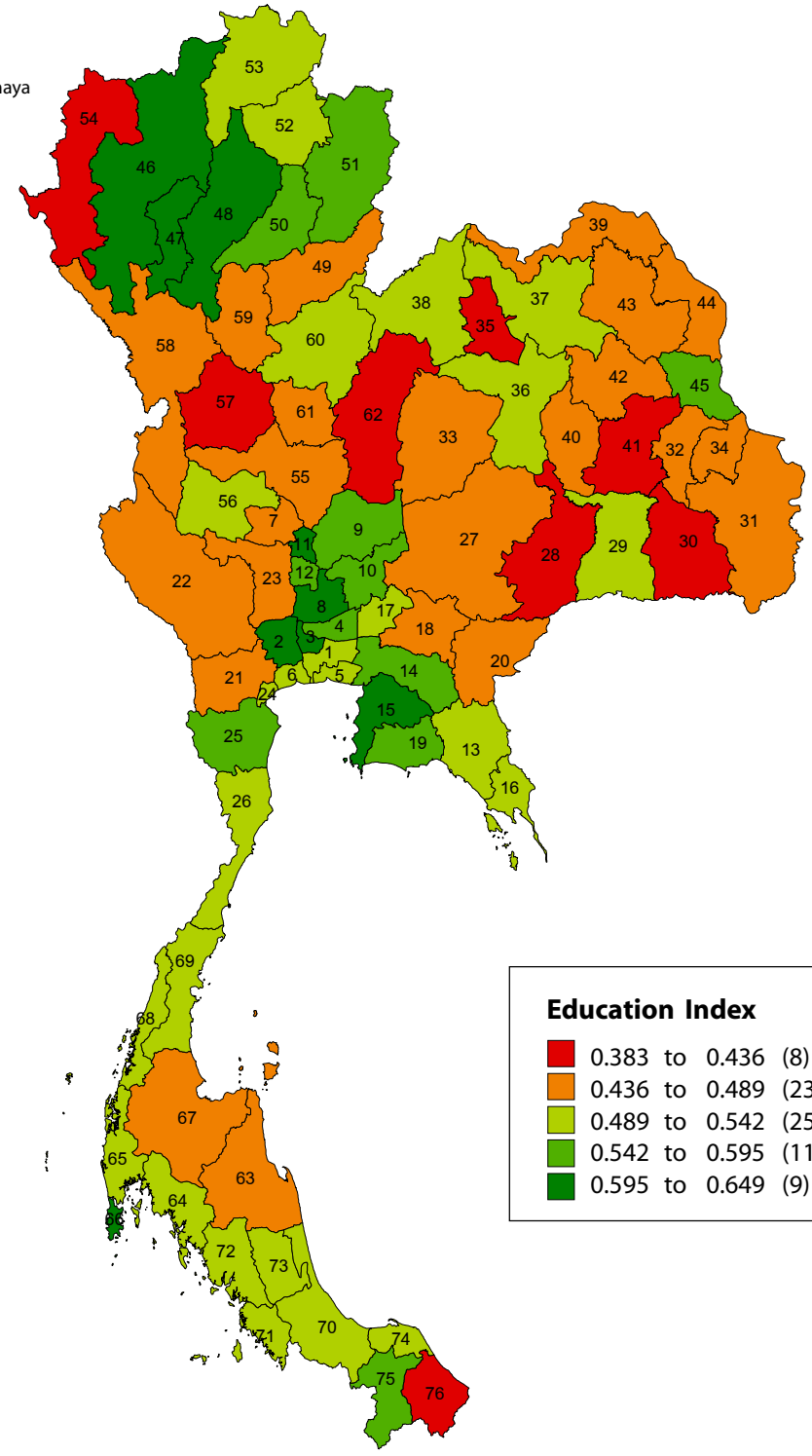
- In terms of access and quantity, residents of Bangkok Metropolis and the vicinity, along with Phuket, have the highest mean years of schooling. This does not necessarily mean that children in these prosperous provinces are the most privileged, but is largely a result of the migration of highly educated population from other regions to the metropolitan over the past decades. People in mountainous and border provinces in the North, e.g., Mae Hong Son, Nan, Tak, Chiang Rai, and Narathiwat have the least schooling years.
- Bangkok Metropolis has a surprisingly low enrolment rate. But this finding should be examined carefully; it could be attributed to inconsistency in data collection. Due to different administrative structures, data for Bangkok Metropolis and other provinces are handled by different organizations. Other low-enrolment provinces are Nakhon Sawan, Kamphaeng Phet and Phichit in the lower North.
- As for upper secondary enrolment, Kamphaeng Phet and Sukhothai in the lower North are still lagging behind, along with other northeastern provinces. Nan has a shortage of education infrastructure, which is probably a side effect of its high enrolment rate.
- In terms of quality, students in Bangkok Metropolis, in spite of crowded classrooms, perform well at both lower and upper secondary levels, while students in the Northeast

Table 3. The Five Best and Worst Performers on Education Indicators

Mean years of schooling (years)		Lower secondary gross enrolment (%)		Upper secondary gross enrolment (%)		Marks of lower secondary students (%)		Marks of upper secondary students (%)		Upper secondary students per teacher (students)		Upper secondary students per classroom (students)	
Top 5 provinces													
Nonthaburi	10.3	Chon Buri	102.3	Lamphun	79.8	Tak	51.6	Chiang Mai	43.8	Phra Nakhon Si Ayutthaya	14	Nakhon Ratchasima	31
Bangkok Metropolis	9.6	Pathum Thani	100.6	Phrae	79.1	Nong Khai	50.1	Bangkok Metropolis	43.3	Nonthaburi	15	Nakhon Pathom	32
Pathum Thani	8.8	Yala	100.4	Phuket	79.0	Trat	50.0	Phrae	41.7	Nakhon Pathom	15	Lamphun	32
Phuket	8.4	Lamphun	97.4	Nan	77.2	Bangkok Metropolis	49.6	Pattani	40.1	Phattalung	16	Phichit	32
Samut Prakan	8.4	Nan	96.6	Sing Buri	74.4	Lop Buri	49.3	Sing Buri	39.9	Lampang	16	Ranong	32
Bottom 5 provinces													
Narathiwat	5.9	Bangkok Metropolis	63.4	Nong Khai	37.9	Songkhla	40.6	Nakhon Si Thammarat	31.3	Tak	26	Samut Prakan	39
Chiang Rai	5.8	Nakhon Sawan	63.3	Sukhothai	36.5	Uttaradit	40.0	Kalasin	31.0	Si Sa Ket	26	Nonthaburi	39
Tak	5.8	Kamphaeng Phet	62.1	Kamphaeng Phet	35.5	Ratchaburi	39.8	Buri Ram	31.0	Buri Ram	26	Phrae	39
Nan	5.8	Phichit	59.2	Nong Bua Lam Phu	31.5	Narathiwat	39.8	Nong Bua Lam Phu	30.7	Nong Bua Lam Phu	28	Bangkok Metropolis	40
Mae Hong Son	4.5	Roi Et	37.1	Chaiyaphum	30.3	Satun	39.4	Phetchabun	28.7	Sa Kaeo	29	Nan	42

Map 2. Provincial Distribution of the Education Index

1. Bangkok
2. Nakhon Pathom
3. Nonthaburi
4. Pathum Thani
5. Samut Prakan
6. Samut Sakhon
7. Chai Nat
8. Phra Nakhon Si Ayutthaya
9. Lop Buri
10. Saraburi
11. Sing Buri
12. Ang Thong
13. Chanthaburi
14. Chachoengsao
15. Chon Buri
16. Trat
17. Nakhon Nayok
18. Prachin Buri
19. Rayong
20. Sa Kaeo
21. Ratchaburi
22. Kanchanaburi
23. Suphan Buri
24. Samut Songkhram
25. Phetchaburi
26. Prachuap Khiri Khan
27. Nakhon Ratchasima
28. Buri Ram
29. Surin
30. Si Sa Ket
31. Ubon Ratchathani
32. Yasothon
33. Chaiyaphum
34. Amnat Charoen
35. Nong Bua Lam Phu
36. Khon Kaen
37. Udon Thani
38. Loei
39. Nong Khai
40. Maha Sarakham
41. Roi Et
42. Kalasin
43. Sakon Nakhon
44. Nakhon Phanom
45. Mukdahan
46. Chiang Mai
47. Lamphun
48. Lampang
49. Uttaradit
50. Phrae
51. Nan
52. Phayao
53. Chiang Rai
54. Mae Hong Son
55. Nakhon Sawan
56. Uthai Thani
57. Kamphaeng Phet
58. Tak
59. Sukhothai
60. Phitsanulok
61. Phichit
62. Phetchabun
63. Nakhon Si Thammarat
64. Krabi
65. Phangnga
66. Phuket
67. Surat Thani
68. Ranong
69. Chumphon
70. Songkhla
71. Satun
72. Trang
73. Phatthalung
74. Pattani
75. Yala
76. Narathiwat



deserve special attention. It should also be noted that variations in upper and lower secondary test scores may reflect not only the quality of schools, but also the socio-economic situations of the households of the students taking the tests.

- In terms of education infrastructure, Nakhon Pathom is outstanding for the low ratio of students per teacher and students per classroom.

3. Employment Index

Working is an important part of everyone's life. The quality of working life is influenced by the extent to which the workers are able to find:

- favourable employment (unemployment and underemployment),
- security and protection (social security).

Unemployment in Thailand has always been relatively low, even during the economic crises, but underemployment remains high, which is a characteristic of most agricultural societies. Another important issue is formal vs informal sector employment, which is also reflected in the social security coverage.

Only workers in the formal sector benefit from social security. The data in this study is as of December 2001 when establishments with 10 employees or more were required to enter this scheme. Starting in April 2002, the coverage expanded to any establishment with one or more employees. There is also a self-insured scheme for self-employed workers, but this has not been successful. As of June 2002, about 6.7 million employees or about one-quarter of the labour force outside the public sector were covered by social security.

It should be noted that social security is registered by the location of the work place, not the worker's residence. Therefore, provinces that have a high concentration of factories and out-of-province workers record a very high coverage.

The employment index covers a wide range, from 0.267 to 0.894. Provinces in the Bangkok vicinity are the best scorers. Within this group, Samut Sakon, Pathum Thani, Samut Prakan – the industrial ring around Bangkok – are most outstanding. Next in line are Chon Buri in the East and Phuket in the South.

Map 3 and Table 4 show that the upper Northeast, more specifically the border provinces, are the worst performers. Udon Thani has the lowest index score, followed by Nong Bua Lam Phu, Nakhon Phanom and Amnat Charoen.

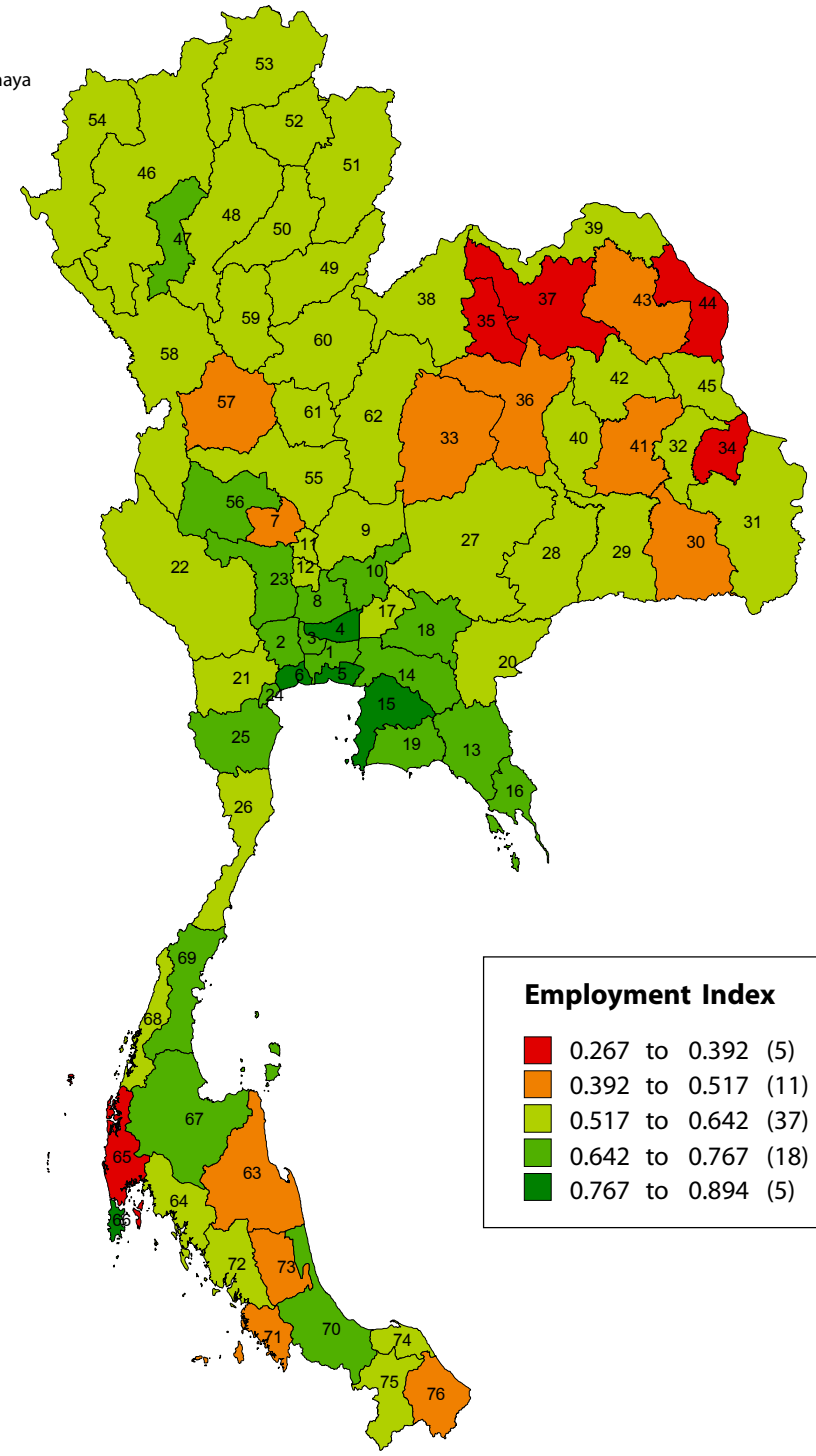
An observation should be made that Phangnga has a very low index score of 0.286 due to its 26 per cent underemployment, which is exceptionally high, and is probably a data error. But there is no basis for estimating an alternative number. Note, however, that Phangnga performs respectably in income, housing and living conditions, as well as family and community life. In this respect, Phangnga follows the pattern of most southern provinces where employment and income are not closely related as in other parts of the country.

Table 4. Five Best and Worst Performers on Employment Indicators

Unemployment (%)		Underemployment (%)		Social Security (%)	
Top 5 provinces					
Suphan Buri	0.1	Uttaradit	0.0	Samut Sakon	99.6
Uthai Thani	0.4	Sa Kaeo	0.0	Samut Prakan	91.6
Trat	0.7	Phetchaburi	0.0	Pathum Thani	78.2
Maha Salakam	0.7	Trat	0.0	Phuket	55.8
Chumphon	0.7	Phitsanulok	0.0	Phra Nakhon Si Ayutthaya	53.6
Bottom 5 provinces					
Samut Prakan	4.1	Phattalung	7.0	Sakhon Nakhon	1.7
Nakhon Phanom	5.0	Nakhon Phanom	7.3	Yasothon	1.6
Amnat Charoen	5.1	Satun	9.5	Nakhon Phanom	1.4
Nong Bua Lam Phu	6.7	Udon Thani	9.7	Amnat Charoen	1.4
Udon Thani	7.3	Phangnga	26.0	Si Sa Ket	0.9

Map 3. Provincial Distribution of the Employment Index

1. Bangkok
2. Nakhon Pathom
3. Nonthaburi
4. Pathum Thani
5. Samut Prakan
6. Samut Sakhon
7. Chai Nat
8. Phra Nakhon Si Ayutthaya
9. Lop Buri
10. Saraburi
11. Sing Buri
12. Ang Thong
13. Chanthaburi
14. Chachoengsao
15. Chon Buri
16. Trat
17. Nakhon Nayok
18. Prachin Buri
19. Rayong
20. Sa Kaeo
21. Ratchaburi
22. Kanchanaburi
23. Suphan Buri
24. Samut Songkhram
25. Phetchaburi
26. Prachuap Khiri Khan
27. Nakhon Ratchasima
28. Buri Ram
29. Surin
30. Si Sa Ket
31. Ubon Ratchathani
32. Yasothon
33. Chaiyaphum
34. Amnat Charoen
35. Nong Bua Lam Phu
36. Khon Kaen
37. Udon Thani
38. Loei
39. Nong Khai
40. Maha Sarakham
41. Roi Et
42. Kalasin
43. Sakon Nakhon
44. Nakhon Phanom
45. Mukdahan
46. Chiang Mai
47. Lamphun
48. Lampang
49. Uttaradit
50. Phrae
51. Nan
52. Phayao
53. Chiang Rai
54. Mae Hong Son
55. Nakhon Sawan
56. Uthai Thani
57. Kamphaeng Phet
58. Tak
59. Sukhothai
60. Phitsanulok
61. Phichit
62. Phetchabun
63. Nakhon Si Thammarat
64. Krabi
65. Phangnga
66. Phuket
67. Surat Thani
68. Ranong
69. Chumphon
70. Songkhla
71. Satun
72. Trang
73. Phatthalung
74. Pattani
75. Yala
76. Narathiwat



4. Income Index

Income represents the command people have over goods and services. Income is necessary for people to achieve a certain standard of well-being. Poverty, on the other hand, is an indicator of ill-being. People are defined as poor if they do not have sufficient income to satisfy their minimum basic needs. The income index is expressed by:

- Income (household income and income change),
- Poverty (poverty incidence),
- Debt (household debt).

Provinces vary considerably on this measure. The income index ranges from 0.150 to 0.808. Predictably, Bangkok Metropolis maintains the highest score, followed by Phuket, Nonthaburi and Pathum Thani – the two provinces that could be regarded as Bangkok's northern surburb. Phra Nakhon Si Ayutthaya, Chon Buri and Samut Songkhram – an industrial ring around Bangkok form the next best group. Samut Prakan and Samut Sakon – also part of the industrial ring – are notably absent from the first echelon. They appear in the second and third tiers respectively, reflecting the low-paying jobs held by residents of the two provinces.

Phuket consistently appears in the best five in household income, poverty and debt. In general, northeastern provinces are at the low end of the spectrum. The gap between Bangkok Metropolis and Yasothon – the lowest income province is 5.6 times. Three provinces – Yasothon, Nong Bua Lam Phu and Nakhon Phanom consistently appear in the bottom five in all categories, with an exception of debt.

Map 4 presents areas of prosperity and pockets of poverty that share a similar distribution pattern as the employment index. The exception is the South where there is high underemployment and low social security coverage, but the people have a reasonable level of income and a low poverty incidence. The economic and demographic structure of the South is largely accountable for this characteristic.

A likely explanation is that some common economic activities in the South are indeed episodic. These activities include: harvesting of raw latex, palm oil, and parawood; seasonal fishing and shell fishing, boat rentals and other services for seasonal tourists. Together, in most years, these activities produce good incomes. But respondents to a survey may still quite accurately report that they are "underemployed" and not covered by social security.

As echoed in previous chapters, debt is a problem in most communities. Even in best places, at least a quarter of the households are in debt. In worst cases, the proportion is close to ninth-tens.[43]

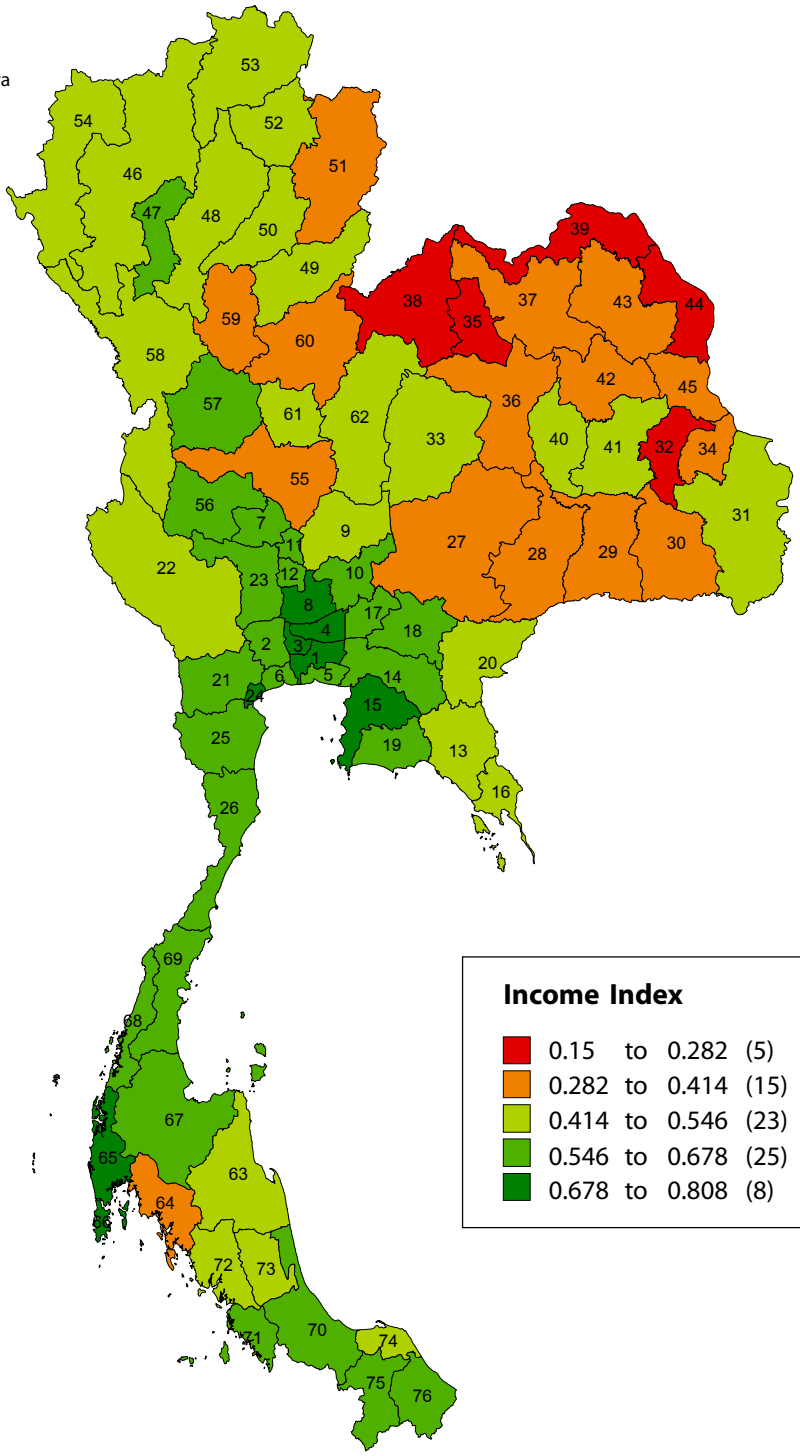
Table 5. The Five Best and Worst Performers on Income Indicators

Household current income (Baht/month)		Household current income changes 1998-2000 (%)		Poverty incidence (%)		Households with debt (%)	
Top 5 provinces							
Bangkok Metropolis	26,831	Phangnga	33.4	Phuket	0.05	Narathiwat	24.7
Nonthaburi	24,393	Yala	33.0	Chon Buri	0.05	Phangnga	26.4
Phuket	20,200	Kamphaeng Phet	27.5	Nonthaburi	0.05	Chon Buri	28.0
Pathum Thani	19,160	Uthai Thani	24.1	Samut Songkhram	0.05	Trat	34.6
Nakhon Pathom	18,205	Ang Thong	21.0	Bangkok Metropolis	0.26	Phuket	35.1
Bottom 5 provinces							
Surin	6,148	Nakhon Phanom	-32.8	Sakhon Nakhon	40.48	Nakhon Sawan	76.4
Phayao	5,865	Nong Bua Lam Phu	-35.3	Surin	41.02	Loei	79.4
Nong Bua Lam Phu	5,358	Trat	-37.0	Nakhon Phanom	48.14	Krabi	79.4
Nakhon Phanom	5,209	Yasothon	-37.6	Nong Bua Lam Phu	49.98	Si Sa Ket	81.2
Yasothon	4,753	Nong Khai	-40.9	Yasothon	50.27	Buri Ram	86.1

[43] In OECD countries, 60-70 per cent of households have mortgage debt for housing. This is a form of forced savings and, with the higher average incomes in these countries, is fully sustainable and desirable. Some of the better-off provinces and income deciles in Thailand may also have sustainable debt for housing and for business formation or expansion.

Map 4. Provincial Distribution of the Income Index

1. Bangkok
2. Nakhon Pathom
3. Nonthaburi
4. Pathum Thani
5. Samut Prakan
6. Samut Sakhon
7. Chai Nat
8. Phra Nakhon Si Ayutthaya
9. Lop Buri
10. Saraburi
11. Sing Buri
12. Ang Thong
13. Chanthaburi
14. Chachoengsao
15. Chon Buri
16. Trat
17. Nakhon Nayok
18. Prachin Buri
19. Rayong
20. Sa Kaeo
21. Ratchaburi
22. Kanchanaburi
23. Suphan Buri
24. Samut Songkhram
25. Phetchaburi
26. Prachuap Khiri Khan
27. Nakhon Ratchasima
28. Buri Ram
29. Surin
30. Si Sa Ket
31. Ubon Ratchathani
32. Yasothon
33. Chaiyaphum
34. Amnat Charoen
35. Nong Bua Lam Phu
36. Khon Kaen
37. Udon Thani
38. Loei
39. Nong Khai
40. Maha Sarakham
41. Roi Et
42. Kalasin
43. Sakon Nakhon
44. Nakhon Phanom
45. Mukdahan
46. Chiang Mai
47. Lamphun
48. Lampang
49. Uttaradit
50. Phrae
51. Nan
52. Phayao
53. Chiang Rai
54. Mae Hong Son
55. Nakhon Sawan
56. Uthai Thani
57. Kamphaeng Phet
58. Tak
59. Sukhothai
60. Phitsanulok
61. Phichit
62. Phetchabun
63. Nakhon Si Thammarat
64. Krabi
65. Phangnga
66. Phuket
67. Surat Thani
68. Ranong
69. Chumphon
70. Songkhla
71. Satun
72. Trang
73. Phatthalung
74. Pattani
75. Yala
76. Narathiwat



It is also interesting to observe that provinces with heavy debts are not the worst poverty-stricken. The relationship between poverty and debt is by no means direct and simple. Krabi – a rich resource and famous tourist destination in the South surprisingly turns up as the third-ranking province in debt, which accounts for its low ranking on the overall income index. It should, however, be noted that the household debt data used in this study consists of all sources of debt – household consumption, non-farm business, farming and others.

5. Housing and Living Conditions Index

The housing and living conditions index has 4 indicators that convey:

- physical and durable facilities (households constructed with permanent materials, urban households in slum),
- essential amenities (refrigerator, cooking gas or electric stove).

Table 6. Five Best and Worst Performers on Housing and Living Conditions Indicators

Houses with permanent materials (%)		Urban households in slum (%)		Households with Refrigerator (%)		Households with cooking gas or electric stove (%)	
Top 5 provinces							
Nonthaburi	100.0	Chumphon	2.2	Rayong	93.5	Rayong	97.0
Trat	100.0	Trang	4.8	Nonthaburi	90.0	Samut Songkhram	94.7
Rayong	100.0	Nakhon Pathom	5.5	Ang Thong	86.5	Samut Prakan	92.7
Uttaradit	100.0	Phetchaburi	5.7	Phra Nakhon Si Ayutthaya	85.6	Krabi	90.8
Satun	100.0	Kanchanaburi	6.3	Lamphun	85.4	Samut Sakon	90.8
Bottom 5 provinces							
Samut Sakon	90.8	Sakhon Nakhon	78.7	Buri Ram	51.9	Ubon Ratchathani	22.7
Chiang Mai	90.6	Maha Salakam	80.7	Ubon Ratchathani	51.2	Mukdahan	20.3
Prachuap Khiri Khan	90.4	Uthai Thani	82.3	Surin	40.0	Kalasin	18.3
Kanchanaburi	89.6	Samut Sakon	83.6	Si Sa Ket	39.6	Amnat Charoen	16.8
Phangnga	89.2	Krabi	100.0	Mae Hong Son	36.7	Nakhon Phanom	10.9

Although environmental factors are the basis of a good living environment, relevant data is not available at the provincial level. Therefore, this index cannot capture the downside of life in overcrowded and industrial cities, e.g., pollution or other environmental harzards that are threatening the lives of many Thais.

The housing and living conditions index ranges from 0.406 to 0.904. Nonthaburi and Nakhon Pathom – the northern and western Bangkok surburbs are among the top five. Others are Chumporn and Songkhla in the South and Chon Buri in the East. In general, provinces in the Central Plain, the East and the South, especially industrial provinces have good housing and living conditions.

Mae Hong Son – a northern province on the Myanmar border, and most northeastern provinces along the border are the worst-off, while the central northeastern provinces and the upper northern provinces also deserve special attention.

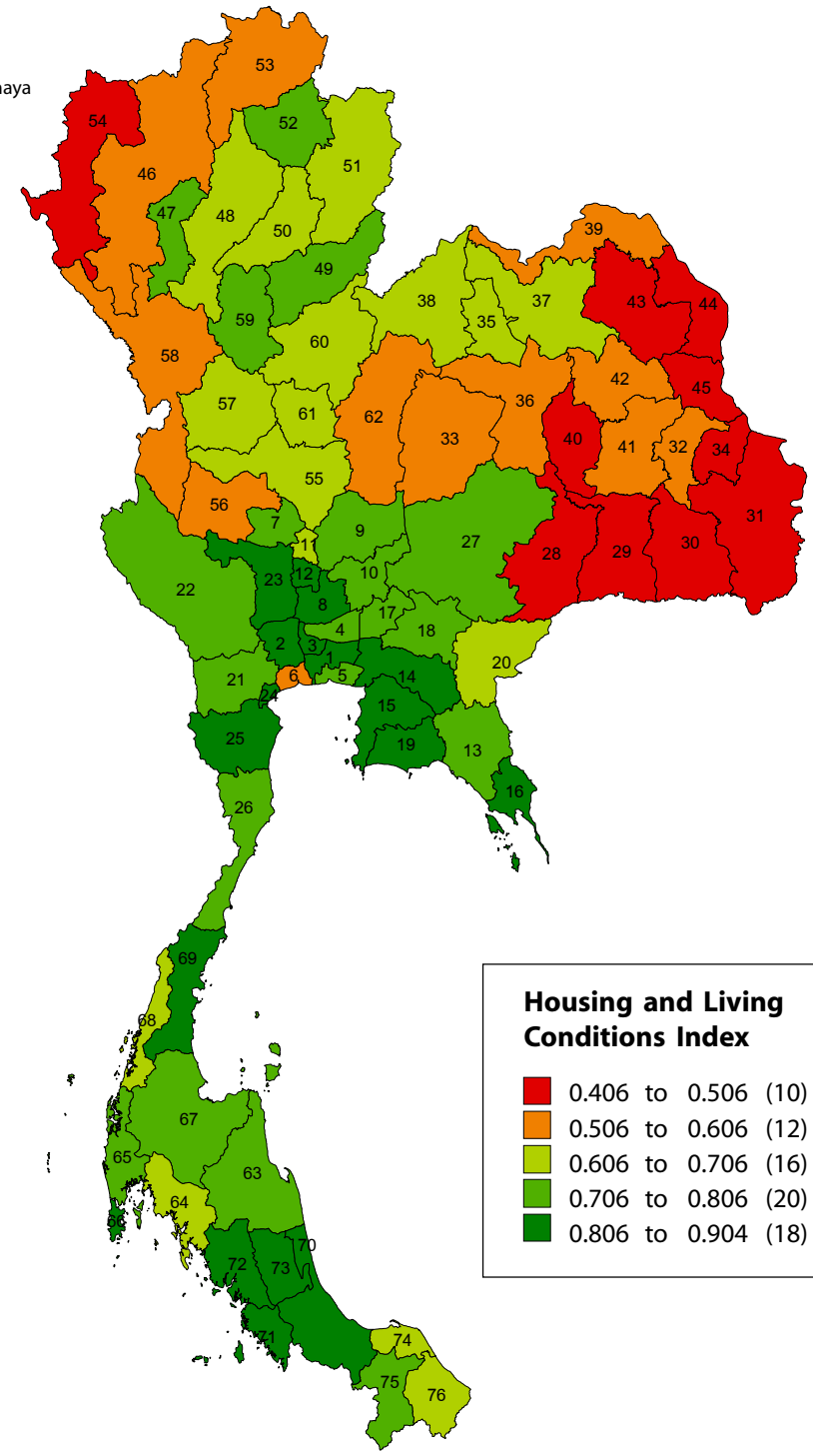
Many people in industrial provinces near Bangkok especially Samut Sakhon and Samut Prakan live in congested areas, and many northeastern households still live without cooking gas or an electric stove.

Urban households in slum is the proportion of household in slum out of total households in urban areas (municipal and sanitary districts). This indicator deserves a careful examination. For example, the data shows that 100 per cent of households in Krabi are in slum. This is a result of different data sources.[44] As a result, the denominator is an imperfect proxy for the relevant urban population, yielding percentages living in slums that are probably too low in some provinces and too high in others.

[44] Number of households in low-income community in 317 municipal areas with over 10,000 persons is from Housing Authority of Thailand Survey in 2000. Number of households in municipal and sanitary districts is from Socio-economic Survey 2000, National Statistical Office.

Map 5. Provincial Distribution of the Housing and Living Conditions Index

1. Bangkok
2. Nakhon Pathom
3. Nonthaburi
4. Pathum Thani
5. Samut Prakan
6. Samut Sakhon
7. Chai Nat
8. Phra Nakhon Si Ayutthaya
9. Lop Buri
10. Saraburi
11. Sing Buri
12. Ang Thong
13. Chanthaburi
14. Chachoengsao
15. Chon Buri
16. Trat
17. Nakhon Nayok
18. Prachin Buri
19. Rayong
20. Sa Kaeo
21. Ratchaburi
22. Kanchanaburi
23. Suphan Buri
24. Samut Songkhram
25. Phetchaburi
26. Prachuap Khiri Khan
27. Nakhon Ratchasima
28. Buri Ram
29. Surin
30. Si Sa Ket
31. Ubon Ratchathani
32. Yasothon
33. Chaiyaphum
34. Amnat Charoen
35. Nong Bua Lam Phu
36. Khon Kaen
37. Udon Thani
38. Loei
39. Nong Khai
40. Maha Sarakham
41. Roi Et
42. Kalasin
43. Sakon Nakhon
44. Nakhon Phanom
45. Mukdahan
46. Chiang Mai
47. Lamphun
48. Lampang
49. Uttaradit
50. Phrae
51. Nan
52. Phayao
53. Chiang Rai
54. Mae Hong Son
55. Nakhon Sawan
56. Uthai Thani
57. Kamphaeng Phet
58. Tak
59. Sukhothai
60. Phitsanulok
61. Phichit
62. Phetchabun
63. Nakhon Si Thammarat
64. Krabi
65. Phangnga
66. Phuket
67. Surat Thani
68. Ranong
69. Chumphon
70. Songkhla
71. Satun
72. Trang
73. Phatthalung
74. Pattani
75. Yala
76. Narathiwat



6. Family and Community Life Index

Every individual needs a family and a community life. Strong family and community ties provide necessary emotional support and are the most reliable social safety net. A stressful family life, on the other hand, places extra burden on all family members. Communities that are beset with social problems also expose their members to human insecurity. This index is captured by the followings:

- family life (female-headed households, elderly-headed households, working children, divorce incidence, disabled persons),
- community life (violent crimes reported, drug-related arrests).

The family and community life index ranges from 0.483 to 0.778. In contrast to other indices, the best family and community life is found in the northeastern provinces. Surin has the highest score, followed closely by Khon Kaen, Yasothon, Nong Bua Lam Phu, Sa Kaeo, Buri Ram. Mae Hong Son, a remote province in the North, also another poor-income and deprived province in many aspects, is also a high scorer. Yala – the southern most province is also outstanding. Other southern provinces also have good family and community life.

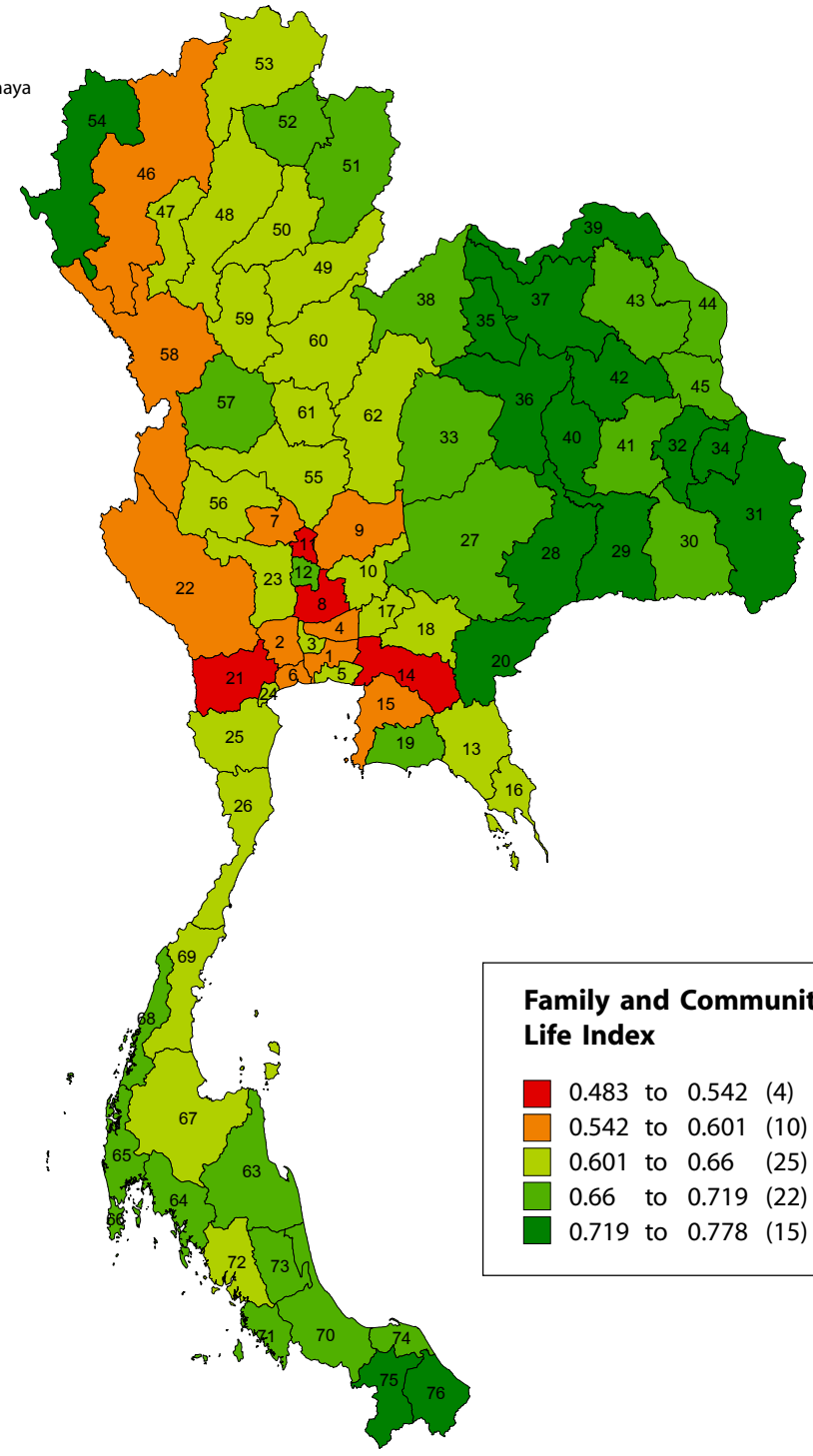
At the other end are Phra Nakhon Si Ayutthaya, followed by Ratchaburi, Sing Buri, Chachoengsao, Chon Buri, Nakhon Pathom, Samut Sakon, Bangkok Metropolis, and Chiang Mai. Most are outlying provinces around Bangkok. Kanchanaburi

Table 7. Five Best and Worst Performers on Family and Community Life Indicators

Female-headed households (%)		Elderly-headed households (%)		Working children aged 15-17 (%)		Divorce incidence (per 1,000 marriage)		Disable persons (%)		Violent crimes reported (per 100,000)		Drug-related arrests (per 100,000)	
Top 5 provinces													
Mae Hong Son	13.8	Samut Prakan	6.8	Phrae	4.7	Narathiwat	95	Mae Hong Son	0.7	Yasothon	4	Surin	76
Krabi	13.9	Phuket	11.5	Nonthaburi	6.7	Pattani	95	Songkhla	0.8	Amnat Charoen	4	Phattalung	86
Loei	14.7	Mukdahan	12.0	Khon Kaen	6.8	Yala	100	Udon Thani	0.8	Surin	4	Nong Bua Lam Phu	95
Amnat Charoen	15.0	Chon Buri	12.0	Phayao	7.4	Si Sa Ket	106	Samut Sakon	0.8	Sakhon Nakhon	5	Buri Ram	98
Mukdahan	16.9	Bangkok Metropolis	12.2	Ang Thong	9.1	Ubon Ratchathani	109	Rayong	0.8	Si Sa Ket	5	Si Sa Ket	137
Bottom 5 provinces													
Chon Buri	37.8	Phichit	33.9	Chachoeng-sao	36.2	Bangkok Metropolis	351	Nakhon Sawan	2.8	Songkhla	28	Phra Nakhon Si Ayutthaya	944
Chachoengsao	38.7	Phra Nakhon Si Ayutthaya	35.6	Krabi	36.5	Lampang	361	Chai Nat	2.9	Surat Thani	29	Pathum Thani	963
Phra Nakhon Si Ayutthaya	41.5	Ratchaburi	37.2	Tak	40.2	Chiang Rai	362	Phichit	3.2	Krabi	30	Samut Prakan	1,001
Sing Buri	41.6	Lop Buri	37.3	Samut Sakon	41.5	Phrae	366	Phrae	3.3	Satun	31	Bangkok Metropolis	1,015
Ratchaburi	41.9	Sing Buri	42.8	Mae Hong Son	48.0	Chiang Mai	384	Si Sa Ket	4.0	Trang	34	Nakhon Pathom	1,043

Map 6. Provincial Distribution of the Family and Community Life Index

1. Bangkok
2. Nakhon Pathom
3. Nonthaburi
4. Pathum Thani
5. Samut Prakan
6. Samut Sakhon
7. Chai Nat
8. Phra Nakhon Si Ayutthaya
9. Lop Buri
10. Saraburi
11. Sing Buri
12. Ang Thong
13. Chanthaburi
14. Chachoengsao
15. Chon Buri
16. Trat
17. Nakhon Nayok
18. Prachin Buri
19. Rayong
20. Sa Kaeo
21. Ratchaburi
22. Kanchanaburi
23. Suphan Buri
24. Samut Songkhram
25. Phetchaburi
26. Prachuap Khiri Khan
27. Nakhon Ratchasima
28. Buri Ram
29. Surin
30. Si Sa Ket
31. Ubon Ratchathani
32. Yasothon
33. Chaiyaphum
34. Amnat Charoen
35. Nong Bua Lam Phu
36. Khon Kaen
37. Udon Thani
38. Loei
39. Nong Khai
40. Maha Sarakham
41. Roi Et
42. Kalasin
43. Sakon Nakhon
44. Nakhon Phanom
45. Mukdahan
46. Chiang Mai
47. Lamphun
48. Lampang
49. Uttaradit
50. Phrae
51. Nan
52. Phayao
53. Chiang Rai
54. Mae Hong Son
55. Nakhon Sawan
56. Uthai Thani
57. Kamphaeng Phet
58. Tak
59. Sukhothai
60. Phitsanulok
61. Phichit
62. Phetchabun
63. Nakhon Si Thammarat
64. Krabi
65. Phangnga
66. Phuket
67. Surat Thani
68. Ranong
69. Chumphon
70. Songkhla
71. Satun
72. Trang
73. Phatthalung
74. Pattani
75. Yala
76. Narathiwat



and Tak on the western border are the other two provinces that are not performing well.

Other interesting patterns are:

- The Central Plain has a remarkably high proportion of female-headed households and elderly-headed households.[45] (Note that the "female-headed" designation tells who is the breadwinner of the family. A husband-and-wife family may be categorized as such).
- Northern provinces are remarkably high in divorce rate. High rates of working children are notable in Mae Hong Son, Tak and Samut Sakon. These are provinces with high concentration of ethnic minorities and migrant workers.
- Bangkok Metropolis and Bangkok vicinity entail high rates of divorce, crimes and drug offenses.
- The Northeast, on the contrary, has the lowest divorce and crime rates. Drug also seems to be a lesser problem.

7. Transportation and Communication Index

Mobility and connectivity enhances people's capacity while enriching their lives. This index is composed of:

- Transport (travel to nearest district, personal vehicle registration),
- Communication (television, telephone, internet).

Data for convenient access to the nearest district is from rural areas only. In general, people in urban areas have convenient access to important facilities – hence Bangkok is assigned a perfect score.

This is one of the most inequitable indices with a range between 0.209 and 0.877. Phuket, now being groomed to be the national IT centre, performs second after Bangkok. Chon Buri and Rayong the two industrial provinces in the East are at the forefront, as well as Nonthaburi which serves as Bangkok's residential surburb. Apart from some provinces that form a small crescent around the Gulf of Thailand, a few hubs of transportation and communication are located in the North and South.

Personal vehicle registration is probably overestimated for Bangkok and underestimated for Bangkok vicinity since a large number of vehicles in these provinces are registered in Bangkok.

It comes as no surprise that Mae Hong Son – a remote mountainous province on the Myanmar border scores the lowest. Si Sa Ket, Surin, Nong Bua Lam Phu, Buri Ram, Kalasin in the Northeast are the next worst-off group. Pattani on the southern border also deserves special attention. The relatively low penetration of television in some southern provinces is also noteworthy.

All in all, the Northeast which is the poorest region, is much less advanced than the rest of the country. The disparity is most acute in telephone and internet – the backbone of the network age. The telephone indicator shows that the best province is 30 times better than the worst province. Nonetheless, it should be noted that excluded from this indicator are mobile phones, which in many remote areas have helped overcome the infrastructure barrier. At present, mobile phones have surpassed fixed line telephones in terms of subscribers.

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[45] Some of the variations in elderly-headed households (for example, in the Central Plain) are probably due to a mix of demographic change (aging of the population) and family dispersion as younger generations find better opportunities in the cities.

Map 7. Provincial Distribution of the Transportation and Communication Index

1. Bangkok
2. Nakhon Pathom
3. Nonthaburi
4. Pathum Thani
5. Samut Prakan
6. Samut Sakhon
7. Chai Nat
8. Phra Nakhon Si Ayutthaya
9. Lop Buri
10. Saraburi
11. Sing Buri
12. Ang Thong
13. Chanthaburi
14. Chachoengsao
15. Chon Buri
16. Trat
17. Nakhon Nayok
18. Prachin Buri
19. Rayong
20. Sa Kaeo
21. Ratchaburi
22. Kanchanaburi
23. Suphan Buri
24. Samut Songkhram
25. Phetchaburi
26. Prachuap Khiri Khan
27. Nakhon Ratchasima
28. Buri Ram
29. Surin
30. Si Sa Ket
31. Ubon Ratchathani
32. Yasothon
33. Chaiyaphum
34. Amnat Charoen
35. Nong Bua Lam Phu
36. Khon Kaen
37. Udon Thani
38. Loei
39. Nong Khai
40. Maha Sarakham
41. Roi Et
42. Kalasin
43. Sakon Nakhon
44. Nakhon Phanom
45. Mukdahan
46. Chiang Mai
47. Lamphun
48. Lampang
49. Uttaradit
50. Phrae
51. Nan
52. Phayao
53. Chiang Rai
54. Mae Hong Son
55. Nakhon Sawan
56. Uthai Thani
57. Kamphaeng Phet
58. Tak
59. Sukhothai
60. Phitsanulok
61. Phichit
62. Phetchabun
63. Nakhon Si Thammarat
64. Krabi
65. Phangnga
66. Phuket
67. Surat Thani
68. Ranong
69. Chumphon
70. Songkhla
71. Satun
72. Trang
73. Phatthalung
74. Pattani
75. Yala
76. Narathiwat

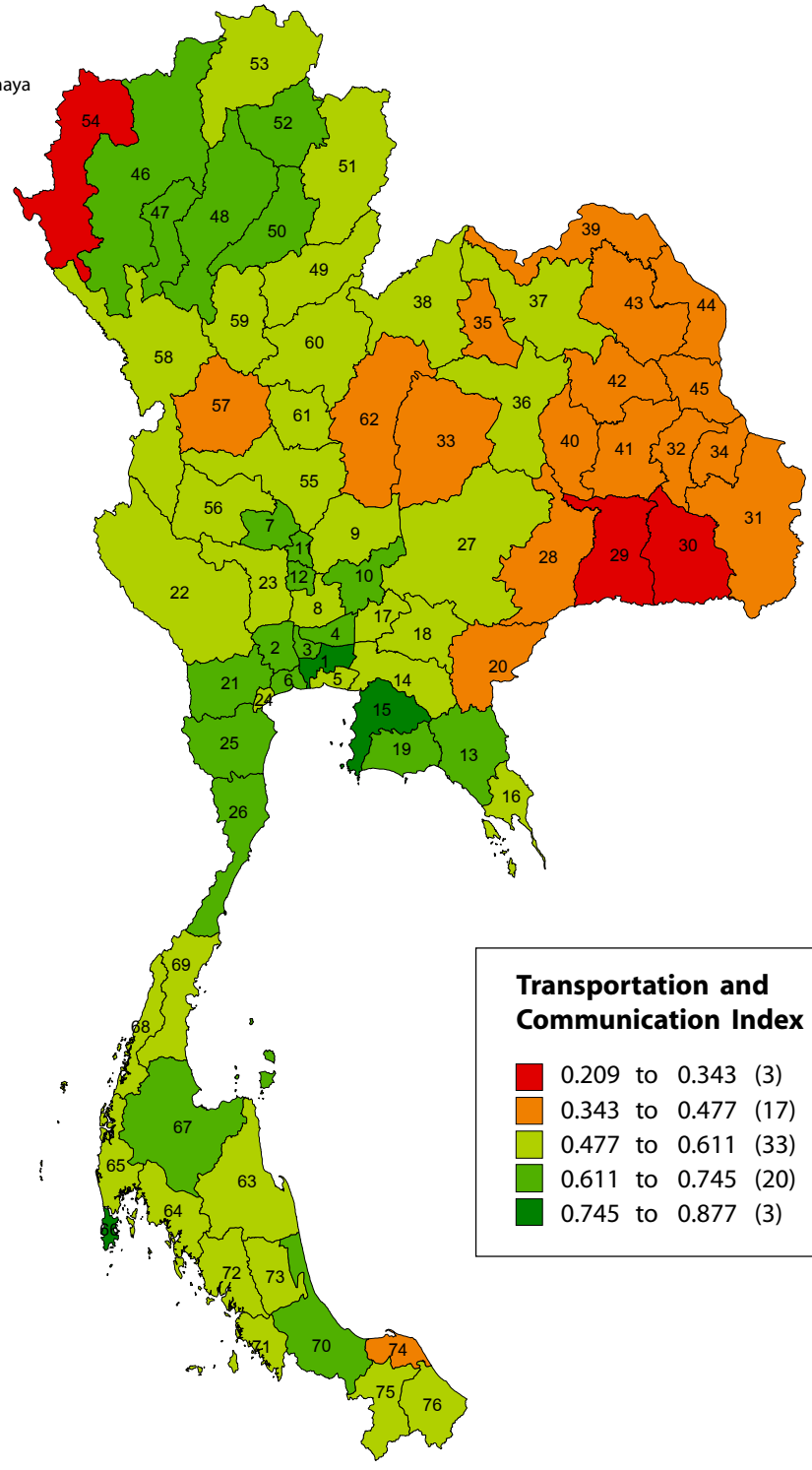

Table 8. Five Best and Worst Performers on Transport and Communication Indicators

Villages with convenient access to nearest district (%)		Personal vehicle registration (per 1,000)		Households with access to television (%)		Population per telephone (persons)		Population with access to internet (%)	
Top 5 provinces									
Bangkok Metropolis	100.0	Phuket	888	Rayong	97.0	Chai Nat	2	Bangkok Metropolis	16.0
Sing Buri	98.3	Bangkok Metropolis	734	Nonthaburi	96.3	Bangkok Metropolis	2	Nonthaburi	15.9
Trang	98.3	Rayong	633	Samut Songkhram	96.1	Pathum Thani	2	Phuket	10.6
Satun	98.0	Chon Buri	621	Loei	95.5	Nonthaburi	2	Pathum Thani	10.3
Phuket	97.9	Lamphun	586	Lamphun	95.2	Samut Prakan	2	Samut Prakan	10.1
Bottom 5 provinces									
Mukdahan	73.9	Si Sa Ket	151	Phangnga	79.1	Kalasin	50	Narathiwat	1.5
Kalasin	73.6	Samut Prakan	118	Yala	77.3	Buri Ram	52	Buri Ram	1.4
Surin	68.5	Nong Bua Lam Phu	115	Narathiwat	73.0	Surin	57	Nong Khai	1.2
Si Sa Ket	61.3	Mae Hong Son	114	Pattani	67.2	Si Sa Ket	58	Nong Bua Lam Phu	1.0
Mae Hong Son	41.1	Pathum Thani	109	Mae Hong Son	51.2	Nong Bua Lam Phu	61	Sa Kaeo	0.9

8. Participation Index

Political and social participation enhances people's lives and improves the quality of community life. The participation index is expressed by:

- political participation (vote turnout),
- civil society participation (community groups, households' participation in local groups and social services).

Data for households' participation in local groups and social services is from rural areas, which is used as proxy for the entire province. There is no comparable data for Bangkok. As Bangkok is among the bottom five in terms of community groups, and its residents are generally known to lead a rather individualist life style, it is given the same score as the least active province.

It should also be noted that government agencies usually play an important role in helping establish and support "community groups" as part of their outreach and extension programmes. This data is therefore an inadequate measure of people's participation. Nonetheless, in the absence of other systematic data at the provincial level, they provide an initial glimpse into this very important aspect of human achievement.

The participation index ranges from 0.295 to 0.768. Nan has the highest score, followed by Sing Buri, Phangnga, Amnat Charoen, Uthai Thani.

At the other end, the residents of Bangkok, Samut Sakon and Pathum Thani (in Bangkok vicinity), Phitsanulok in the North, Pattani and Chumporn in the South, and Chon Buri in the East are among the least active.

While there is no discernable pattern of participation, Map 8 illustrates that people in the upper North and the Northeast have higher participatory rates, while

Map 8. Provincial Distribution of the Participation Index

1. Bangkok
2. Nakhon Pathom
3. Nonthaburi
4. Pathum Thani
5. Samut Prakan
6. Samut Sakhon
7. Chai Nat
8. Phra Nakhon Si Ayutthaya
9. Lop Buri
10. Saraburi
11. Sing Buri
12. Ang Thong
13. Chanthaburi
14. Chachoengsao
15. Chon Buri
16. Trat
17. Nakhon Nayok
18. Prachin Buri
19. Rayong
20. Sa Kaeo
21. Ratchaburi
22. Kanchanaburi
23. Suphan Buri
24. Samut Songkhram
25. Phetchaburi
26. Prachuap Khiri Khan
27. Nakhon Ratchasima
28. Buri Ram
29. Surin
30. Si Sa Ket
31. Ubon Ratchathani
32. Yasothon
33. Chaiyaphum
34. Amnat Charoen
35. Nong Bua Lam Phu
36. Khon Kaen
37. Udon Thani
38. Loei
39. Nong Khai
40. Maha Sarakham
41. Roi Et
42. Kalasin
43. Sakon Nakhon
44. Nakhon Phanom
45. Mukdahan
46. Chiang Mai
47. Lamphun
48. Lampang
49. Uttaradit
50. Phrae
51. Nan
52. Phayao
53. Chiang Rai
54. Mae Hong Son
55. Nakhon Sawan
56. Uthai Thani
57. Kamphaeng Phet
58. Tak
59. Sukhothai
60. Phitsanulok
61. Phichit
62. Phetchabun
63. Nakhon Si Thammarat
64. Krabi
65. Phangnga
66. Phuket
67. Surat Thani
68. Ranong
69. Chumphon
70. Songkhla
71. Satun
72. Trang
73. Phatthalung
74. Pattani
75. Yala
76. Narathiwat

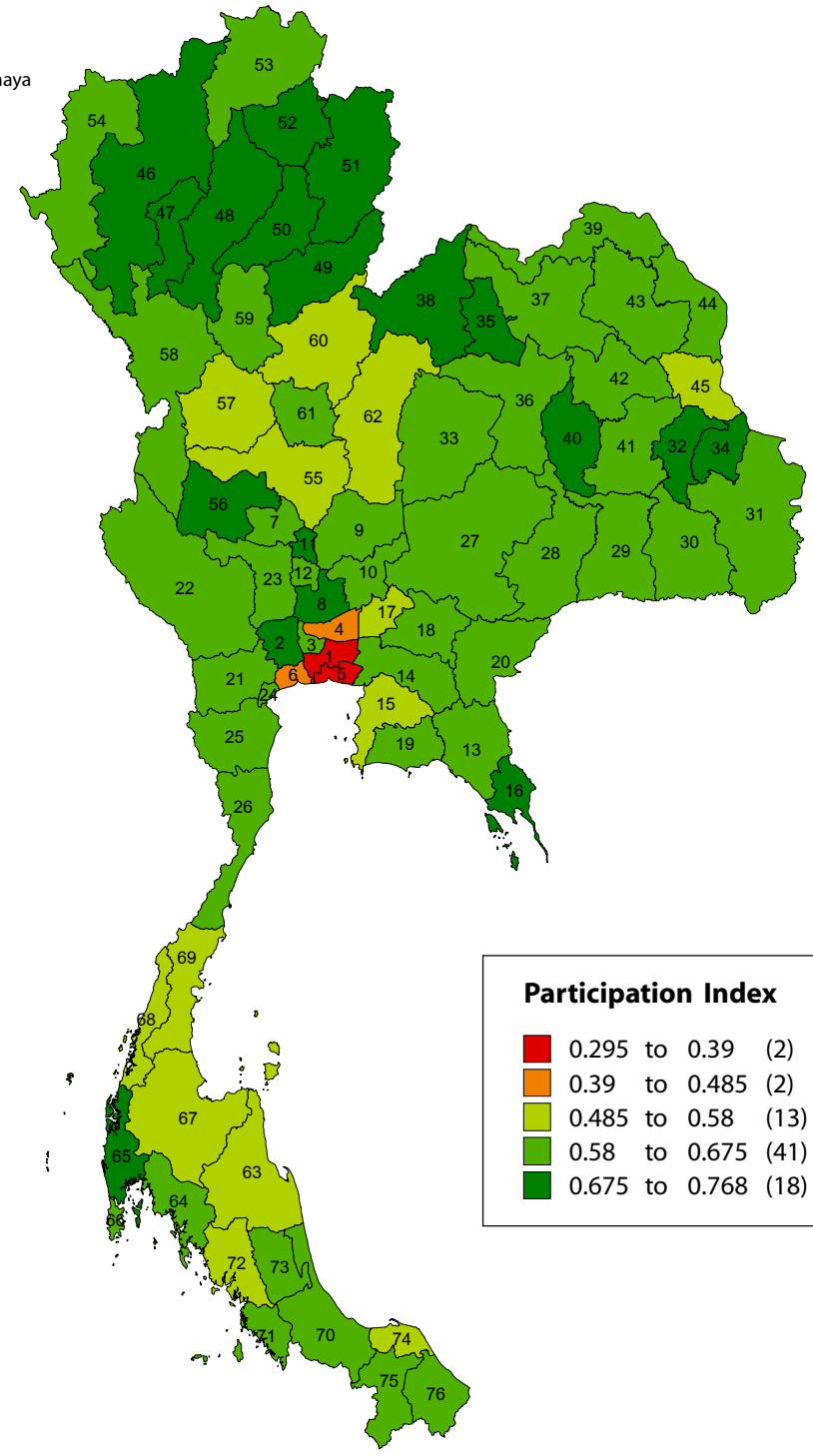

Table 9. The Five Best and Worst Performers on Participation Indicators

Vote turnout (%)		Community groups (per 100,000)		Households participate in local groups (%)		Households participate in social service (%)	
Top 5 provinces							
Prachin Buri	94.8	Trat	253	Lampang	98.4	Maha Salakam	99.1
Lamphun	83.8	Phayao	221	Phrae	97.9	Lampang	99.1
Satun	82.2	Nan	211	Phayao	97.9	Amnat Charoen	99.0
Nan	79.5	Sing Buri	201	Lamphun	96.8	Nan	99.0
Chiang Mai	78.8	Phangnga	175	Samut Songkhram	96.5	Surin	98.9
Bottom 5 provinces							
Si Sa Ket	64.3	Samut Sakon	40.0	Satun	70.8	Trang	89.3
Nong Khai	62.3	Phuket	35.0	Samut Sakon	66.3	Phattalung	89.0
Kamphaeng Phet	61.6	Nonthaburi	33.2	Pathum Thani	57.8	Phitsanulok	88.3
Samut Prakan	60.8	Samut Prakan	19.5	Samut Prakan	37.8	Samut Sakon	88.2
Mukdahan	37.4	Bangkok Metropolis	8.3	Bangkok Metropolis	37.8	Bangkok Metropolis	88.2

those in the lower North and upper South have relatively lower rates of participation.[46]

COMPOSITE HAI

Together, the 8 indices give HAI composite values that range from 0.477 to 0.718. Table 10 shows HAI indices and the composite index by province in descending order.

On the HAI scale, Phuket, the tourism and business center of the South, has the highest level of human achievement in the country. Bangkok metropolis takes the sixth place. The remaining top ten scorers are part of the urban, industrial base that forms a crescent around Bangkok, all within 200 kilometre radius from Bangkok. Lamphun, the largest industrial base in the North, and Songkhla – the business center of the South are three exceptions.

The next best ten are provinces surrounding the first group. Yala and Chumporn in the South and Chanthaburi in the East are the only three exceptions.

At the lower end of the scale, Nakhon Phanom, a border province in the Northeast, has the lowest level of human achievement. Nine of the bottom ten provinces are in the Northeast. The only exception is Mae Hong Son in the North.

Northeastern provinces still dominate the next worst-off group of ten, with Nakhon Sawan in the Central Plain and Phetchabun in the North as the exceptions.

[46] In international research, there is strong evidence that helps to explain why the number of community groups and household participation in local groups tend to be high in poorer areas, and much lower in wealthy areas, particularly in large cities. The higher proportions in poor areas are due, in part, to "informal insurance". Households insure against risk by a range of informal insurance mechanisms, including building and drawing on social capital such as reciprocal labour exchanges, and savings and loan circles. In big cities, households have access to formal insurance and also have higher incomes that enable them to self-insure. (See for example: Jonathan, Morduch *"Between the Market and the State: Can Informal Insurance Patch the Safety Net?"* 1999, Background paper for the Word Development Report 2000/2001). Thus, some of the variation in participation is natural, explainable, seen worldwide, and not necessarily bad.

Map 9 shows the distribution of all the provinces in five categories – green representing the most advanced group in human achievement, while red representing the opposite.

In general, HAI shows that human achievement is higher in Bangkok and its outlying provinces. It confirms that the Northeast has the lowest level of human achievement. The lower North is another area that deserves special attention. Further, HAI also shows that some border provinces in the North, Northeast and the South are among the worst off.

Table 10. Human Achievement Indices and the Composite Index by Province

	Location	Health Index	Education Index	Employment Index	Income Index	Housing and living conditions Index	Family and community life Index	Transportation and communication Index	Participation Index	Composite Index
		1	2	3	4	5	6	7	8	
1.	Phuket	0.6218	0.6377	0.7700	0.7676	0.8308	0.6642	0.8315	0.6161	**0.7175**
2.	Nonthaburi	0.7463	0.5992	0.6523	0.7569	0.9035	0.6565	0.7323	0.6009	**0.7060**
3.	Chon Buri	0.7505	0.6483	0.7787	0.7028	0.8611	0.5555	0.7558	0.5517	**0.7006**
4.	Nakhon Pathom	0.7160	0.6217	0.6743	0.6594	0.8766	0.5610	0.6470	0.6871	**0.6804**
5.	Songkhla	0.7696	0.5119	0.6569	0.5928	0.8730	0.6919	0.6973	0.6369	**0.6788**
6.	Bangkok Metropolis	0.7884	0.5418	0.6744	0.8074	0.8191	0.5816	0.8765	0.2959	**0.6731**
7.	Rayong	0.5604	0.5589	0.7037	0.6715	0.8346	0.6978	0.7320	0.5832	**0.6678**
8.	Lamphun	0.6174	0.6475	0.6470	0.5859	0.7079	0.6496	0.6940	0.7610	**0.6638**
9.	Samut Songkhram	0.7457	0.5147	0.6513	0.6951	0.8096	0.6262	0.6006	0.6648	**0.6635**
10.	Pathum Thani	0.7012	0.5833	0.8137	0.6918	0.7936	0.5928	0.6603	0.4702	**0.6634**
11.	Ang Thong	0.6852	0.5885	0.5997	0.6284	0.8215	0.6625	0.6251	0.6215	**0.6540**
12.	Phra Nakhon Si Ayutthaya	0.6260	0.6094	0.6813	0.7042	0.8408	0.4833	0.6055	0.6787	**0.6536**
13.	Phetchaburi	0.7300	0.5587	0.6568	0.5547	0.8253	0.6299	0.6198	0.6392	**0.6518**
14.	Saraburi	0.7121	0.5488	0.7124	0.6048	0.7513	0.6107	0.6393	0.6271	**0.6508**
15.	Yala	0.6898	0.5789	0.6153	0.6146	0.7920	0.7291	0.5772	0.5910	**0.6485**
16.	Sing Buri	0.7191	0.5992	0.6246	0.6399	0.6804	0.5309	0.6559	0.6996	**0.6437**
17.	Chachoengsao	0.8146	0.5515	0.6728	0.5677	0.8332	0.5318	0.5814	0.5916	**0.6431**
18.	Samut Prakan	0.7856	0.5409	0.7884	0.6489	0.7859	0.6190	0.5984	0.3656	**0.6416**
19.	Chanthaburi	0.6661	0.5343	0.6583	0.4784	0.7794	0.6554	0.6567	0.6585	**0.6359**
20.	Chumphon	0.7165	0.5015	0.6600	0.5681	0.8676	0.6128	0.5926	0.5453	**0.6330**
21.	Prachin Buri	0.7297	0.4879	0.6470	0.6042	0.7641	0.6212	0.5395	0.6707	**0.6330**
22.	Trat	0.6216	0.5212	0.6527	0.4540	0.8322	0.6537	0.5844	0.7308	**0.6313**
23.	Surat Thani	0.7131	0.4866	0.6629	0.5789	0.7396	0.6591	0.6307	0.5632	**0.6293**
24.	Suphan Buri	0.6760	0.4802	0.6483	0.5903	0.8564	0.6284	0.5425	0.6111	**0.6292**
25.	Prachuap Khiri Khan	0.6784	0.5184	0.6356	0.5758	0.7364	0.6425	0.6312	0.6013	**0.6275**
26.	Lampang	0.6359	0.6217	0.6167	0.4543	0.6404	0.6537	0.6384	0.7402	**0.6252**
27.	Samut Sakon	0.7916	0.4940	0.8933	0.5647	0.6060	0.5797	0.6275	0.4371	**0.6242**
28.	Trang	0.6937	0.5115	0.6253	0.5394	0.8328	0.6112	0.6055	0.5627	**0.6228**
29.	Ratchaburi	0.7366	0.4868	0.5572	0.6401	0.8008	0.5070	0.6567	0.5880	**0.6216**
30.	Satun	0.7140	0.5136	0.4616	0.5670	0.8634	0.6624	0.5776	0.6018	**0.6202**
31.	Phrae	0.6292	0.5699	0.5398	0.5187	0.6813	0.6359	0.6464	0.7230	**0.6180**
32.	Uttaradit	0.7523	0.4850	0.5814	0.4683	0.7330	0.6517	0.5671	0.6834	**0.6153**

(Continued on next page)

Table 10 *(continued)*

	Location	Health Index 1	Education Index 2	Employment Index 3	Income Index 4	Housing and living conditions Index 5	Family and community life Index 6	Transportation and communication Index 7	Participation Index 8	Composite Index
33.	Nakhon Nayok	0.7047	0.5136	0.5747	0.5622	0.7781	0.6362	0.5715	0.5673	**0.6135**
34.	Phayao	0.5701	0.5319	0.6219	0.4185	0.7060	0.6975	0.6114	0.7496	**0.6134**
35.	Uthai Thani	0.7043	0.5147	0.6602	0.5619	0.5628	0.6548	0.5567	0.6892	**0.6131**
36.	Lop Buri	0.7206	0.5748	0.5240	0.5291	0.7903	0.5621	0.5657	0.6001	**0.6083**
37.	Phattalung	0.6738	0.5281	0.4546	0.5174	0.8321	0.6814	0.5631	0.5979	**0.6061**
38.	Phangnga	0.6644	0.4962	0.2858	0.7599	0.7081	0.7017	0.5338	0.6942	**0.6055**
39.	Ranong	0.6461	0.5077	0.6087	0.5498	0.6697	0.7084	0.5690	0.5732	**0.6041**
40.	Chai Nat	0.6983	0.4534	0.4722	0.6338	0.7442	0.5881	0.6213	0.6166	**0.6035**
41.	Chiang Mai	0.6504	0.6187	0.5595	0.5203	0.5571	0.5853	0.6378	0.6829	**0.6015**
42.	Nan	0.5419	0.5707	0.6301	0.4025	0.6945	0.6814	0.4904	0.7679	**0.5974**
43.	Nakhon Si Thammarat	0.6776	0.4884	0.5024	0.5072	0.7937	0.6816	0.5583	0.5475	**0.5946**
44.	Chiang Rai	0.7013	0.5031	0.5844	0.4997	0.5903	0.6149	0.5634	0.6720	**0.5911**
45.	Kanchanaburi	0.7088	0.4716	0.5450	0.4804	0.7598	0.5948	0.5639	0.6010	**0.5907**
46.	Sa Kaeo	0.6546	0.4763	0.6298	0.4643	0.6424	0.7457	0.4204	0.6459	**0.5849**
47.	Khon Kaen	0.6673	0.5416	0.5052	0.4107	0.5430	0.7768	0.5677	0.6532	**0.5832**
48.	Krabi	0.6910	0.5046	0.6143	0.4012	0.6211	0.6817	0.5404	0.5819	**0.5795**
49.	Sukhothai	0.6538	0.4531	0.5854	0.3578	0.7187	0.6401	0.5584	0.6276	**0.5743**
50.	Phichit	0.6518	0.4595	0.6187	0.4143	0.6819	0.6198	0.5480	0.5824	**0.5721**
51.	Narathiwat	0.6085	0.4253	0.5040	0.5659	0.6619	0.7257	0.4846	0.5840	**0.5700**
52.	Phitsanulok	0.6401	0.5057	0.6269	0.4134	0.6795	0.6304	0.5363	0.5250	**0.5697**
53.	Pattani Nakon	0.6721	0.5321	0.5446	0.4479	0.6625	0.6983	0.4576	0.5280	**0.5679**
54.	Ratchasima	0.6100	0.4833	0.5283	0.4015	0.7276	0.6777	0.4818	0.6184	**0.5661**
55.	Kamphaeng Phet	0.6171	0.4278	0.4698	0.6092	0.6442	0.6693	0.4545	0.5648	**0.5571**
56.	Tak	0.5850	0.4815	0.5957	0.4814	0.5986	0.5879	0.4877	0.6324	**0.5563**
57.	Maha Salakam	0.5666	0.4856	0.6364	0.4438	0.4458	0.7280	0.4352	0.6952	**0.5546**
58.	Loei	0.6533	0.4913	0.5285	0.2433	0.6276	0.7167	0.4938	0.6757	**0.5538**
59.	Chaiyaphum	0.6063	0.4499	0.5117	0.4656	0.6023	0.6701	0.4237	0.6236	**0.5441**
60.	Nakhon Sawan	0.5642	0.4841	0.5721	0.3336	0.6180	0.6269	0.5728	0.5776	**0.5437**
61.	Phetchabun	0.6678	0.4254	0.5398	0.4673	0.5571	0.6390	0.4720	0.5758	**0.5430**
62.	Yasothon	0.6116	0.4650	0.5367	0.2305	0.5999	0.7746	0.4455	0.6800	**0.5430**
63.	Ubon Ratchathani	0.6159	0.4644	0.5500	0.4220	0.4452	0.7450	0.4478	0.6477	**0.5423**
64.	Roi Et	0.6579	0.3831	0.4836	0.4259	0.5739	0.7018	0.4171	0.6704	**0.5392**
65.	Kalasin	0.6035	0.4881	0.6204	0.2997	0.5141	0.7336	0.3695	0.6546	**0.5354**
66.	Surin	0.5929	0.4919	0.6311	0.3027	0.4958	0.7780	0.3208	0.6563	**0.5337**
67.	Mae Hong Son	0.6402	0.4276	0.6245	0.4903	0.4735	0.7338	0.2094	0.6558	**0.5319**
68.	Nong Khai	0.6934	0.4627	0.5740	0.2363	0.5271	0.7203	0.4350	0.5993	**0.5310**
69.	Mukdahan	0.5515	0.5423	0.5830	0.3962	0.4610	0.6951	0.4330	0.5736	**0.5295**
70.	Udon Thani	0.6545	0.4908	0.2677	0.3349	0.6264	0.7222	0.4791	0.6461	**0.5277**
71.	Sakhon Nakhon	0.6517	0.4700	0.4931	0.3925	0.4121	0.6691	0.4245	0.6434	**0.5196**
72.	Amnat Charoen	0.5718	0.4490	0.3812	0.3747	0.4069	0.7371	0.4272	0.6937	**0.5052**
73.	Nong Bua Lam Phu	0.7106	0.3966	0.3543	0.1502	0.6194	0.7615	0.355	0.6848	**0.5040**
74.	Buri Ram	0.5459	0.4122	0.5208	0.3305	0.4794	0.7402	0.3582	0.6028	**0.4987**
75.	Si Sa Ket	0.5731	0.4350	0.4703	0.3402	0.4438	0.7057	0.2815	0.6627	**0.4890**
76.	Nakhon Phanom	0.5060	0.4585	0.3776	0.2484	0.4286	0.6883	0.4355	0.6704	**0.4767**

Map 9. Provincial Distribution of the Human Achievement Index (HAI)

1. Bangkok
2. Nakhon Pathom
3. Nonthaburi
4. Pathum Thani
5. Samut Prakan
6. Samut Sakhon
7. Chai Nat
8. Phra Nakhon Si Ayutthaya
9. Lop Buri
10. Saraburi
11. Sing Buri
12. Ang Thong
13. Chanthaburi
14. Chachoengsao
15. Chon Buri
16. Trat
17. Nakhon Nayok
18. Prachin Buri
19. Rayong
20. Sa Kaeo
21. Ratchaburi
22. Kanchanaburi
23. Suphan Buri
24. Samut Songkhram
25. Phetchaburi
26. Prachuap Khiri Khan
27. Nakhon Ratchasima
28. Buri Ram
29. Surin
30. Si Sa Ket
31. Ubon Ratchathani
32. Yasothon
33. Chaiyaphum
34. Amnat Charoen
35. Nong Bua Lam Phu
36. Khon Kaen
37. Udon Thani
38. Loei
39. Nong Khai
40. Maha Sarakham
41. Roi Et
42. Kalasin
43. Sakon Nakhon
44. Nakhon Phanom
45. Mukdahan
46. Chiang Mai
47. Lamphun
48. Lampang
49. Uttaradit
50. Phrae
51. Nan
52. Phayao
53. Chiang Rai
54. Mae Hong Son
55. Nakhon Sawan
56. Uthai Thani
57. Kamphaeng Phet
58. Tak
59. Sukhothai
60. Phitsanulok
61. Phichit
62. Phetchabun
63. Nakhon Si Thammarat
64. Krabi
65. Phangnga
66. Phuket
67. Surat Thani
68. Ranong
69. Chumphon
70. Songkhla
71. Satun
72. Trang
73. Phatthalung
74. Pattani
75. Yala
76. Narathiwat

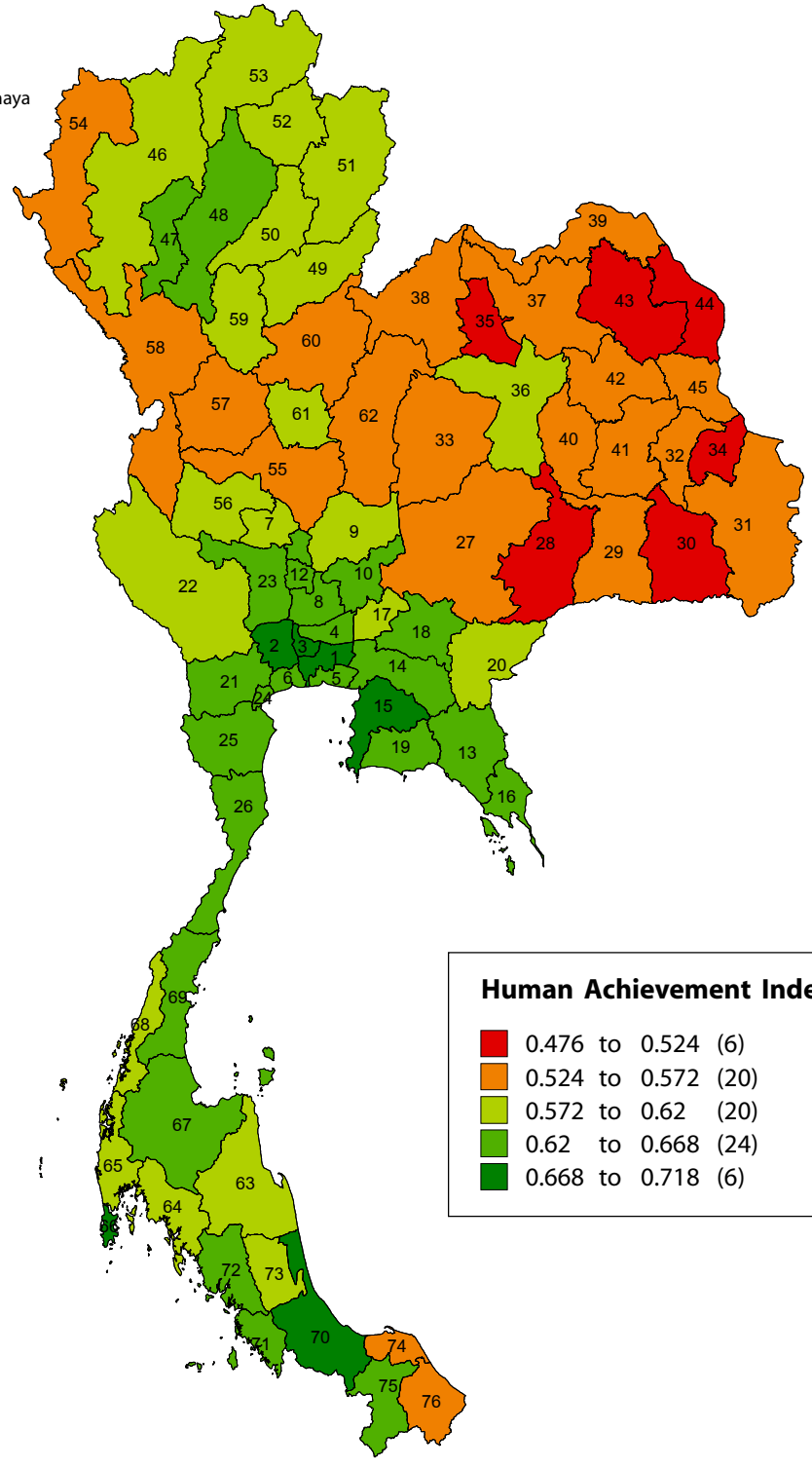

Table 11. Provincial Ranking by HAI Indices

	Health	Education	Employment	Income	Housing and living conditions	Family and community life	Transportation and communication	Participation	HAI
1.	Chachoengsao	Chon Buri	Samut Sakon	Bangkok Metropolis	Nonthaburi	Surin	Bangkok Metropolis	Nan	Phuket
2.	Samut Sakon	Lamphun	Pathum Thani	Phuket	Nakhon Pathom	Khon Kaen	Phuket	Lamphun	Nonthaburi
3.	Bangkok Metropolis	Phuket	Samut Prakan	Phangnga	Songkhla	Yasothon	Chon Buri	Phayao	Chon Buri
4.	Samut Prakan	Nakhon Pathom	Chon Buri	Nonthaburi	Chumphon	Nong Bua Lam Phu	Nonthaburi	Lampang	Nakhon Pathom
5.	Songkhla	Lampang	Phuket	Phra Nakhon Si Ayutthaya	Satun	Sa Kaeo	Rayong	Trat	Songkhla
6.	Uttaradit	Chiang Mai	Saraburi	Chon Buri	Chon Buri	Ubon Ratchathani	Songkhla	Phrae	Bangkok Metropolis
7.	Chon Buri	Phra Nakhon Si Ayutthaya	Rayong	Samut Songkhram	Suphan Buri	Buri Ram	Lamphun	Sing Buri	Rayong
8.	Nonthaburi	Nonthaburi	Phra Nakhon Si Ayutthaya	Pathum Thani	Phra Nakhon Si Ayutthaya	Amnat Charoen	Pathum Thani	Maha Salakam	Lamphun
9.	Samut Songkhram	Sing Buri	Bangkok Metropolis	Rayong	Rayong	Mae Hong Son	Ratchaburi	Phangnga	Samut Songkhram
10.	Ratchaburi	Ang Thong	Nakhon Pathom	Nakhon Pathom	Chachoengsao	Kalasin	Chanthaburi	Amnat Charoen	Pathum Thani
11.	Phetchaburi	Pathum Thani	Chachoengsao	Samut Prakan	Trang	Yala	Sing Buri	Uthai Thani	Ang Thong
12.	Prachin Buri	Yala	Surat Thani	Ratchaburi	Trat	Maha Salakam	Nakhon Pathom	Nakhon Pathom	Phra Nakhon Si Ayutthaya
13.	Lop Buri	Lop Buri	Uthai Thani	Sing Buri	Phattalung	Narathiwat	Phrae	Nong Bua Lam Phu	Phetchaburi
14.	Sing Buri	Nan	Chumphon	Chai Nat	Phuket	Udon Thani	Saraburi	Uttaradit	Saraburi
15.	Chumphon	Phrae	Chanthaburi	Ang Thong	Phetchaburi	Nong Khai	Lampang	Chiang Mai	Yala
16.	Nakhon Pathom	Rayong	Songkhla	Yala	Ang Thong	Loei	Chiang Mai	Yasothon	Sing Buri
17.	Satun	Phetchaburi	Phetchaburi	Kamphaeng Phet	Bangkok Metropolis	Ranong	Prachuap Khiri Khan	Phra Nakhon Si Ayutthaya	Chachoengsao
18.	Surat Thani	Chachoengsao	Trat	Saraburi	Samut Songkhram	Si Sa Ket	Surat Thani	Loei	Samut Prakan
19.	Saraburi	Saraburi	Nonthaburi	Prachin Buri	Ratchaburi	Roi Et	Samut Sakon	Chiang Rai	Chanthaburi
20.	Nong Bua Lam Phu	Mukdahan	Samut Songkhram	Songkhla	Nakhon Si Thammarat	Phangnga	Ang Thong	Prachin Buri	Prachin Buri
21.	Kanchanaburi	Bangkok Metropolis	Suphan Buri	Suphan Buri	Pathum Thani	Pattani	Chai Nat	Roi Et	Chumphon
22.	Nakhon Nayok	Khon Kaen	Lamphun	Lamphun	Yala	Rayong	Phetchaburi	Nakhon Phanom	Trat
23.	Uthai Thani	Samut Prakan	Prachin Buri	Surat Thani	Lop Buri	Phayao	Phayao	Samut Songkhram	Surat Thani
24.	Chiang Rai	Chanthaburi	Maha Salakam	Prachuap Khiri Khan	Samut Prakan	Mukdahan	Phra Nakhon Si Ayutthaya	Si Sa Ket	Suphan Buri
25.	Pathum Thani	Pattani	Prachuap Khiri Khan	Chumphon	Chanthaburi	Songkhla	Trang	Chanthaburi	Prachuap Khiri Khan
26.	Chai Nat	Phayao	Surin	Chachoengsao	Nakhon Nayok	Nakhon Phanom	Samut Songkhram	Surin	Lampang
27.	Trang	Phattalung	Nan	Satun	Prachin Buri	Krabi	Samut Prakan	Mae Hong Son	Samut Sakon
28.	Nong Khai	Trat	Sa Kaeo	Narathiwat	Kanchanaburi	Nakhon Si Thammarat	Chumphon	Kalasin	Trang
29.	Krabi	Prachuap Khiri Khan	Phitsanulok	Samut Sakon	Saraburi	Phattalung	Trat	Khon Kaen	Ratchaburi
30.	Yala	Samut Songkhram	Trang	Nakhon Nayok	Chai Nat	Nan	Chachoengsao	Ubon Ratchathani	Satun
31.	Ang Thong	Uthai Thani	Sing Buri	Uthai Thani	Surat Thani	Nakon Ratchasima	Satun	Udon Thani	Phrae
32.	Prachuap Khiri Khan	Satun	Mae Hong Son	Phetchaburi	Prachuap Khiri Khan	Chaiyaphum	Yala	Sa Kaeo	Uttaradit
33.	Nakhon Si Thammarat	Nakhon Nayok	Phayao	Ranong	Uttaradit	Kamphaeng Phet	Nakhon Sawan	Sakhon Nakhon	Nakhon Nayok
34.	Suphan Buri	Songkhla	Kalasin	Trang	Nakon Ratchasima	Sakhon Nakhon	Nakhon Nayok	Phetchaburi	Phayao
35.	Phattalung	Trang	Phichit	Lop Buri	Sukhothai	Phuket	Ranong	Songkhla	Uthai Thani
36.	Pattani	Ranong	Lampang	Chiang Mai	Phangnga	Ang Thong	Khon Kaen	Tak	Lop Buri
37.	Phetchabun	Phitsanulok	Yala	Phrae	Lamphun	Satun	Uttaradit	Sukhothai	Phattalung
38.	Khon Kaen	Krabi	Krabi	Phattalung	Phayao	Surat Thani	Lop Buri	Saraburi	Phangnga
39.	Chanthaburi	Chiang Rai	Ranong	Nakhon Si Thammarat	Nan	Nonthaburi	Kanchanaburi	Chaiyaphum	Ranong

Table 11 *(continued)*

	Health	Education	Employment	Income	Housing and living conditions	Family and community life	Transportation and communication	Participation	HAI
40.	Phangnga	Chumphon	Ang Thong	Chiang Rai	Phichit	Chanthaburi	Chiang Rai	Ang Thong	Chai Nat
41.	Roi Et	Phangnga	Tak	Mae Hong Son	Phrae	Uthai Thani	Phattalung	Nakon Ratchasima	Chiang Mai
42.	Sa Kaeo	Samut Sakon	Sukhothai	Tak	Sing Buri	Lampang	Sukhothai	Chai Nat	Nan
43.	Udon Thani	Surin	Chiang Rai	Kanchanaburi	Phitsanulok	Trat	Nakhon Si Thammarat	Phuket	Nakhon Si Thammarat
44.	Sukhothai	Loei	Mukdahan	Chanthaburi	Ranong	Uttaradit	Uthai Thani	Suphan Buri	Chiang Rai
45.	Loei	Udon Thani	Uttaradit	Uttaradit	Pattani	Lamphun	Phichit	Buri Ram	Kanchanaburi
46.	Phichit	Nakhon Si Thammarat	Nakhon Nayok	Phetchabun	Narathiwat	Prachuap Khiri Khan	Suphan Buri	Satun	Sa Kaeo
47.	Sakhon Nakhon	Kalasin	Nong Khai	Chaiyaphum	Kamphaeng Phet	Sukhothai	Krabi	Prachuap Khiri Khan	Khon Kaen
48.	Chiang Mai	Prachin Buri	Nakhon Sawan	Sa Kaeo	Sa Kaeo	Phetchabun	Prachin Buri	Kanchanaburi	Krabi
49.	Ranong	Ratchaburi	Chiang Mai	Lampang	Lampang	Nakhon Nayok	Phitsanulok	Nonthaburi	Sukhothai
50.	Mae Hong Son	Surat Thani	Ratchaburi	Trat	Loei	Phrae	Phangnga	Lop Buri	Phichit
51.	Phitsanulok	Maha Salakam	Ubon Ratchathani	Pattani	Udon Thani	Phitsanulok	Loei	Nong Khai	Narathiwat
52.	Lampang	Uttaradit	Kanchanaburi	Maha Salakam	Krabi	Phetchaburi	Nan	Phattalung	Phitsanulok
53.	Phrae	Nakhon Sawan	Pattani	Roi Et	Nong Bua Lam Phu	Suphan Buri	Tak	Chachoengsao	Pattani
54.	Phra Nakhon Si Ayutthaya	Nakon Ratchasima	Phrae	Ubon Ratchathani	Nakhon Sawan	Nakhon Sawan	Narathiwat	Yala	Nakon Ratchasima
55.	Phuket	Tak	Phetchabun	Phayao	Samut Sakon	Samut Songkhram	Nakon Ratchasima	Ratchaburi	Kamphaeng Phet
56.	Trat	Suphan Buri	Yasothon	Phichit	Chaiyaphum	Prachin Buri	Udon Thani	Narathiwat	Tak
57.	Lamphun	Sa Kaeo	Loei	Phitsanulok	Yasothon	Phichit	Phetchabun	Rayong	Maha Salakam
58.	Kamphaeng Phet	Kanchanaburi	Nakon Ratchasima	Khon Kaen	Tak	Samut Prakan	Pattani	Phichit	Loei
59.	Ubon Ratchathani	Sakhon Nakhon	Lop Buri	Nan	Chiang Rai	Chiang Rai	Kamphaeng Phet	Krabi	Chaiyaphum
60.	Yasothon	Yasothon	Buri Ram	Nakon Ratchasima	Roi Et	Chumphon	Ubon Ratchathani	Nakhon Sawan	Nakhon Sawan
61.	Nakon Ratchasima	Ubon Ratchathani	Chaiyaphum	Krabi	Uthai Thani	Trang	Yasothon	Phetchabun	Yasothon
62.	Narathiwat	Nong Khai	Khon Kaen	Mukdahan	Chiang Mai	Saraburi	Nakhon Phanom	Mukdahan	Phetchabun
63.	Chaiyaphum	Phichit	Narathiwat	Sakhon Nakhon	Phetchabun	Kanchanaburi	Maha Salakam	Ranong	Ubon Ratchathani
64.	Kalasin	Nakhon Phanom	Nakhon Si Thammarat	Amnat Charoen	Khon Kaen	Pathum Thani	Nong Khai	Nakhon Nayok	Roi Et
65.	Surin	Chai Nat	Sakhon Nakhon	Sukhothai	Nong Khai	Chai Nat	Mukdahan	Kamphaeng Phet	Kalasin
66.	Tak	Sukhothai	Roi Et	Si Sa Ket	Kalasin	Tak	Amnat Charoen	Surat Thani	Surin
67.	Si Sa Ket	Chaiyaphum	Chai Nat	Udon Thani	Surin	Chiang Mai	Sakhon Nakhon	Trang	Mae Hong Son
68.	Amnat Charoen	Amnat Charoen	Si Sa Ket	Nakhon Sawan	Buri Ram	Bangkok Metropolis	Chaiyaphum	Chon Buri	Nong Khai
69.	Phayao	Si Sa Ket	Kamphaeng Phet	Buri Ram	Mae Hong Son	Samut Sakon	Sa Kaeo	Nakhon Si Thammarat	Mukdahan
70.	Maha Salakam	Kamphaeng Phet	Satun	Surin	Mukdahan	Lop Buri	Roi Et	Chumphon	Udon Thani
71.	Nakhon Sawan	Mae Hong Son	Phattalung	Kalasin	Maha Salakam	Nakhon Pathom	Kalasin	Pattani	Sakhon Nakhon
72.	Rayong	Phetchabun	Amnat Charoen	Nakhon Phanom	Ubon Ratchathani	Chon Buri	Buri Ram	Phitsanulok	Amnat Charoen
73.	Mukdahan	Narathiwat	Nakhon Phanom	Loei	Si Sa Ket	Chachoengsao	Nong Bua Lam Phu	Pathum Thani	Nong Bua Lam Phu
74.	Buri Ram	Buri Ram	Nong Bua Lam Phu	Nong Khai	Nakhon Phanom	Sing Buri	Surin	Samut Sakon	Buri Ram
75.	Nan	Nong Bua Lam Phu	Phangnga	Yasothon	Sakhon Nakhon	Ratchaburi	Si Sa Ket	Samut Prakan	Si Sa Ket
76.	Nakhon Phanom	Roi Et	Udon Thani	Nong Bua Lam Phu	Amnat Charoen	Phra Nakhon Si Ayutthaya	Mae Hong Son	Bangkok Metropolis	Nakhon Phanom

HUMAN DEVELOPMENT INDEX (HDI)

While HAI is locally developed for assessing progress in human development in Thailand, HDI is UNDP's key human development index and has been used and recognized worldwide to compare human development progress among countries since 1990. It has also been used at sub-national level in many countries. In the following section, this Report will attempt to use HDI to capture human development situations at the provincial level in Thailand.

HDI is based on three indicators: (i) length of life, as measured by life expectancy at birth, (ii) educational attainment, as measured by the adult literacy rate[47] and the combined gross primary, secondary and tertiary enrolment ratio;[48] and (iii) standard of living, as measured by GDP per capita (US$ PPP).[49]

Table 12 presents HDI scores and ranks by province. Rayong – the center of the Eastern Seaboard has the highest HDI score. Rayong's GPP per capita almost doubles that of Chon Buri. Phuket falls slightly from 1st rank on HAI to 5th place on the HDI. Similar pattern is noted for several industrial cities, e.g., Nakorn Pathom, Songkhla, Samut Songkhram, Lamphun, Ang Thong, and some tourist cities, e.g., Phetchaburi, Nakorn Nayok, Chiang Mai, Chiang Rai, and Phuket. One possible explanation is that the use of GPP, which records income from business establishments by their place of registration, not their physical location, could produce such result in cases that a number of the larger factories and hotels have their headquarters or business units registered in Bangkok. There are, however, several other factors at work that account for the gaps between HAI and HDI that cannot be categorically explained.

On the contrary, some provinces perform considerably better on HDI than HAI. Three southern most provinces, for example, constitute a case of large discrepancy. When comparing HAI with HDI, Satun moves from 30th to 14th place, Narathiwat from 51st to 25th, and Pattani from 53rd to 19th. No single explanation can account for this. The difference is a result of a combination of factors, largely due to the use of different indices and indicators.

This highlights the fact that decisions regarding the structure of composite index, the selection of relevant indices and indicators are most crucial; they should mirror both the subjective norms and objective standards of human development of the society.

GENDER-RELATED DEVELOPMENT INDEX (GDI)

GDI measures progress in human development using the same variables as the HDI, but takes account of inequality in achievement between women and men. In this Report, GDI is based on the available gender disaggregated data, namely life expectancy, combined primary, secondary enrolment ratio,[50] and GPP per capita.

GDI represents the HDI adjusted for gender inequality. GDI gives some indication of how basic human capabilities are distributed between women and men. If GDI equals HDI, it means that there is no gender bias between women and men. The greater the gender disparity in human development, the lower the GDI is

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47 Adult literacy rate for population aged 14 to 50 from BMN data in 2000. BMN data covers only rural areas. Bangkok Metropolis literacy rate data is therefore not available. In this calculation, Bangkok vicinity literacy rate is used as proxy for Bangkok Metropolis literacy rate.

48 In this calculation, tertiary enrolment is dropped as most students enrol in universities/colleges in large cities, and some provinces do not have any tertiary institution.

49 This calculation uses gross provincial product (GPP) per capita and does not convert it to US$PPP as it is for the purpose of intra-country, not inter-country comparison.

50 No gender disaggregated data for adult literacy rate.

Table 12. HAI, HDI and GDI by Province

	HAI rank	HAI score	HDI rank	HDI score	GDI rank	GDI score	HDI rank Minus GDI rank
1.	Phuket	0.7175	5	0.8027	3	0.7616	2
2.	Nonthaburi	0.7060	7	0.7992	6	0.7282	1
3.	Chon Buri	0.7006	4	0.8113	2	0.7715	2
4.	Nakhon Pathom	0.6804	18	0.7337	22	0.6651	-4
5.	Songkhla	0.6788	15	0.7454	10	0.7017	5
6.	Rayong	0.6678	1	0.8198	4	0.7587	-3
7.	Bangkok Metropolis	0.6731	8	0.7964	12	0.6962	-4
8.	Samut Songkhram	0.6635	57	0.6605	58	0.5578	-1
9.	Lamphun	0.6638	68	0.6411	75	0.5021	-7
10.	Pathum Thani	0.6634	3	0.8130	1	0.7723	2
11.	Ang Thong	0.6540	28	0.7118	31	0.6410	-3
12.	Phra Nakhon Si Ayutthaya	0.6536	13	0.7480	19	0.6721	-6
13.	Phetchaburi	0.6518	33	0.7025	35	0.6290	-2
14.	Saraburi	0.6508	9	0.7825	8	0.7187	1
15.	Yala	0.6485	22	0.7234	14	0.6912	8
16.	Sing Buri	0.6437	48	0.6794	39	0.6023	9
17.	Chachoengsao	0.6431	10	0.7643	13	0.6945	-3
18.	Samut Prakan	0.6416	2	0.8165	5	0.7578	-3
19.	Chanthaburi	0.6359	26	0.7171	21	0.6694	5
20.	Prachin Buri	0.6330	30	0.7109	36	0.6102	-6
21.	Chumphon	0.6330	11	0.7536	9	0.7130	2
22.	Trat	0.6313	17	0.7392	20	0.6704	-3
23.	Surat Thani	0.6293	20	0.7259	33	0.6401	-13
24.	Suphan Buri	0.6292	35	0.6959	38	0.6057	-3
25.	Prachuap Khiri Khan	0.6275	16	0.7447	17	0.6738	-1
26.	Lampang	0.6252	39	0.6927	29	0.6415	10
27.	Samut Sakon	0.6242	6	0.8020	7	0.7263	-1
28.	Trang	0.6228	24	0.7201	26	0.6561	-2
29.	Ratchaburi	0.6216	29	0.7112	34	0.6368	-5
30.	Satun	0.6202	14	0.7476	23	0.6646	-9
31.	Phrae	0.6180	69	0.6384	53	0.5675	16
32.	Uttaradit	0.6153	40	0.6921	43	0.5970	-3
33.	Nakhon Nayok	0.6135	51	0.6747	48	0.5873	3
34.	Uthai Thani	0.6131	42	0.6870	42	0.5989	0
35.	Phayao	0.6134	75	0.6160	61	0.5528	14
36.	Lop Buri	0.6083	27	0.7123	30	0.6410	-3
37.	Phattalung	0.6061	46	0.6808	52	0.5698	-6
38.	Phangnga	0.6055	43	0.6865	74	0.5040	-31
39.	Ranong	0.6041	32	0.7052	76	0.4823	-44
40.	Chai Nat	0.6035	37	0.6950	49	0.5835	-12
41.	Chiang Mai	0.6015	55	0.6628	32	0.6403	23
42.	Nan	0.5974	50	0.6749	28	0.6493	22
43.	Nakhon Si Thammarat	0.5946	23	0.7204	37	0.6076	-14
44.	Chiang Rai	0.5911	76	0.6070	51	0.5700	25
45.	Kanchanaburi	0.5907	21	0.7250	27	0.6542	-6
46.	Sa Kaeo	0.5849	31	0.7097	25	0.6572	6
47.	Khon Kaen	0.5832	38	0.6928	41	0.5994	-3
48.	Krabi	0.5795	12	0.7519	15	0.6842	-3
49.	Sukhothai	0.5743	56	0.6613	56	0.5607	0
50.	Phichit	0.5721	62	0.6525	66	0.5417	-4
51.	Narathiwat	0.5700	25	0.7197	11	0.6966	14
52.	Phitsanulok	0.5697	44	0.6864	40	0.6007	4
53.	Pattani	0.5679	19	0.7273	24	0.6617	-5
54.	Nakon Ratchasima	0.5661	47	0.6803	54	0.5672	-7
55.	Kamphaeng Phet	0.5571	36	0.6951	44	0.5957	-8

(Continued on next page)

Table 12 *(continued)*

	HAI rank	HAI score	HDI rank	HDI score	GDI rank	GDI score	HDI rank Minus GDI rank
56.	Tak	0.5563	34	0.6966	16	0.6790	18
57.	Maha Salakam	0.5546	63	0.6503	64	0.5461	-1
58.	Loei	0.5538	45	0.6840	45	0.5933	0
59.	Chaiyaphum	0.5441	49	0.6766	57	0.5581	-8
60.	Nakhon Sawan	0.5437	41	0.6887	46	0.5913	-5
61.	Phetchabun	0.5430	53	0.6725	50	0.5809	3
62.	Yasothon	0.5430	72	0.6348	72	0.5177	0
63.	Ubon Ratchathani	0.5423	61	0.6547	62	0.5527	-1
64.	Roi Et	0.5392	67	0.6431	69	0.5292	-2
65.	Kalasin	0.5354	64	0.6476	59	0.5561	5
66.	Surin	0.5337	59	0.6551	60	0.5539	-1
67.	Mae Hong Son	0.5319	66	0.6433	18	0.6729	48
68.	Nong Khai	0.5310	60	0.6547	67	0.5370	-7
69.	Mukdahan	0.5295	52	0.6742	47	0.5907	5
70.	Udon Thani	0.5277	54	0.6642	55	0.5622	-1
71.	Sakhon Nakhon	0.5196	71	0.6355	70	0.5221	1
72.	Amnat Charoen	0.5052	70	0.6384	68	0.5342	2
73.	Nong Bua Lam Phu	0.5040	74	0.6329	73	0.5145	1
74.	Buri Ram	0.4987	58	0.6591	63	0.5499	-5
75.	Si Sa Ket	0.4890	65	0.6475	65	0.5449	0
76.	Nakhon Phanom	0.4767	73	0.6332	71	0.5204	2

relative to HDI. A positive figure in the HDI rank-minus-GDI rank column in Table 11 signals a relatively equitable process of capacity building between men and women in the province.

Table 12 shows that with the exception of Mae Hong Son where women fare better than men (GDI higher than HDI), gender disparity is still prevalent in every part of the country. It is, however, much less pronounced in northern provinces. A few southern provinces deserve special attention, e.g., Phangnga and Ranong. Songkhla, Yala and Narathiwat, noticably contradict the generalization of Muslim-dominated provinces having a propensity for gender inequality.

It should, however, be noted that the income component in the GDI takes into account the income difference between men and women who are engaged in income-generating activities, and does not include those who do not have income. A province where women work for less income than men could therefore have a lower GDI score than another province where women do not work at all.

A REGIONAL OVERVIEW: HAI, HDI, GDI

A brief regional analysis of HAI, HDI and GDI can enrich our provincial analysis and offer another perspective on disparity in Thailand.

By and large, the regional ranking presents no big surprise. Table 13 shows that Bangkok Metropolis leads other regions in overall human achievement. It is the leader in four aspects – health, income, housing and living conditions, transportation and communication. Bangkok vicinity takes the lead in education and employment.

The Northeast finds itself in extreme situations – being at the bottom in five areas, but on the top on family and community life, and participation.

Common perception of the South belies its situation. Southerners are not generally thought of being poor or deprived, and the region ranks respectably in health and income. Yet, the South is the second worst-off in education and employment.

Table 13. HAI Indices and the Composite Index by region

Location	Health Index	Education Index	Employment Index	Income Index	Housing and living conditions Index	Family and community life Index	Transportation and communication Index	Participation Index	Composite Index
	1	2	3	4	5	6	7	8	
Kingdom	**0.6889**	**0.5075**	**0.5885**	**0.5100**	**0.7040**	**0.6573**	**0.5984**	**0.6758**	**0.6163**
Bangkok Metropolis	0.7884	0.5418	0.6744	0.8074	0.8191	0.5816	0.8765	0.2959	0.6731
Bangkok vicinity	0.7369	0.5618	0.7496	0.6725	0.8094	0.6015	0.6613	0.5084	0.6627
Eastern region	0.7058	0.5484	0.6874	0.5817	0.8032	0.6222	0.5865	0.6076	0.6429
Central region	0.7110	0.5612	0.6032	0.6200	0.7769	0.5678	0.6056	0.6356	0.6352
Western region	0.7042	0.5035	0.6052	0.5798	0.8021	0.5954	0.6022	0.6147	0.6259
Southern region	0.6743	0.5094	0.5736	0.5452	0.7822	0.6765	0.5992	0.5821	0.6178
Northern region	0.6563	0.5095	0.5832	0.4610	0.6296	0.6345	0.5680	0.6525	0.5868
Northeastern region	0.6234	0.4654	0.5074	0.3542	0.5422	0.7209	0.4392	0.6502	0.5379

Table 14. Comparison of HAI, HDI, GDI by region

Region	HAI rank	HAI score	HDI rank	HDI score	GDI rank	GDI score
Kingdom		**0.6163**		**0.7263**		**0.6378**
Bangkok Metropolis	1	0.6731	2	0.7964	3	0.6962
Bangkok vicinity	2	0.6627	1	0.8094	1	0.7473
Eastern region	3	0.6429	3	0.7803	2	0.7226
Central region	4	0.6352	4	0.7354	4	0.6593
Western region	5	0.6259	6	0.7111	6	0.6323
Southern region	6	0.6178	5	0.7257	5	0.6373
Northern region	7	0.5868	7	0.6624	7	0.5943
Northeastern region	8	0.5379	8	0.6613	8	0.5554

The North also deserves special attention as it comes second to last in health, income, housing and living conditions, transportation and communication.

The Central, Plain, the East and the West are in a relatively good situation in most aspects, but they all have difficulty maintaining a good family and community life and active public participation.

Table 14 presents a comparison of HAI, HDI, and GDI by region. The three regional rankings are generally aligned or staying very close, with an exception of Bangkok Metropolis that exhibits a higher degree of gender disparity.

CONCLUSION

Measuring human development is a daunting task. New indices are often a target of criticism and disagreement among academics, policy makers and development practitioners. Yet, many organizations, UNDP included, are committed to find a new and better way to measure human development. This is because in most cases, in spite of their imperfection, the value of human development indices outweighs their shortcomings.

In the case of HAI, HDI and GDI, their value lies first and foremost in their potential to gain the attention and get

the policy makers and the people to think, discuss and debate "human development" in concrete and meaningful terms. The regional and provincial data that supports the 40 indicators, 8 HAI indices and the composite index can serve as an important basis for public awareness, problem identification, and policy decisions at national and local levels.

It is hoped that the provincial and regional HAI, HDI and GDI presented in this Report has constituted a good start for an ongoing process in which the indices and the composite index will be improved both with better data and better methodologies. This process will provide an enabling environment and valuable support to policy makers and the public in their pursuit of human development in the years to come.

STATISTICAL ANNEX

TECHNICAL NOTES ON HDI AND GDI

HUMAN DEVELOPMENT INDEX (HDI)

HDI is based on three indices: longevity; as measured by life expectancy at birth; education attainment, as measured by a combination of the adult literacy rate (two-thirds weight) and combined gross primary, lower secondary and upper secondary enrolment ratio (one-third weight); and standard of living; as measured by Gross Domestic Product (GDP) per capita, expressed in US$ PPP.

The calculation of provincial and regional HDI follows the methodology of global HDI with the following adjustments:

- Tertiary enrolment is not used, as most students enrol in universities/ colleges in large cities, and some provinces do not have tertiary institution.
- This calculation uses gross regional/ provincial product (GPP) per capita instead of purchasing power parity in US$.

Computing the individual HDI indices is based on the following formula:

Index = (Actual value – Minimum value)/
(Maximum value – Minimum value)

Fixed minimum and maximum values (goal post):

- Life expectancy at birth: 25 years and 85 years.
- Adult literacy rate (aged 14 to 50): 0 per cent and 100 per cent
- Combined gross enrolment ratio: 0 per cent and 100 per cent
- GPP or GRP per capita: $100 and $40,000

Data and Calculation

Life expectancy at birth: 1996 data.

Adult literacy rate: Data for adult literacy rate for population aged 14 to 50 is from Basic Minimum Needs data in 2000. BMN data covers only rural areas which is used as proxy for the entire province. BMN does not include the Bangkok Metropolis, hence, the Bangkok vicinity data is used as proxy for Bangkok Metropolis literacy rate.

Combined gross enrolment: Combined gross enrolment of primary, lower secondary education and upper secondary education in 1999.

Income:

Human development requires a certain level of income. Beyond this level, additional income does not translate into human development. To reflect this, income is discounted by the following formula:

W(y) = (log y – log ymin)/
(log ymax – log ymin)

HDI = (life expectancy index + education attainment index + income index)/3

GENDER-RELATED DEVELOPMENT INDEX (GDI)

The calculation of provincial and regional GDI follows the methodology of global GDI, with the same adjustments made for HDI for Thailand.

Computing GDI individual indices is based on the following formula:

Index = (Actual value – Minimum value)/
(Maximum value – Minimum value)

Fixed minimum and maximum values (goal post):

- Life expectancy at birth: Women generally live longer than men. For women the maximum value is 87.5 years and the minimum value is 27.5 years. For men the maximum value is 82.5 years and the minimum value is 22.5 years
- Adult literacy rate: There is no gender disaggregated data. Therefore, this indicator is excluded from the calculation.
- Combined gross enrolment ratio: 0 per cent and 100 per cent
- GPP per capita: $100 and $40,000

Data and Calculation

Life expectancy at birth: 1996 data.

Combined gross enrolment: Combined gross enrolment of primary, lower secondary education and upper secondary education in 1999.

Income:

Values of per capita GPP for women and men are calculated from the female share (sf) and male share (sm) of earned income. These shares are estimated from the ratio of the female total real income (wf) to the male total real income (wm) and the percentage of women (eaf) and men (eam) in the economically active population.

In this calculation, income shares of women and men is an average of real total income (wage, salary, overtime, bonus, profit, etc.) observed from the labour force survey 1992 to 1998.

Income ratio of women/men is 77 per cent (see income sheet).

Percentage share of women and men in the economically active population (total labour force) are 45 per cent and 54.99 per cent, respectively. Female share of total income (sf) is 0.39.

Therefore, the GPP per capita for women is equal to Sf x GPP per capita.

And GPP per capita for men is equal to GPP per capita – women GPP per capita.

High-levels of income is discounted by using the following formula:

W(y) = (log y – log ymin)/
(log ymax – log ymin)

Equally distributed life expectancy index:

$\{[\text{female population share} \times (\text{female life expectancy index})^{-1}] + [\text{male population share} \times (\text{male life expectancy index})^{-1}]\}^{-1}$

Equally distributed educational attainment index:

$\{[\text{female population share} \times (\text{female educational attainment index})^{-1}] + [\text{male population share} \times (\text{male educational attainment index})^{-1}]\}^{-1}$

Equally distributed income index:

Percentage share of the economically active population.

Female (eaf)	45.0	per cent
Male (eam)	54.99	per cent

Ratio of female total real income to male total real income (Wf/Wm) = 0.77

Female share of total income (sf) = (0.77 x 0.45)/[(0.77 x 0.45) + 0.5499] = 0.39

Female total GPP per capita = 0.39 x GPP per capita

Male total GPP per capita = 1 – Female total GPP per capita
W(yf) = [log (yf) – log (100)]/[log (40,000) – log (100)]
W(ym) = [log (ym) – log (100)]/[log (40,000) – log (100)]

Equally distributed income index = ({female population share x $[W(yf)]^{-1}$} + {male population share x $[W(ym)]^{-1}$})$^{-1}$

GDI = (equally distributed life expectancy + equally distributed educational attainment + equally distributed income)/3

DATA SOURCES

TABLE 1 – BASIC DATA

Columns 1-3

Key Registration Statistics 2001, Registration Administration Bureau, Department of Local Administration, Ministry of Interior.

Columns 4-5

Socio-economic Survey 2000, National Statistical Office.

Columns 6-7

National Account Division, Office of the National Economic and Social Development Board, 1999. Gross provincial product at current market prices and per capita income by region and province 1999.

Columns 8-12

Royal Thai Survey Department and Royal Forest Department, LANDSAT, 1998.

Notes:

1. Forest land is the land area still under forest.
2. Unclassified land is the balance of land area taken from total land minus forest land and farm holding land, municipal area, railroads, highways, real estate, public area, etc.

TABLE 2 – HEALTH

Column 1

Number of Midyear Population (July 1 st) by Region and Province, 2001, Bureau of Health Policy and Planning, Ministry of Public Health.

Columns 2-4

Development Evaluation Division, National Economic and Social Development Board. Calculation is based on the 1998 civil registration from Registration Administration Bureau Department, Ministry of Interior.

Columns 5-7

Public Health Statistics 2002, Health Information Division, Bureau of Health Policy and Planning, Ministry of Public Health.

Column 8

Nutrition Surveillance in Children (0-60 months) Report, First Quarter/ Fiscal Year 1998 (October-December 1997), Health Department, Ministry of Public Health.

Note: Data includes only first-degree malnutrition.

Columns 9-11

Department of Communicable Disease Control, Ministry of Public Health, Fiscal Year 2001 (Sickness per 1000 population). Number of patients covers only those who came for medical services. Population Midyear 2001.

Columns 12-14

Division of Epidemiology, Ministry of Public Health. Number of AIDS patients by province is from 1984 to August 31, 2002 and does not exclude those who passed away. Number of new AIDS patients represents reported cases during January-September 31,2002. AIDS incidence per 100,000 population (new AIDS rate) is also based on the 9-month data.

Column 15

Department of Mental Health, Ministry of Public Health, Fiscal Year 2001. Population by province as of December 31, 2001 from Registration

Administration Bureau, Department of Local Administration, Ministry of Interior, December 31, 2001.

Note: Mental illnesses include those who are diagnosed for schizophrenia, anxiety, depression, mental retardness, drug-addiction, other mental illnesses, suicide, attempted suicide.

Columns 16-18

Health and Welfare Survey 2001, National Statistical Office. The survey shows percentages of population aged 11 and over who regularly smoke and/or consume alcoholic beverage.

Columns 19-23

Health Personnel and Resources 2000, Health Information Division, Bureau of Health Policy and Planning, Ministry of Public Health.

TABLE 3 – EDUCATION

Columns 1-3

National Statistical Office, Calculation is based on the **Labour Force Survey, Round 3 (July-September), 2001**, and covers people aged 15 and over.

Columns 4-12

Calculation is based on the **Labor Force Survey, Round 3 (July-September), 2001**, and covers people aged 15 and over, National Statistical Office.

Columns 13-18

Numbers of students are from Educational Areas' reports of students and teachers 2000, Education Information Center, Office of Permanent Secretary, Ministry of Education. Number of students in each age group in 2000 is from Office of the National Education Commission.

Columns 19-20

Information and Statistical Section, Planning Division, Department of General Education, Ministry of Education, 2000.

Columns 21-22

National Assessment Test, Department of Curriculum and Instruction Development, Ministry of Education, 1997.

Notes:

1. For lower secondary level, the figures are average scores in five major subjects.
2. For upper secondary level, the figures are average scores in eight major subjects.

Columns 23-28

Education Information Center, Office of Permanent Secretary, Ministry of Education, 1999.

Column 29

Data compiled from:

Technical and Planning Division, Department of Skills Development, Ministry of Labour and Social Welfare, 1999.

Non-formal Education Department, Ministry of Education, 1999.

Occupational Promotion Division, Community Development Office, Bangkok Metropolitan Administration, 1999.

Education Information Center, Office of Permanent Secretary, Ministry of Education, 1999.

Number of population at December 31, 1999 from Registration Administration Bureau, Department of Local Administration, Ministry of Interior.

TABLE 4 – EMPLOYMENT

Columns 1-16

Labour Force Survey, Round 3 (July-September) 2001, National Statistical Office.

Notes: Employment, Unemployment and Underemployment for population 15 years and over.

Underemployment = having worked less than 35 hours per week and wanting to work more.

Column 17

Technical Studies and Planing Division, Social Security Office. Insured persons by provinces are as of December 2001.

Note: Percentage of insured workers = number of total insured workers/ current labour force; Calculated from Labour Force Survey, Round 3 (July-September) 2001, National Statistical Office.

TABLE 5 – INCOME

Columns 1, 6-7, 15-16

Socio-economic Survey 1998, National Statistical Office.

Columns 2-4, 13-14, 18-19

Socio-economic Survey 2000, National Statistical Office.

Columns 5, 8, 17

Calculation is not adjusted by inflation.

Columns 9-12

Calculated from **Socio-economic Survey 2000.**

Note: Welfare is percentage of average income above poverty line (100* per capita current income/poverty line).

TABLE 6 – HOUSING AND LIVING CONDITIONS

Columns 1-3, 5-11

Socio-economic Survey 2000, National Statistical Office.

Column 4

Number of households in congested communities from Housing Authority of Thailand, Preliminary data as of July 24, 2001.

Number of households in municipalities and sanitary districts from **Socio-economic Survey 2000**, National Statistical Office.

TABLE 7 – FAMILY AND COMMUNITY LIFE

Columns 1-4

Socio-economic Survey 2000, National Statistical Office (Elders are those aged 60 and over).

Columns 5-7

Labour Force Survey, Round 3 (July-September) 2001, National Statistical Office.

Note: Working children are children aged 15-17 not attending schools. They may be employed, unemployed, seasonally unemployed or assigned to do housework.

Column 8

Key Registration Statistics 1999, Registration Administration Bureau, Department of Local Administration, Ministry of Interior.

Columns 9-11

Health and Welfare Survey 2001, National Statistical Office.

Columns 12-13

Crime Statistics of Thailand 2000, Royal Thai Police. Calculation is based on population at December 31, 2000, Registration Administration Bureau, Department of Local Administration, Ministry of Interior.

Notes: Violent crimes include murder, gang robbery, robbery, kidnapping and arson.

TABLE 8 – TRANSPORT AND COMMUNICATION

Columns 1-2

National Rural Development 2C (Khor Chor Chor 2 Khor), 2001.

Note: Convenient travel to the nearest district is defined as (1) having private automobile or public bus service all year round including rainy season, (2) over 60% of the households in the village own a motorcycle, (3) travel time to the nearest district by boat, train or other means of transportation is less than 15 minutes.

Column 3

Technical and Planning Division, Department of Land Transportation, December, 2001.

Notes:
1. Includes personal car with less than 7 seats, personal car with more than 7 seats and motorcycle.
2. Calculation is based on population at December 31, 2001 from Registration Administration Bureau, Department of Local Administration, Ministry of Interior.

Columns 4-5

Socio-economic Survey 2000, National Statistical Office.

Columns 6-8

Number of personal and public telephones provided by TOT, TA and TT&T. This includes only telephone lines that had been leased. Population per telephone line (operated by TOT, TA and TT&T) as of July 31, 2002 is provided by TOT Corporation Public Company Limited, Thailand.

Note: Number of leased lined in Bangkok Metropolis, Nonthaburi, Pathum Thani and Samut Prakan comes in one aggregated number. This Report assumes the same population per telephone ratio for all four provinces and calculates the number of telephone lines per province by this ratio.

Columns 9-10

Labour Force Survey, Round 3 (July-September), 2000, Record 2, National Statistical Office.

Notes: Internet access includes access from home, workplace, school, internet cafe, etc.

TABLE 9 – PARTICIPATION

Columns 1-2

Election Commission of Thailand, Result of the General Election, January 6, 2001.

Column 3

Community Organization Development Institute, 2000.

Columns 4-5

Minimum Basic Needs (BMN) 2001, Community Development Department, Ministry of Interior.

Data Tables

Table 1. Basic Data

Location	Population 2001			Household 2000		Gross Provincial Product (GPP) 1999	
	Total	Male	Female				
	Number 1	Number 2	Number 3	Number 4	Average size 5	Total mil. Baht/year 6	Per capita Baht/year 7
Kingdom	**62,308,887**	**30,913,485**	**31,395,402**	**16,086,398**	**3.6**	**4,615,386**	**74,675**
Bangkok Metropolis	**5,726,203**	**2,776,975**	**2,949,228**	**1,960,900**	**3.3**	**1,715,992**	**228,921**
Bangkok Vicinity	**3,802,688**	**1,844,721**	**1,957,967**	**915,600**	**3.3**	**2,268,248**	**203,778**
Nakhon Pathom	791,914	385,756	406,158	212,600	3.6	64,217	75,817
Nonthaburi	884,077	423,420	460,657	203,400	3.3	78,962	101,363
Pathum Thani	679,417	330,181	349,236	147,100	3.3	129,169	230,248
Samut Prakan	1,011,692	492,074	519,618	237,300	3.0	186,506	183,568
Samut Sakon	435,588	213,290	222,298	115,200	3.4	93,401	216,207
Central Region	**2,984,711**	**1,474,359**	**1,510,352**	**789,400**	**3.4**	**207,653**	**71,334**
Chai Nat	350,932	170,406	180,526	109,900	3.0	14,943	40,169
Phra Nakhon Si Ayutthaya	741,774	360,882	380,892	193,700	3.4	75,884	103,808
Lop Buri	765,133	387,828	377,305	198,700	3.4	31,432	41,467
Saraburi	614,267	307,532	306,735	144,900	3.5	61,929	115,539
Sing Buri	223,163	107,652	115,511	67,400	3.7	10,325	42,844
Ang Thong	289,442	140,059	149,383	74,800	3.7	13,141	48,134
Eastern Region	**4,241,974**	**2,121,611**	**2,120,363**	**1,040,800**	**3.5**	**568,556**	**144,230**
Chanthaburi	499,849	248,952	250,897	120,100	3.4	22,844	50,878
Chachoengsao	643,996	317,691	326,305	162,900	3.9	55,544	88,586
Chon Buri	1,104,231	555,195	549,036	258,400	3.0	206,859	210,009
Trat	224,341	113,368	110,973	53,700	3.3	14,803	74,762
Nakhon Nayok	250,007	124,132	125,875	70,200	3.6	9,393	36,834
Prachin Buri	448,476	224,813	223,663	109,600	3.7	25,699	52,446
Rayong	536,335	268,058	268,277	131,600	3.3	219,105	419,741
Sa Kaeo	534,739	269,402	265,337	134,300	3.8	14,310	34,398
Western Region	**3,623,638**	**1,794,357**	**1,829,281**	**886,200**	**3.6**	**192,338**	**55,734**
Ratchaburi	825,272	405,758	419,514	208,600	3.6	48,754	61,018
Kanchanaburi	792,294	401,457	390,837	169,800	3.7	43,578	62,612
Suphan Buri	859,905	419,042	440,863	230,100	3.5	40,148	46,413
Samutshongkhram	204,406	99,151	105,255	53,200	3.7	8,675	41,707
Phetchaburi	459,042	223,764	235,278	112,800	3.5	22,515	51,522
Prachuap Khiri khan	482,719	245,185	237,534	111,700	3.5	28,668	64,278
Northeastern Region	**21,493,681**	**10,746,373**	**10,747,308**	**5,205,799**	**3.9**	**530,277**	**25,367**
Nakon Ratchasima	2,565,685	1,272,823	1,292,862	680,300	3.7	94,324	36,070
Buri Ram	1,533,874	765,853	768,021	349,200	4.0	32,935	22,060
Surin	1,392,229	696,355	695,874	343,800	3.9	26,235	19,725
Si Sa Ket	1,451,435	725,240	726,195	352,800	3.9	27,533	19,569
Ubon Ratchathani	1,779,752	892,336	887,416	406,100	3.9	37,119	21,938
Yasothon	552,714	277,538	275,176	142,800	3.9	11,392	19,743
Chaiyaphum	1,130,913	563,573	567,340	287,000	3.5	28,450	25,934
Amnat Charoen	368,230	184,773	183,457	87,600	4.0	6,375	17,807
Nong Bua Lam Phu	496,519	250,760	245,759	111,700	4.1	8,075	16,719
Khon Kaen	1,756,995	876,223	880,772	453,500	3.7	70,261	39,428

Location	Population 2001			Household 2000		Gross Provincial Product (GPP) 1999	
	Total	Male	Female				
	Number 1	Number 2	Number 3	Number 4	Average size 5	Total mil. Baht/year 6	Per capita Baht/year 7
Udon Thani	1,526,600	766,735	759,865	349,300	4.3	37,921	25,902
Loei	632,320	321,305	311,015	152,000	4.1	15,305	26,118
Nong Khai	904,806	455,556	449,250	215,400	4.0	21,639	24,478
Maha Salakam	939,920	467,710	472,210	244,800	4.1	21,039	21,847
Roi Et	1,319,589	659,858	659,731	313,800	3.7	27,120	21,941
Kalasin	985,454	491,926	493,528	233,400	4.0	19,662	21,302
Sakhon Nakhon	1,101,608	550,123	551,485	246,400	4.1	22,554	21,728
Nakhon Phanom	719,111	359,115	359,996	167,100	4.0	13,629	19,867
Mukdahan	335,927	168,571	167,356	68,800	3.9	8,710	30,034
Northern Region	**12,124,425**	**6,020,928**	**6,103,497**	**3,182,200**	**3.4**	**425,066**	**37,905**
Chiang Mai	1,600,850	791,537	809,313	432,800	3.1	80,503	55,405
Lamphun	406,030	199,151	206,879	122,900	3.3	27,045	62,316
Lampang	801,260	398,240	403,020	225,200	3.4	32,060	41,368
Uttaradit	484,060	240,181	243,879	128,900	3.2	17,924	38,965
Phrae	486,502	239,588	246,914	153,100	3.4	12,946	25,334
Nan	487,206	246,320	240,886	125,800	3.4	12,404	28,127
Phayao	509,075	252,068	257,007	144,500	3.3	14,067	27,967
Chiang Rai	1,263,169	630,324	632,845	319,800	3.6	31,893	28,629
Mae Hong Son	236,993	122,726	114,267	47,200	3.6	5,568	32,184
Nakhon Sawan	1,128,855	555,646	573,209	310,300	3.3	41,583	37,631
Uthai Thani	333,909	164,830	169,079	89,100	3.5	10,702	34,634
Kamphaeng Phet	766,248	380,858	385,390	190,400	3.5	27,521	40,354
Tak	498,890	253,313	245,577	99,100	3.6	15,354	43,128
Sukhothai	624,064	304,778	319,286	169,700	3.5	18,398	31,130
Phitsanulok	869,566	431,474	438,092	224,700	3.6	32,314	40,191
Phichit	591,412	290,385	301,027	154,700	3.4	18,577	31,974
Phetchabun	1,036,336	519,509	516,827	244,000	3.7	26,208	28,425
Southern Region	**8,311,567**	**4,134,161**	**4,177,406**	**2,105,500**	**3.9**	**423,249**	**51,284**
Nakhon Si Thammarat	1,527,273	761,238	766,035	425,100	4.0	67,779	41,329
Krabi	371,814	187,513	184,301	82,400	3.9	18,864	57,338
Phangnga	237,514	120,248	117,266	69,700	3.9	15,528	62,868
Phuket	261,386	127,123	134,263	49,200	3.3	37,463	188,257
Surat Thani	907,612	452,523	455,089	228,700	3.6	48,404	54,880
Ranong	161,724	83,194	78,530	37,600	3.4	14,126	102,362
Chumphon	468,746	235,574	233,172	125,100	3.3	20,713	46,757
Songkhla	1,249,402	615,043	634,359	330,700	3.5	76,617	58,846
Satun	267,095	133,815	133,280	61,200	4.0	15,789	61,675
Trang	596,673	295,925	300,748	155,900	3.9	27,316	44,130
Phattalung	502,869	247,680	255,189	137,700	3.5	14,118	27,307
Pattani	618,268	305,065	313,203	144,200	4.4	31,229	50,862
Yala	451,190	225,891	225,299	103,600	4.2	16,204	39,523
Narathiwat	690,001	343,329	346,672	154,400	4.6	19,098	29,069

Table 1. Basic Data *(continued)*

Location	Total Land Area 1998 rai 8	Forest Area 1998 rai 9	Farm Holding Land 1998 rai 10	Unclassified Land 1998 rai 11	Pop. Density 1998 p.p. sq. km 12
Kingdom	**320,696,888**	**81,076,428**	**130,393,525**	**109,226,935**	**121**
Bangkok Metropolis	**978,263**	**1,094**	**143,904**	**833,265**	**3,658**
Bangkok Vicinity	**3,870,578**	**12,458**	**1,841,006**	**2,017,114**	**614**
Nakhon Pathom	1,355,204	0	751,078	604,126	365
Nonthaburi	388,939	0	189,167	199,772	1,421
Pathum Thani	953,660	0	536,937	416,723	445
Samut Prakan	627,558	1,857	230,483	395,218	1,008
Samut Sakon	545,217	10,601	133,341	401,275	499
Central Region	**10,370,922**	**151,711**	**6,334,005**	**3,885,206**	**180**
Chai Nat	1,543,591	3,713	1,165,728	374,150	142
Phra Nakhon Si Ayutthaya	1,597,900	0	1,092,641	505,259	290
Lop Buri	3,874,846	119,531	2,228,617	1,526,698	123
Saraburi	2,235,304	28,467	949,654	1,257,183	172
Sing Buri	514,049	0	433,675	80,374	271
Ang Thong	605,232	0	463,690	141,542	299
Eastern Region	**22,814,063**	**4,692,142**	**10,394,196**	**7,727,725**	**116**
Chanthaburi	3,961,250	1,166,962	1,545,822	1,248,466	79
Chachoengsao	3,344,375	724,219	1,788,757	831,399	120
Chon Buri	2,726,875	150,509	1,305,611	1,270,755	253
Trat	1,761,875	469,845	494,278	797,752	80
Nakhon Nayok	1,326,250	300,624	641,815	383,811	118
Prachin Buri	2,976,476	998,907	1,242,574	734,995	94
Rayong	2,220,000	131,064	1,273,862	815,074	151
Sa Kaeo	4,496,962	750,012	2,101,477	1,645,473	74
Western Region	**26,904,427**	**9,865,049**	**7,170,403**	**9,868,975**	**84**
Ratchaburi	3,247,789	816,640	1,127,565	1,303,584	159
Kanchanaburi	12,176,968	6,579,846	1,983,144	3,613,978	41
Suphan Buri	3,348,755	353,597	2,088,609	906,549	160
Samutshongkhram	260,442	7,156	112,232	141,054	491
Phetchaburi	3,890,711	1,340,466	664,130	1,886,115	74
Prachuap Khiri khan	3,979,762	767,344	1,194,723	2,017,695	76
Northeastern Region	**105,533,963**	**13,114,948**	**57,429,749**	**34,989,266**	**127**
Nakon Ratchasima	12,808,728	1,389,187	7,715,541	3,704,000	125
Buri Ram	6,451,178	327,657	3,803,346	2,320,175	149
Surin	5,077,535	168,906	3,535,333	1,373,296	171
Si Sa Ket	5,524,985	441,016	3,397,169	1,686,800	164
Ubon Ratchathani	9,840,526	1,548,360	4,776,985	3,515,181	113
Yasothon	2,601,040	230,626	1,627,928	742,486	133
Chaiyaphum	7,986,429	1,882,033	3,437,482	2,666,914	89
Amnat Charoen	1,975,785	646,562	1,319,964	9,259	116
Nong Bua Lam Phu	2,411,929	182,814	1,506,081	723,034	129
Khon Kaen	6,803,744	507,269	4,077,983	2,218,492	161

Location	Total Land Area 1998 rai 8	Forest Area 1998 rai 9	Farm Holding Land 1998 rai 10	Unclassified Land 1998 rai 11	Pop. Density 1998 p.p. sq. km 12
Udon Thani	7,331,439	1,154,075	3,696,675	2,480,689	130
Loei	7,140,382	1,805,667	2,279,037	3,055,678	55
Nong Khai	4,582,675	289,644	2,539,978	1,753,053	123
Maha Salakam	3,307,302	20,392	2,712,409	574,501	178
Roi Et	5,187,156	116,719	3,179,594	1,890,843	159
Kalasin	4,341,716	369,220	2,560,861	1,411,635	142
Sakhon Nakhon	6,003,602	850,938	2,924,574	2,228,090	115
Nakhon Phanom	3,445,418	351,875	1,440,619	1,652,924	130
Mukdahan	2,712,394	831,988	898,190	982,216	77
Northern Region	**106,027,680**	**45,660,825**	**28,274,892**	**32,091,963**	**71**
Chiang Mai	12,566,911	8,787,656	1,316,820	2,462,435	80
Lamphun	2,816,176	1,332,499	473,391	1,010,286	90
Lampang	7,833,726	4,896,650	984,526	1,952,550	64
Uttaradit	4,899,120	1,885,439	1,308,252	1,705,429	62
Phrae	4,086,624	1,506,769	613,520	1,966,335	74
Nan	7,170,045	2,995,238	776,777	3,398,030	42
Phayao	3,959,412	1,513,281	1,012,642	1,433,489	80
Chiang Rai	7,298,981	2,386,875	2,145,246	2,766,860	108
Mae Hong Son	7,925,787	5,479,650	246,060	2,200,077	19
Nakhon Sawan	5,998,548	413,902	4,034,458	1,550,188	118
Uthai Thani	4,206,404	1,614,805	1,329,812	1,261,787	50
Kamphaeng Phet	5,379,681	1,251,718	2,602,823	1,525,140	89
Tak	10,254,156	7,182,562	1,024,401	2,047,193	30
Sukhothai	4,122,557	1,385,156	1,901,328	836,073	95
Phitsanulok	6,759,909	1,493,781	2,519,007	2,747,121	80
Phichit	2,831,883	0	2,095,091	736,792	131
Phetchabun	7,917,760	1,534,844	3,890,738	2,492,178	82
Southern Region	**44,196,992**	**7,578,201**	**18,805,370**	**17,813,421**	**118**
Nakhon Si Thammarat	6,214,064	768,436	3,062,459	2,383,169	154
Krabi	2,942,820	199,376	1,229,245	1,514,199	79
Phangnga	2,606,809	714,062	831,651	1,061,096	57
Phuket	339,396	15,236	143,021	181,139	481
Surat Thani	8,057,168	1,881,587	2,623,957	3,551,624	70
Ranong	2,061,278	664,780	453,074	943,424	49
Chumphon	3,755,630	636,874	1,810,696	1,308,060	78
Songkhla	4,621,181	357,423	2,088,694	2,175,064	169
Satun	1,549,361	330,178	538,569	680,614	108
Trang	3,073,449	584,688	1,527,424	961,337	121
Phattalung	2,140,296	273,505	1,205,519	661,272	147
Pattani	1,212,722	27,346	742,287	443,089	319
Yala	2,825,674	696,897	1,185,198	943,579	100
Narathiwat	2,797,144	427,813	1,363,576	1,005,755	154

Table 2. Health

Location	Population Mid-year 2001	Life expectancy at birth 1996 (yrs)			Crude death rate 2001 per 1,000 pop.	Infant mortality rate 2001 per 1,000 live births	Maternal mortality rate 2001 per 100,000 live births	Under 5 1st degree malnutrition 1997 (%)	Sexually transmitted diseases 2001		
		Male	Female	Total					No. of patients examined	No. of STD cases	STD per 1,000 pop.
	1	2	3	4	5	6	7	8	9	10	11
Kingdom	**62,093,855**	**68.5**	**76.1**	**72.2**	**6.0**	**6.5**	**12.9**	**7.36**	**538,816**	**15,358**	**0.25**
Bangkok Metropolis	**5,703,292**	**69.6**	**77.9**	**73.8**	**6.8**	**7.3**	**10.0**	**4.01**	**39,900**	**5,800**	**1.02**
Bangkok Vicinity	**2,974,869**	**70.1**	**78.0**	**74.1**	**7.9**	**5.6**	**12.6**	**1.66**	**42,547**	**620**	**0.21**
Nakhon Pathom	786,527	66.5	75.9	71.2	6.7	5.7	9.6	2.04	18,201	195	0.25
Nonthaburi	871,843	77.2	82.4	79.8	6.6	5.2	10.6	1.60	1,437	11	0.01
Pathum Thani	667,060	67.9	75.3	71.6	5.8	3.7	27.1	1.91	1,220	6	0.01
Samut Prakan	1,003,765	72.8	78.9	75.9	5.5	8.3	15.7	1.02	12,809	346	0.34
Samut Sakon	432,201	69.1	77.7	73.4	6.9	5.1	0.0	1.79	8,880	62	0.14
Central Region	**2,975,959**	**69.3**	**76.0**	**72.6**	**7.2**	**8.0**	**11.0**	**3.26**	**28,561**	**539**	**0.18**
Chai Nat	350,988	71.0	77.7	74.4	6.6	9.7	0.0	4.08	1,774	6	0.02
Phra Nakhon Si Ayutthaya	737,893	67.8	74.0	71.0	7.1	7.1	0.0	2.98	7,875	191	0.26
Lop Buri	763,301	70.3	77.2	73.6	7.0	6.3	13.2	4.60	7,992	96	0.13
Saraburi	610,934	71.1	79.2	75.1	6.8	4.0	12.9	6.37	4,816	154	0.25
Sing Buri	223,420	65.5	69.6	67.7	9.5	7.9	0.0	3.70	5,040	78	0.35
Ang Thong	289,423	67.6	75.4	71.6	8.1	13.2	39.9	2.17	1,064	14	0.05
Eastern Region	**4,211,410**	**68.0**	**76.5**	**72.1**	**6.3**	**4.8**	**5.1**	**4.80**	**57,434**	**1,216**	**0.29**
Chanthaburi	496,642	66.6	74.8	70.4	7.2	3.8	15.0	5.28	10,614	44	0.09
Chachoengsao	641,874	70.9	79.0	74.9	6.2	3.3	0.0	2.59	4,214	46	0.07
Chon Buri	1,091,375	68.2	76.5	72.1	7.0	5.3	13.8	1.89	29,366	858	0.79
Trat	224,133	67.7	77.6	72.3	5.8	6.5	0.0	4.41	832	18	0.08
Nakhon Nayok	248,445	64.7	73.7	69.1	6.3	3.2	0.0	4.25	1,162	4	0.02
Prachin Buri	446,334	69.9	77.5	73.7	6.3	6.0	0.0	7.54	1,700	39	0.09
Rayong	529,927	64.3	73.8	68.7	6.3	5.7	12.0	4.30	8,076	186	0.35
Sa Kaeo	532,680	69.6	77.6	73.4	4.5	4.4	0.0	9.84	1,470	21	0.04
Western Region	**3,615,141**	**67.2**	**75.2**	**71.1**	**6.2**	**6.8**	**6.4**	**3.24**	**25,870**	**479**	**0.13**
Ratchaburi	823,438	65.5	74.1	69.7	6.8	7.6	26.7	0.00	4,463	135	0.16
Kanchanaburi	789,148	68.5	76.5	72.3	5.0	5.6	0.0	4.72	2,780	77	0.10
Suphan Buri	859,054	67.9	75.2	71.5	6.7	5.4	11.7	5.61	3,017	96	0.11
Samutshongkhram	204,70	63.2	69.8	66.6	6.7	7.9	0.0	3.53	1,771	128	0.63
Phetchaburi	457,968	65.2	74.0	69.6	7.0	6.5	0.0	2.64	1,512	9	0.02
Prachuap Khiri khan	480,832	70.9	79.3	74.9	5.5	8.0	0.0	2.26	12,327	34	0.07
Northeastern Region	**21,449,224**	**69.2**	**75.7**	**72.4**	**5.1**	**6.2**	**9.8**	**10.26**	**105,358**	**2,774**	**0.13**
Nakon Ratchasima	2,555,998	69.4	76.6	72.9	5.0	7.4	10.2	10.58	10,556	960	0.38
Buri Ram	1,531,041	70.6	77.2	73.9	4.3	4.1	5.3	13.38	938	31	0.02
Surin	1,387,693	70.2	76.3	73.2	4.7	4.5	0.0	9.95	3,256	50	0.04
Si Sa Ket	1,447,601	68.8	76.2	72.4	4.8	8.2	18.4	8.33	9,189	37	0.03
Ubon Ratchathani	1,773,549	69.3	75.5	72.3	5.1	6.2	12.9	12.32	6,341	166	0.09
Yasothon	553,349	68.4	73.0	70.7	5.8	5.7	0.0	9.22	4,795	7	0.01
Chaiyaphum	1,129,940	73.0	79.1	76.0	4.9	4.2	46.9	7.24	1,691	136	0.12
Amnat Charoen	367,563	68.3	74.4	71.2	5.1	3.9	0.0	13.27	93	0	0.00
Nong Bua Lam Phu	495,405	68.2	76.9	72.3	4.9	5.7	0.0	0.82	437	66	0.13
Khon Kaen	1,752,607	69.1	75.8	72.4	6.0	9.3	14.3	13.89	16,142	739	0.42

Location	Population Mid-year 2001 1	Life expectancy at birth 1996 (yrs) Male 2	Female 3	Total 4	Crude death rate 2001 per 1,000 pop. 5	Infant mortality rate 2001 per 1,000 live births 6	Maternal mortality rate 2001 per 100,000 live births 7	Under 5 1st degree malnutrition 1997 (%) 8	Sexually transmitted diseases 2001 No. of patients examined 9	No. of STD cases 10	STD per 1,000 pop. 11
Udon Thani	1,523,229	69.1	75.4	72.1	5.1	5.4	10.7	9.22	24,486	285	0.19
Loei	631,864	72.6	78.2	75.2	5.1	4.0	0.0	10.96	4,361	23	0.04
Nong Khai	904,346	69.6	75.7	72.5	4.8	7.2	0.0	7.00	931	47	0.05
Maha Salakam	938,891	68.6	74.2	71.4	5.4	2.5	0.0	8.66	4,101	39	0.04
Roi Et	1,318,689	68.2	74.4	71.3	5.7	7.1	7.9	10.18	4,044	25	0.02
Kalasin	984,703	67.1	73.8	70.3	5.2	3.9	0.0	10.94	3,009	37	0.04
Sakhon Nakhon	1,099,617	66.8	72.9	69.8	5.4	7.2	14.6	10.92	9,880	84	0.08
Nakhon Phanom	718,013	67.5	73.2	70.3	5.3	8.4	11.4	9.66	963	20	0.03
Mukdahan	335,126	68.6	74.5	71.5	5.0	3.8	0.0	11.21	145	22	0.07
Northern Region	**12,112,820**	**64.3**	**73.1**	**68.5**	**7.0**	**7.1**	**20.2**	**7.92**	**130,629**	**1,865**	**0.15**
Chiang Mai	1,595,589	57.7	69.0	62.9	9.4	8.1	33.1	10.21	29,797	444	0.28
Lamphun	406,079	59.5	71.4	65.1	8.8	12.4	0.0	8.25	3,532	36	0.09
Lampang	802,35	64.9	74.1	69.2	8.4	6.4	16.4	6.55	18,243	59	0.07
Uttaradit	483,981	69.9	75.8	72.8	7.0	5.9	22.0	5.99	1,995	16	0.03
Phrae	488,046	61.8	68.8	65.2	9.2	4.0	26.9	8.28	4,175	45	0.09
Nan	486,650	68.9	74.5	71.6	6.3	8.3	0.0	15.24	1,987	6	0.01
Phayao	510,346	56.5	67.8	61.7	9.0	3.8	47.7	10.36	6,025	18	0.04
Chiang Rai	1,261,579	56.5	67.7	61.6	8.3	5.9	41.5	0.01	22,602	90	0.07
Mae Hong Son	235,610	70.6	76.8	73.4	4.3	7.4	49.1	15.87	6,424	14	0.06
Nakhon Sawan	1,127,071	69.5	76.6	73.0	6.2	8.4	9.1	7.23	8,253	613	0.54
Uthai Thani	333,518	69.2	76.0	72.6	5.8	4.0	0.0	5.25	253	15	0.04
Kamphaeng Phet	766,002	71.1	77.5	74.2	4.8	3.9	14.3	8.93	3,692	27	0.04
Tak	494,473	72.0	77.6	74.6	5.2	6.6	39.6	13.17	2,299	171	0.35
Sukhothai	624,699	66.6	73.4	70.0	5.9	2.9	18.3	7.17	2,441	57	0.09
Phitsanulok	867,782	67.5	75.8	71.5	6.1	14.8	0.0	9.45	10,111	85	0.10
Phichit	592,612	66.0	73.7	69.8	6.1	7.4	0.0	10.08	6,214	65	0.11
Phetchabun	1,036,432	69.7	77.3	73.4	5.0	6.1	0.0	5.32	2,586	104	0.10
Southern Region	**8,264,613**	**72.3**	**80.6**	**76.3**	**5.0**	**6.6**	**19.9**	**6.55**	**108,517**	**2,065**	**0.25**
Nakhon Si Thammarat	1,525,916	74.8	82.6	78.7	4.4	4.6	5.3	6.08	17,627	276	0.18
Krabi	368,65	73.9	80.3	77.0	4.4	7.3	16.6	4.32	4,077	30	0.08
Phangnga	236,366	70.1	79.8	74.6	4.8	5.9	31.2	6.37	1,036	15	0.06
Phuket	255,992	67.7	76.3	71.8	6.1	6.9	0.0	4.00	12,535	195	0.76
Surat Thani	900,573	70.1	79.1	74.4	4.9	3.6	7.4	4.45	13,144	200	0.22
Ranong	161,178	73.9	80.8	77.1	3.6	2.8	46.3	4.36	395	21	0.13
Chumphon	466,070	71.8	82.4	76.9	5.1	3.5	15.9	5.52	7,007	106	0.23
Songkhla	1,241,002	69.4	77.6	73.4	5.7	7.0	9.7	6.66	28,702	832	0.67
Satun	265,306	73.2	81.2	77.0	4.3	4.9	89.6	7.68	786	81	0.31
Trang	593,762	69.0	78.3	73.5	5.1	8.7	0.0	5.61	4,410	29	0.05
Phattalung	503,277	72.0	80.7	76.4	4.5	3.8	17.9	3.55	4,177	77	0.15
Pattani	615,198	73.8	81.6	77.6	5.5	10.4	48.5	6.53	3,270	85	0.14
Yala	446,746	73.7	79.7	76.6	4.8	9.2	29.8	11.19	4,734	81	0.18
Narathiwat	684,568	75.2	82.7	78.7	5.1	8.2	30.5	10.44	6,617	37	0.05

Table 2. Health *(continued)*

Location	Total AIDS patients 1984-2002	New AIDS patients Jan-Sep 2002	AIDS incidence per 100,000 pop.	Mental illness 2001 per 1,000 pop.	Unhealthy behaviour 2001 (%)			Persons per physician 2000	Persons per dentist 2000	Persons per pharmacist 2000	Persons per nurse 2000	Persons per hospital bed 2000
					Male	Female	Total					
	12	13	14	15	16	17	18	19	20	21	22	23
Kingdom	**201,268**	**5,088**	**8.19**	**22**	**60.5**	**10.2**	**35.2**	**3,433**	**14,941**	**9,692**	**616**	**454**
Bangkok Metropolis	**21,280**	**766**	**13.43**	**6**	**51.7**	**6.7**	**28.0**	**793**	**3,529**	**2,551**	**271**	**202**
Bangkok Vicinity	**14,094**	**398**	**13.38**	**21**	**63.0**	**6.1**	**34.4**	**3,245**	**13,541**	**11,881**	**610**	**273**
Nakhon Pathom	3,486	129	16.40	5	68.7	9.4	39.2	3,948	22,220	15,872	666	551
Nonthaburi	3,134	0	0.00	49	63.8	4.9	34.6	3,044	10,485	11,324	448	165
Pathum Thani	2,967	167	25.04	17	65.6	7.3	36.4	2,261	10,068	9,763	581	255
Samut Prakan	2,777	48	4.78	15	59.2	5.9	31.7	3,915	14,094	12,032	899	299
Samut Sakon	1,730	54	12.49	10	48.8	2.3	24.8	3,486	19,331	11,191	554	382
Central Region	**8,417**	**314**	**10.55**	**29**	**58.3**	**6.4**	**32.3**	**4,249**	**18,153**	**11,035**	**533**	**431**
Chai Nat	640	9	2.56	30	59.1	15.3	36.8	5,760	25,095	13,513	562	483
Phra Nakhon Si Ayutthaya	2,615	128	17.35	39	69.4	16.2	43.3	4,520	15,254	10,612	681	601
Lop Buri	1,708	77	10.09	8	60.7	11.2	35.9	4,848	19,517	14,096	569	428
Saraburi	2,113	41	6.71	39	56.3	2.1	29.1	2,963	16,414	9,640	437	314
Sing Buri	682	28	12.53	24	56.0	2.1	29.5	2,665	13,170	6,051	301	259
Ang Thong	659	31	10.71	45	52.2	2.0	27.1	7,395	27,993	13,514	675	665
Eastern Region	**19,849**	**752**	**17.86**	**9**	**62.4**	**9.8**	**36.3**	**3,084**	**16,983**	**10,249**	**484**	**412**
Chanthaburi	3,396	196	39.47	4	55.0	10.0	33.4	2,320	17,562	8,627	419	356
Chachoengsao	1,534	0	0.00	5	50.7	4.5	27.4	4,068	24,566	13,306	794	584
Chon Buri	4,332	171	15.67	5	62.8	9.7	36.6	1,876	10,280	8,553	317	286
Trat	1,747	82	36.59	14	67.3	16.1	41.7	4,073	12,444	9,333	386	394
Nakhon Nayok	873	5	2.01	19	65.5	8.1	37.2	4,713	18,851	10,211	397	441
Prachin Buri	912	14	3.14	5	63.3	4.5	34.1	4,471	19,247	8,854	607	462
Rayong	6,184	272	51.33	11	67.6	26.4	47.4	3,242	25,938	9,788	566	411
Sa Kaeo	871	12	2.25	18	49.7	4.1	27.0	12,066	40,837	21,235	1,314	985
Western Region	**14,241**	**457**	**12.64**	**19**	**60.8**	**10.3**	**35.4**	**4,373**	**21,046**	**11,647**	**566**	**432**
Ratchaburi	2,932	48	5.83	29	62.1	10.3	35.5	3,129	16,073	9,210	396	283
Kanchanaburi	2,775	108	13.69	16	53.0	10.8	32.0	4,712	23,704	15,043	702	523
Suphan Buri	2,596	102	11.87	24	57.9	5.7	31.8	6,444	27,646	14,776	761	526
Samutshongkhram	1,023	30	14.66	6	47.2	2.5	23.7	4,889	15,796	7,898	400	379
Phetchaburi	2,977	79	17.25	11	57.5	6.4	31.5	3,193	19,023	9,925	537	474
Prachuap Khiri khan	1,938	90	18.72	9	70.5	15.5	43.2	6,209	25,161	12,581	698	600
Northeastern Region	**33,487**	**657**	**3.06**	**30**	**59.6**	**10.6**	**35.2**	**8,311**	**35,476**	**21,740**	**1,109**	**766**
Nakon Ratchasima	2,782	16	0.63	39	66.9	7.0	37.1	7,778	39,131	23,995	1,111	744
Buri Ram	2,535	29	1.89	43	65.7	9.3	37.2	11,725	40,114	21,776	1,331	976
Surin	2,217	40	2.88	45	50.4	3.5	28.0	13,164	53,161	28,796	1,444	773
Si Sa Ket	1,460	60	4.14	27	54.2	6.5	29.5	19,007	60,190	36,114	1,850	1,063
Ubon Ratchathani	3,076	2	0.11	55	48.6	3.2	26.2	7,504	30,938	20,270	892	600
Yasothon	888	17	3.07	17	57.2	18.8	38.7	10,872	34,655	18,482	1,034	785
Chaiyaphum	1,466	21	1.86	27	62.2	14.8	39.2	13,759	36,395	20,514	1,259	1,114
Amnat Charoen	629	6	1.63	39	55.8	2.4	28.7	12,635	24,428	15,267	1,032	944
Nong Bua Lam Phu	707	47	9.49	7	51.8	2.7	27.1	13,731	38,024	23,539	1,811	414
Khon Kaen	3,941	38	2.17	26	53.1	7.2	30.5	2,928	26,484	20,092	748	507

Location	Total AIDS patients 1984-2002	New AIDS patients Jan-Sep 2002	AIDS incidence per 100,000 pop.	Mental illness 2001 per 1,000 pop.	Unhealthy behaviour 2001 (%)			Persons per physician 2000	Persons per dentist 2000	Persons per pharmacist 2000	Persons per nurse 2000	Persons per hospital bed 2000
					Male	Female	Total					
	12	13	14	15	16	17	18	19	20	21	22	23
Udon Thani	3,270	183	12.01	27	56.4	2.8	29.4	6,180	29,236	17,474	1,027	726
Loei	1,403	43	6.81	35	48.0	3.4	24.5	8,324	22,594	13,460	848	729
Nong Khai	935	11	1.22	20	50.6	2.6	27.0	9,909	45,085	24,370	1,144	952
Maha Salakam	1,650	25	2.66	15	71.2	31.1	51.8	11,049	44,721	24,080	1,213	943
Roi Et	2,495	50	3.79	5	57.3	9.0	32.7	9,701	36,647	29,984	1,342	959
Kalasin	1,365	34	3.45	13	52.3	9.2	31.0	14,261	42,783	22,364	1,232	902
Sakhon Nakhon	812	14	1.27	6	57.3	5.4	31.4	10,244	31,318	22,370	1,075	736
Nakhon Phanom	1,265	3	0.42	63	74.7	8.0	41.7	13,015	28,634	16,269	1,018	915
Mukdahan	591	18	5.37	13	71.5	39.2	55.8	8,139	27,807	13,347	748	719
Northern Region	**33,487**	**657**	**5.42**	**23**	**62.1**	**13.6**	**37.8**	**4,501**	**17,037**	**11,012**	**632**	**493**
Chiang Mai	16,051	207	12.97	17	58.0	8.2	32.3	2,082	7,789	8,407	444	257
Lamphun	3,990	75	18.47	15	60.5	11.2	36.2	5,647	19,362	11,959	688	588
Lampang	7,700	98	24.68	25	59.0	10.9	34.1	4,193	15,786	8,386	432	423
Uttaradit	581	26	5.37	8	46.4	3.2	24.6	6,292	18,633	12,749	648	485
Phrae	2,153	26	5.33	30	58.6	11.7	35.2	5,710	19,644	9,266	451	670
Nan	2,226	69	14.18	21	66.8	14.4	41.2	8,268	21,209	10,162	647	562
Phayao	8,561	49	9.60	4	68.2	24.7	47.0	7,334	25,669	13,510	581	610
Chiang Rai	15,093	197	15.62	8	53.8	7.5	29.8	7,652	30,060	16,834	929	611
Mae Hong Son	1,102	29	12.31	23	51.0	3.3	25.7	4,488	16,668	10,607	533	491
Nakhon Sawan	2,412	86	7.63	75	69.6	17.9	43.8	4,264	27,458	15,636	809	583
Uthai Thani	537	7	2.10	32	50.7	6.7	29.3	6,652	20,787	11,878	608	545
Kamphaeng Phet	2,079	62	8.09	21	56.5	5.9	31.7	12,980	31,909	24,704	1,247	981
Tak	950	16	3.24	28	68.5	22.0	45.1	6,498	24,368	10,370	612	494
Sukhothai	1,723	75	12.01	48	51.1	2.8	27.0	4,540	17,402	9,788	501	546
Phitsanulok	1,959	58	6.68	9	73.2	27.8	50.5	2,350	9,323	5,223	575	373
Phichit	1,486	54	9.11	10	66.5	10.2	38.2	4,621	17,533	10,645	590	611
Phetchabun	2,248	55	5.31	9	55.2	4.7	29.0	14,629	49,459	24,154	1,400	967
Southern Region	**70,851**	**1,289**	**15.60**	**17**	**64.2**	**11.3**	**37.6**	**5,194**	**22,549**	**10,575**	**571**	**494**
Nakhon Si Thammarat	1,737	92	6.03	12	72.3	7.4	40.4	8,815	33,890	20,891	957	721
Krabi	1,062	35	9.49	4	63.8	12.8	37.4	10,341	21,291	12,927	757	733
Phangnga	486	5	2.12	28	69.3	19.6	45.1	4,258	13,776	7,097	373	413
Phuket	1,804	13	5.08	49	73.0	29.3	51.6	2,103	13,669	7,237	396	298
Surat Thani	2,030	37	4.11	41	61.7	2.5	31.8	3,561	17,456	5,975	357	334
Ranong	1,861	36	22.34	32	66.5	13.8	40.2	4,831	15,941	8,856	408	430
Chumphon	1,056	21	4.51	15	64.7	9.1	37.0	5,689	27,109	9,805	663	400
Songkhla	3,475	25	2.01	17	47.6	3.5	24.7	3,086	18,062	9,448	469	352
Satun	556	3	1.13	15	56.8	4.3	29.6	8,446	20,140	11,384	721	885
Trang	1,678	71	11.96	4	66.5	13.6	40.0	5,262	21,050	8,930	661	510
Phattalung	604	0	0.00	28	73.3	16.0	45.3	7,087	25,159	12,579	668	690
Pattani	1,060	78	12.68	6	67.1	11.0	39.1	8,475	26,531	15,646	810	834
Yala	472	6	1.34	15	56.2	15.1	35.2	4,880	24,400	8,784	397	357
Narathiwat	1,168	33	4.82	5	73.1	17.1	46.1	11,645	37,522	15,350	704	923

Table 3. Education

Location	Mean years of schooling 2001			No formal education 2001				Education attainment 2001					Enrolment rate 2000		
	Male	Female	Average	Male	Female	Total		Primary	Lower secondary	Upper secondary	Vocational secondary	Tertiary	Lower secondary (%)		
	Years 1	Years 2	Years 3	Number 4	Number 5	Number 6	% 7	% 8	% 9	% 10	% 11	% 12	Male 13	Female 14	Total 15
Kingdom	**7.5**	**7.0**	**7.3**	**854,161**	**1,723,561**	**2,577,722**	**5.5**	**56.7**	**14.2**	**8.0**	**3.7**	**11.9**	**73.4**	**74.1**	**73.8**
Bangkok Metropolis	**9.8**	**9.4**	**9.6**	**94,767**	**157,214**	**251,982**	**4.0**	**36.2**	**15.5**	**9.0**	**7.1**	**28.3**	**67.3**	**59.6**	**63.4**
Bangkok Vicinity	**8.8**	**8.1**	**8.4**	**39,718**	**86,023**	**125,742**	**4.2**	**45.9**	**16.1**	**9.1**	**6.2**	**18.5**	**86.6**	**86.4**	**86.5**
Nakhon Pathom	7.4	6.9	7.1	12,370	27,862	40,232	5.9	58.1	13.2	7.6	3.7	11.4	88.5	79.1	83.7
Nonthaburi	10.6	9.9	10.3	3,470	14,356	17,825	2.6	31.9	14.4	9.6	8.6	32.7	77.8	80.3	79.0
Pathum Thani	9.1	8.5	8.8	2,469	8,513	10,982	2.4	42.5	17.8	11.0	6.7	19.4	100.0	101.3	100.6
Samut Prakan	8.7	8.1	8.4	14,174	22,658	36,832	4.3	45.1	18.7	9.6	6.5	15.7	90.1	90.9	90.5
Samut Sakon	7.7	6.8	7.2	7,236	12,635	19,871	5.7	56.1	16.6	6.8	4.5	10.2	72.9	82.7	77.5
Central Region	**7.6**	**6.6**	**7.1**	**19,881**	**89,263**	**109,144**	**4.8**	**56.8**	**15.5**	**7.7**	**5.0**	**10.2**	**83.6**	**80.8**	**82.3**
Chai Nat	6.9	6.1	6.4	3,896	14,944	18,840	6.4	63.0	12.5	6.5	3.6	8.0	63.0	67.1	65.0
Phra Nakhon Si Ayutthaya	7.8	6.7	7.2	3,619	21,803	25,422	4.5	54.5	17.4	8.7	5.5	9.4	86.4	81.3	83.9
Lop Buri	7.3	6.4	6.9	5,760	28,066	33,826	5.8	57.8	15.8	6.6	4.4	9.7	83.4	83.0	83.2
Saraburi	8.3	7.3	7.8	3,887	10,312	14,199	3.5	50.6	16.0	10.2	5.9	13.7	90.7	80.3	85.6
Sing Buri	7.4	6.4	6.9	1,108	7,713	8,821	4.6	60.6	13.9	6.7	4.4	9.8	89.2	88.1	88.7
Ang Thong	7.4	6.6	7.0	1,612	6,424	8,035	3.8	59.7	13.8	6.4	6.4	9.9	85.7	87.2	86.4
Eastern Region	**7.5**	**6.8**	**7.2**	**45,622**	**112,002**	**157,624**	**5.1**	**56.8**	**15.8**	**7.8**	**4.4**	**10.1**	**87.5**	**89.8**	**88.6**
Chanthaburi	7.2	6.8	7.0	6,220	9,476	15,697	4.4	59.3	17.3	6.9	2.6	9.5	88.4	94.5	91.4
Chachoengsao	7.5	6.4	6.9	8,419	21,984	30,403	6.2	56.4	16.3	7.4	4.8	8.8	87.5	88.7	88.1
Chon Buri	8.2	7.5	7.8	7,700	23,682	31,382	3.9	50.2	18.2	9.0	6.1	12.6	103.3	101.3	102.3
Trat	6.6	5.9	6.3	4,755	9,236	13,991	9.4	60.9	11.9	8.0	3.7	6.1	74.6	81.6	78.0
Nakhon Nayok	7.0	6.1	6.5	3,421	8,100	11,521	5.8	64.7	11.1	7.1	3.7	7.7	79.1	84.8	81.7
Prachin Buri	7.3	6.4	6.9	4,379	14,759	19,138	6.1	58.0	15.7	7.5	3.7	9.0	70.7	73.0	71.8
Rayong	8.1	7.4	7.8	4,164	8,040	12,204	3.0	55.2	13.7	8.4	5.4	14.4	84.6	85.0	84.8
Sa Kaeo	6.6	6.2	6.4	6,564	16,724	23,288	6.4	64.1	15.0	6.8	1.6	6.1	87.9	94.8	91.3
Western Region	**7.0**	**6.4**	**6.7**	**51,833**	**135,731**	**187,563**	**7.1**	**60.2**	**13.0**	**7.0**	**3.5**	**9.2**	**77.1**	**77.0**	**77.1**
Ratchaburi	6.9	6.4	6.7	11,062	30,894	41,956	6.7	60.8	13.8	5.6	3.9	9.1	77.1	77.4	77.2
Kanchanaburi	6.8	6.4	6.6	15,741	37,160	52,901	10.3	56.6	12.4	7.9	2.9	9.9	74.0	73.3	73.7
Suphan Buri	6.7	6.0	6.4	15,180	41,053	56,233	8.3	63.4	11.1	6.4	2.9	7.9	76.2	75.5	75.9
Samutshongkhram	6.6	6.5	6.6	3,776	6,504	10,279	6.2	63.1	11.2	7.6	3.4	8.4	68.7	73.4	71.0
Phetchaburi	7.4	6.9	7.1	3,285	7,844	11,129	3.3	60.1	13.6	8.2	3.6	11.1	85.1	86.8	85.9
Prachuap Khiri khan	7.6	6.8	7.2	2,789	12,277	15,065	4.6	57.1	16.5	7.5	4.5	9.7	80.4	77.3	78.9
Northeastern Region	**6.9**	**6.5**	**6.7**	**141,823**	**285,670**	**427,493**	**2.8**	**66.8**	**13.4**	**7.9**	**2.0**	**7.0**	**70.0**	**71.2**	**70.6**
Nakon Ratchasima	7.1	6.6	6.8	17,381	58,318	75,699	3.9	62.3	14.8	9.3	2.6	7.2	66.4	72.3	69.2
Buri Ram	6.5	6.2	6.4	22,278	31,984	54,263	5.1	66.8	12.1	8.5	1.9	5.6	67.2	68.8	68.0
Surin	6.5	5.9	6.2	11,856	31,774	43,629	4.6	68.5	12.1	7.8	0.9	6.1	76.3	76.5	76.4
Si Sa Ket	6.6	6.1	6.4	12,374	28,712	41,086	4.1	69.5	12.1	7.5	1.1	5.8	67.0	75.6	71.1
Ubon Ratchathani	7.0	6.5	6.8	8,735	14,296	23,031	1.9	68.2	12.7	7.8	2.0	7.4	69.0	67.3	68.2
Yasothon	7.2	6.8	7.0	3,048	2,021	5,069	1.2	66.9	12.3	8.1	2.5	9.0	61.0	77.3	68.3
Chaiyaphum	6.7	6.3	6.5	3,113	15,002	18,116	2.2	70.7	13.1	6.5	2.3	5.3	70.4	74.7	72.5
Amnat Charoen	6.6	6.3	6.4	2,200	1,665	3,864	1.5	73.1	12.8	6.5	1.2	4.9	70.2	72.3	71.2
Nong Bua Lam Phu	7.0	6.4	6.7	3,084	6,278	9,362	2.8	68.2	13.6	8.2	0.9	6.4	66.7	67.3	67.0
Khon Kaen	7.3	6.9	7.1	7,803	14,021	21,825	1.6	63.5	14.3	8.5	3.2	8.8	83.5	80.1	81.8

Location	Mean years of schooling 2001			No formal education 2001				Education attainment 2001					Enrolment rate 2000		
	Male	Female	Average	Male	Female	Total		Primary	Lower secondary	Upper secondary	Vocational secondary	Tertiary	Lower secondary (%)		
	Years 1	Years 2	Years 3	Number 4	Number 5	Number 6	% 7	% 8	% 9	% 10	% 11	% 12	Male 13	Female 14	Total 15
Udon Thani	7.0	6.7	6.9	9,773	15,774	25,547	2.4	66.9	14.8	6.5	2.1	7.3	81.7	73.3	77.4
Loei	6.9	6.5	6.7	11,526	13,573	25,099	5.7	62.1	15.2	8.5	3.0	5.4	83.4	76.1	79.7
Nong Khai	6.8	6.5	6.6	9,085	9,983	19,067	3.1	67.4	14.4	7.9	2.6	4.7	67.8	64.5	66.2
Maha Salakam	7.4	6.8	7.1	2,315	5,406	7,720	1.1	67.0	11.8	8.1	1.5	10.4	74.6	74.3	74.4
Roi Et	7.0	6.5	6.8	1,535	6,791	8,326	0.9	69.6	13.1	7.1	1.7	7.6	38.9	35.2	37.1
Kalasin	7.0	6.6	6.8	2,076	3,114	5,190	0.8	69.5	13.3	7.9	2.7	5.9	76.3	88.4	82.1
Sakhon Nakhon	7.0	6.6	6.8	2,780	6,951	9,732	1.3	70.4	12.2	6.9	1.9	7.3	68.9	68.0	68.4
Nakhon Phanom	7.1	6.6	6.9	5,983	14,671	20,654	4.2	63.6	14.1	9.1	1.0	7.9	65.6	67.3	66.4
Mukdahan	7.3	6.8	7.0	4,879	5,335	10,214	5.1	58.8	16.5	8.4	1.9	9.5	83.5	88.3	85.9
Northern Region	**6.7**	**6.1**	**6.4**	**306,485**	**562,390**	**868,875**	**10.0**	**58.9**	**12.5**	**7.1**	**2.8**	**8.7**	**74.9**	**75.6**	**75.2**
Chiang Mai	6.8	6.6	6.7	57,898	80,742	138,640	11.7	52.1	13.9	7.5	3.1	11.7	89.0	88.0	88.5
Lamphun	6.6	6.4	6.5	15,782	21,036	36,818	10.4	55.8	13.2	8.2	3.0	9.4	99.2	95.5	97.4
Lampang	6.9	6.2	6.6	16,735	43,074	59,809	9.6	56.7	13.0	6.7	3.0	10.9	88.9	93.6	91.1
Uttaradit	7.1	6.6	6.9	4,430	9,186	13,616	3.8	64.9	12.1	7.0	4.0	8.1	71.3	73.8	72.5
Phrae	7.0	6.3	6.6	10,392	17,049	27,442	6.6	61.5	11.6	7.7	3.8	8.7	81.3	81.6	81.5
Nan	6.2	5.3	5.8	24,294	38,489	62,783	18.8	52.5	10.8	8.4	2.1	7.4	99.0	94.0	96.6
Phayao	6.4	5.8	6.2	19,828	27,570	47,398	12.0	58.7	11.3	9.9	1.5	6.7	86.7	82.6	84.6
Chiang Rai	6.2	5.4	5.8	59,150	95,763	154,913	17.8	54.1	10.6	6.5	2.9	8.2	77.4	80.3	78.8
Mae Hong Son	4.9	4.0	4.5	22,006	24,981	46,987	37.5	41.4	8.6	5.8	1.1	5.4	77.9	81.9	79.9
Nakhon Sawan	7.1	6.3	6.7	9,314	47,052	56,366	6.5	59.5	13.7	7.3	2.6	10.5	64.7	61.8	63.3
Uthai Thani	6.9	5.9	6.4	4,146	9,471	13,616	5.8	65.5	11.7	6.3	2.7	8.0	71.9	75.3	73.5
Kamphaeng Phet	6.4	5.6	6.0	13,346	34,703	48,049	9.6	62.3	15.2	3.6	2.9	6.3	60.7	63.6	62.1
Tak	6.2	5.4	5.8	17,615	22,652	40,267	15.4	55.9	12.6	6.4	2.7	6.9	79.1	83.2	81.1
Sukhothai	6.4	5.9	6.1	4,264	12,760	17,025	3.8	72.6	9.9	5.6	2.8	5.3	64.5	66.2	65.3
Phitsanulok	7.0	6.6	6.8	7,357	20,524	27,880	4.6	62.0	13.0	7.9	3.0	9.5	71.0	71.8	71.4
Phichit	6.9	6.1	6.5	6,380	28,335	34,715	7.8	61.0	12.8	8.0	2.7	7.7	59.2	59.3	59.2
Phetchabun	6.6	6.3	6.5	13,549	29,002	42,551	6.2	64.1	12.7	7.7	1.8	7.6	63.6	66.7	65.1
Southern Region	**7.4**	**6.9**	**7.1**	**154,031**	**295,268**	**449,300**	**7.7**	**53.2**	**15.5**	**8.8**	**4.1**	**10.7**	**70.1**	**77.1**	**73.5**
Nakhon Si Thammarat	7.6	7.1	7.4	13,198	40,080	53,277	4.7	54.0	15.8	8.8	4.9	11.9	67.5	73.0	70.2
Krabi	7.1	6.7	6.9	3,984	10,349	14,333	6.5	57.4	17.3	7.2	4.5	7.1	73.1	87.5	79.7
Phangnga	6.7	6.4	6.6	7,548	7,535	15,083	8.5	61.5	14.3	6.1	2.6	7.0	68.5	71.1	69.8
Phuket	8.4	8.5	8.4	2,711	4,341	7,052	4.7	42.5	19.6	9.4	6.5	17.3	82.9	85.4	84.1
Surat Thani	7.5	7.0	7.2	5,804	19,889	25,694	4.0	55.3	18.0	10.0	4.5	8.2	70.2	78.5	74.2
Ranong	7.6	7.3	7.4	3,560	3,316	6,876	7.2	49.9	16.8	12.3	4.3	9.5	80.3	74.4	77.3
Chumphon	7.5	6.8	7.2	2,166	7,790	9,957	3.1	57.2	17.6	9.9	4.1	8.1	70.1	76.4	73.1
Songkhla	8.0	7.5	7.7	19,950	42,714	62,664	6.6	49.3	15.6	8.1	4.3	16.2	67.5	72.4	69.9
Satun	7.2	6.7	6.9	4,365	8,340	12,705	7.3	57.5	14.4	9.1	3.9	7.7	79.0	87.6	83.1
Trang	7.3	6.9	7.1	5,858	15,816	21,674	5.0	57.8	14.3	9.8	3.8	9.1	67.4	71.0	69.2
Phattalung	7.4	6.8	7.1	4,066	8,925	12,991	3.6	60.2	15.2	7.7	4.9	8.4	63.8	69.7	66.7
Pattani	6.6	6.0	6.3	28,581	46,283	74,864	17.5	49.8	12.6	7.5	1.9	10.7	76.0	83.2	79.6
Yala	7.1	6.7	6.9	18,257	22,400	40,657	14.1	46.7	13.6	9.2	5.0	11.2	93.6	107.5	100.4
Narathiwat	6.4	5.5	5.9	33,982	57,490	91,472	20.1	47.8	13.6	9.9	1.9	6.5	59.8	73.8	66.6

Table 3. Education *(continued)*

Location	Enrolment rate 2000 higher secondary (%)			Transition rate 2000		Quality of education (average score) 1997		Students per teacher 1999			Students per class room 1999			Population attending training 1999
	Male 16	Female 17	Total 18	Primary to Lower secondary 19	Lower secondary to Upper secondary & vocational 20	Lower secondary % 21	Upper secondary % 22	Lower secondary Number 23	Upper secondary Number 24	Vocational Number 25	Lower secondary Number 26	Upper secondary Number 27	Vocational Number 28	Per 1,000 pop. 29
Kingdom	**50.2**	**54.0**	**52.0**	**94.9**	**87.8**	**45.5**	**36.4**	**20**	**20**	**28**	**35**	**39**	**35**	**15**
Bangkok Metropolis	**66.4**	**50.6**	**58.2**	**98.5**	**116.8**	**49.6**	**43.3**	**26**	**26**	**35**	**39**	**40**	**44**	**11**
Bangkok Vicinity	**49.6**	**53.9**	**51.8**	**98.6**	**79.9**	**46.6**	**36.7**	**22**	**20**	**26**	**39**	**37**	**35**	**16**
Nakhon Pathom	58.8	66.9	62.8	96.8	111.5	49.0	38.4	18	15	19	37	32	31	19
Nonthaburi	41.0	55.8	48.5	108.1	72.3	47.1	37.9	19	15	16	38	39	38	24
Pathum Thani	60.2	64.5	62.3	102.2	81.8	41.2	33.7	21	20	24	37	37	29	16
Samut Prakan	45.6	45.9	45.7	101.8	65.2	47.1	36.1	23	22	30	41	39	31	9
Samut Sakon	42.0	34.9	38.3	79.2	72.9	48.5	37.2	26	23	32	40	37	35	8
Central Region	**59.9**	**63.3**	**61.5**	**97.8**	**96.3**	**44.0**	**37.1**	**17**	**18**	**23**	**33**	**35**	**32**	**15**
Chai Nat	42.1	46.9	44.4	93.5	85.0	41.8	33.0	15	19	31	30	35	35	8
Phra Nakhon Si Ayutthaya	58.0	60.3	59.1	94.8	90.1	46.7	39.7	18	14	23	32	34	33	23
Lop Buri	66.1	71.2	68.6	101.0	112.8	49.3	36.1	22	19	20	39	38	31	4
Saraburi	56.0	55.4	55.7	92.8	90.3	43.3	37.0	21	21	24	36	35	34	23
Sing Buri	71.2	78.0	74.4	107.0	97.0	40.8	39.9	14	18	20	27	34	24	17
Ang Thong	70.4	78.1	74.0	106.0	98.0	42.2	36.9	15	18	21	32	34	37	10
Eastern Region	**54.0**	**62.6**	**58.2**	**94.2**	**89.3**	**45.9**	**36.1**	**20**	**22**	**22**	**35**	**36**	**32**	**20**
Chanthaburi	48.1	62.7	55.2	87.3	93.9	44.6	38.5	21	23	18	35	38	31	13
Chachoengsao	47.9	55.5	51.6	96.6	83.3	42.4	36.5	19	18	19	34	33	34	35
Chon Buri	69.7	75.2	72.4	100.7	104.7	46.2	39.3	21	18	27	37	35	33	27
Trat	50.2	64.3	56.9	64.8	86.4	50.0	36.5	19	25	18	33	33	32	6
Nakhon Nayok	54.3	64.9	59.2	97.3	80.2	44.9	35.9	16	22	19	34	38	31	25
Prachin Buri	50.3	56.2	53.2	97.0	87.5	44.1	31.5	21	20	29	33	35	32	16
Rayong	48.0	55.0	51.4	105.4	91.6	48.4	38.7	22	21	19	37	37	33	14
Sa Kaeo	47.0	58.4	52.4	87.9	67.7	46.4	31.8	24	29	25	33	36	29	4
Western Region	**49.1**	**56.3**	**52.6**	**89.3**	**98.9**	**42.9**	**37.7**	**19**	**21**	**23**	**34**	**37**	**32**	**17**
Ratchaburi	52.2	60.7	56.4	90.8	89.9	39.8	37.8	19	22	23	37	38	34	22
Kanchanaburi	44.9	49.4	47.1	84.0	89.3	45.7	38.0	21	25	21	33	38	32	14
Suphan Buri	47.4	56.6	51.9	88.1	129.2	42.4	38.6	23	23	26	35	38	35	20
Samutshongkhram	53.0	54.9	53.9	91.8	98.5	42.2	37.1	16	17	22	34	35	30	19
Phetchaburi	53.9	69.7	61.6	95.3	103.9	42.7	37.6	18	19	19	34	36	34	17
Prachuap Khiri khan	46.4	46.6	46.5	91.7	75.1	44.4	36.9	19	20	27	31	35	26	5
Northeastern Region	**43.4**	**48.2**	**45.7**	**95.2**	**76.8**	**45.6**	**33.2**	**20**	**23**	**24**	**33**	**35**	**33**	**11**
Nakon Ratchasima	40.4	50.2	45.1	102.3	80.7	43.8	32.4	20	20	26	33	31	34	7
Buri Ram	39.8	46.6	43.1	92.9	76.2	44.2	31.0	18	26	19	32	37	25	19
Surin	48.4	51.0	49.6	96.8	67.9	48.4	35.7	21	24	23	35	35	33	9
Si Sa Ket	45.3	55.3	50.0	96.2	66.6	44.2	32.5	21	26	26	32	37	29	10
Ubon Ratchathani	38.9	43.1	41.0	81.6	94.9	43.6	35.0	20	20	26	32	36	36	14
Yasothon	40.9	51.6	46.0	90.4	70.7	44.5	34.6	18	22	32	32	37	36	19
Chaiyaphum	27.4	33.5	30.3	88.6	71.9	47.0	33.2	21	22	31	33	34	37	6
Amnat Charoen	45.8	46.4	46.1	88.9	74.8	45.3	32.4	21	25	21	31	34	38	10
Nong Bua Lam Phu	29.8	33.2	31.5	93.6	58.1	47.4	30.7	23	28	34	34	36	25	5
Khon Kaen	59.5	57.7	58.6	103.6	86.5	46.1	36.4	19	21	15	33	36	38	15

Location	Enrolment rate 2000 higher secondary (%)			Transition rate 2000		Quality of education (average score) 1997		Students per teacher 1999			Students per class room 1999			Population attending training 1999
	Male	Female	Total	Primary to Lower secondary	Lower secondary to Upper secondary & vocational	Lower secondary %	Upper secondary %	Lower secondary Number	Upper secondary Number	Vocational Number	Lower secondary Number	Upper secondary Number	Vocational Number	Per 1,000 pop.
	16	17	18	19	20	21	22	23	24	25	26	27	28	29
Udon Thani	42.6	43.5	43.0	99.0	70.0	44.5	36.8	23	21	25	34	37	38	12
Loei	46.2	48.8	47.5	99.6	66.9	44.0	33.4	18	21	26	32	35	33	7
Nong Khai	38.4	37.5	37.9	91.2	78.1	50.1	33.5	21	22	29	34	36	36	8
Maha Salakam	51.2	55.8	53.4	103.5	79.1	47.1	31.4	20	23	23	33	37	31	13
Roi Et	46.5	52.4	49.4	91.3	73.6	41.7	32.3	18	22	21	37	37	33	21
Kalasin	46.4	53.9	50.0	97.0	83.8	44.4	31.0	20	23	20	32	34	34	7
Sakhon Nakhon	41.7	45.6	43.7	93.0	71.7	42.8	33.7	16	18	23	33	37	24	8
Nakhon Phanom	42.6	46.3	44.4	96.0	88.1	49.1	33.1	20	25	18	32	35	33	8
Mukdahan	51.6	61.1	56.4	96.1	81.2	47.3	32.1	19	21	25	32	33	35	21
Northern Region	**51.6**	**58.6**	**55.0**	**93.6**	**86.3**	**45.6**	**36.8**	**18**	**21**	**24**	**32**	**36**	**34**	**17**
Chiang Mai	71.9	72.6	72.2	95.3	97.1	48.4	43.8	17	19	20	33	38	32	6
Lamphun	78.8	80.9	79.8	100.6	113.3	48.6	38.3	16	19	24	34	32	34	19
Lampang	68.9	74.1	71.4	97.8	79.9	46.3	39.4	21	16	18	36	35	37	41
Uttaradit	46.6	54.4	50.4	95.4	87.3	40.0	37.6	17	21	27	32	36	40	7
Phrae	63.0	96.8	79.1	97.6	96.8	43.3	41.7	17	21	17	32	39	35	18
Nan	76.9	77.6	77.2	94.8	88.2	48.4	37.8	17	22	25	34	42	32	23
Phayao	61.2	67.4	64.2	96.2	99.0	44.6	38.9	18	23	32	34	37	36	36
Chiang Rai	49.6	57.9	53.6	90.1	75.6	45.9	38.3	19	23	31	34	35	34	22
Mae Hong Son	39.1	43.3	41.2	82.1	87.1	41.8	32.5	20	22	18	29	35	33	6
Nakhon Sawan	42.3	50.3	46.3	91.6	83.9	45.2	37.1	20	19	27	32	36	34	18
Uthai Thani	52.3	55.2	53.8	92.3	82.2	45.2	39.5	20	22	26	31	34	32	30
Kamphaeng Phet	32.0	39.2	35.5	84.4	73.1	46.4	35.0	18	23	30	33	35	31	7
Tak	48.3	50.9	49.6	92.0	92.6	51.6	34.7	18	26	16	30	38	38	14
Sukhothai	29.8	43.4	36.5	96.7	75.7	47.8	35.7	20	20	31	33	38	37	10
Phitsanulok	50.8	56.4	53.5	97.4	97.0	45.2	31.6	15	17	22	30	36	31	21
Phichit	43.4	48.0	45.6	92.7	84.1	42.2	35.2	16	20	25	31	32	31	15
Phetchabun	38.8	46.1	42.4	93.2	72.7	44.2	28.7	20	21	20	32	37	35	9
Southern Region	**49.3**	**58.8**	**54.0**	**94.1**	**95.5**	**43.1**	**35.7**	**19**	**20**	**23**	**35**	**36**	**32**	**24**
Nakhon Si Thammarat	48.2	61.9	54.8	101.3	83.1	42.9	31.3	19	19	19	35	37	36	9
Krabi	50.6	61.0	55.6	75.2	90.8	41.5	37.1	24	23	21	34	35	35	21
Phangnga	43.2	45.6	44.4	84.1	78.8	45.7	36.0	19	19	27	32	34	30	17
Phuket	73.3	84.6	79.0	100.3	132.6	48.7	38.8	22	18	35	34	38	36	49
Surat Thani	44.4	56.1	50.1	90.8	87.9	41.9	35.5	20	21	24	35	37	32	31
Ranong	57.1	54.3	55.7	88.0	85.5	42.0	36.8	18	25	23	31	32	26	4
Chumphon	50.9	55.2	53.0	90.3	97.5	42.3	33.7	19	20	22	34	34	35	20
Songkhla	50.7	59.8	55.2	89.7	99.0	40.6	34.6	17	17	25	36	36	32	31
Satun	53.4	63.0	58.1	96.0	92.2	39.4	32.7	17	18	21	38	36	30	20
Trang	55.6	63.8	59.6	90.1	99.6	46.5	34.0	20	20	22	35	37	32	9
Phattalung	49.3	63.6	56.1	93.4	98.4	41.5	37.4	15	16	23	33	33	37	26
Pattani	46.1	53.7	50.1	102.4	99.3	48.6	40.1	23	20	19	37	38	23	26
Yala	65.0	55.6	60.3	119.8	167.3	42.1	39.1	22	20	18	37	36	34	28
Narathiwat	34.1	48.2	40.9	85.5	88.5	39.8	32.4	18	20	16	34	35	23	46

Table 4. Employment

Location	Population 2001			Population over 15 years 2001			Employment 2001		
							No. of employed persons		
	Male 1	Female 2	Total 3	Male 4	Female 5	Total 6	Male 7	Female 8	Total 9
Kingdom	**31,390,697**	**31,610,442**	**63,001,140**	**23,355,399**	**23,778,982**	**47,134,381**	**18,470,993**	**15,012,732**	**33,483,724**
Bangkok Metropolis	**3,720,062**	**4,065,604**	**7,785,666**	**2,995,234**	**3,342,775**	**6,338,009**	**2,240,648**	**2,039,292**	**4,279,940**
Bangkok Vicinity	**1,859,901**	**1,951,113**	**3,811,014**	**1,453,115**	**1,550,866**	**3,003,981**	**1,135,743**	**983,801**	**2,119,544**
Nakhon Pathom	429,932	454,500	884,431	323,889	352,411	676,300	262,891	240,724	503,615
Nonthaburi	405,280	430,014	835,293	324,144	349,951	674,094	238,456	205,325	443,781
Pathum Thani	289,790	296,928	586,717	225,263	233,164	458,427	168,005	134,365	302,370
Samut Prakan	518,471	541,280	1,059,750	412,049	437,021	849,069	328,875	279,037	607,912
Samut Sakon	216,429	228,393	444,822	167,771	178,320	346,091	137,516	124,351	261,867
Central Region	**1,437,726**	**1,487,208**	**2,924,934**	**1,103,534**	**1,160,765**	**2,264,299**	**820,192**	**694,230**	**1,514,423**
Chai Nat	181,967	193,226	375,193	140,700	152,304	293,004	105,105	94,690	199,795
Phra Nakhon Si Ayutthaya	357,514	378,999	736,513	273,508	297,649	571,157	192,226	159,531	351,75
Lop Buri	382,312	375,527	757,838	295,375	290,621	585,996	228,509	190,485	418,994
Saraburi	267,450	266,756	534,206	204,906	205,200	410,106	156,186	119,582	275,768
Sing Buri	116,388	128,264	244,652	89,672	101,998	191,670	65,426	60,262	125,688
Ang Thong	132,096	144,437	276,533	99,374	112,994	212,368	72,742	69,680	142,421
Eastern Region	**2,037,623**	**1,991,461**	**4,029,084**	**1,551,199**	**1,518,280**	**3,069,479**	**1,245,635**	**959,661**	**2,205,296**
Chanthaburi	233,588	225,179	458,767	180,421	172,935	353,356	151,732	110,443	262,175
Chachoengsao	319,708	323,694	643,402	240,635	246,285	486,920	190,467	150,214	340,681
Chon Buri	512,275	499,425	1,011,699	404,232	397,509	801,740	318,803	247,108	565,911
Trat	103,299	96,912	200,211	77,441	70,997	148,438	66,319	43,262	109,581
Nakhon Nayok	129,282	134,597	263,879	97,024	101,477	198,501	72,100	60,288	132,389
Prachin Buri	212,253	206,902	419,155	158,039	154,046	312,085	126,916	104,887	231,802
Rayong	269,100	262,445	531,545	206,103	200,791	406,894	167,152	124,441	291,592
Sa Kaeo	258,119	242,309	500,428	187,305	174,241	361,546	152,146	119,019	271,165
Western Region	**1,719,054**	**1,778,290**	**3,497,343**	**1,287,772**	**1,357,469**	**2,645,241**	**1,020,138**	**886,833**	**1,906,971**
Ratchaburi	397,619	416,563	814,181	300,876	323,403	624,279	237,530	216,719	454,249
Kanchanaburi	350,200	346,518	696,718	257,311	256,405	513,716	205,949	174,379	380,328
Suphan Buri	427,775	455,495	883,269	322,098	352,557	674,655	252,779	215,708	468,488
Samutshongkhram	102,005	111,405	213,410	77,693	86,789	164,482	57,483	55,852	113,335
Phetchaburi	216,676	226,961	443,637	163,551	174,835	338,386	127,311	112,095	239,406
Prachuap Khiri khan	224,780	221,349	446,129	166,244	163,481	329,725	139,086	112,080	251,166
Northeastern Region	**10,684,649**	**10,528,244**	**21,212,893**	**7,675,854**	**7,585,409**	**15,261,264**	**6,153,164**	**4,725,452**	**10,878,616**
Nakon Ratchasima	1,343,556	1,330,504	2,674,061	979,550	971,227	1,950,776	793,243	618,242	1,411,484
Buri Ram	760,358	748,095	1,508,453	537,179	531,177	1,068,355	406,665	303,045	709,711
Surin	676,130	673,047	1,349,176	472,781	476,901	949,682	387,030	290,682	677,711
Si Sa Ket	710,078	714,786	1,424,863	499,802	507,007	1,006,808	432,375	363,758	796,133
Ubon Ratchathani	867,955	844,922	1,712,878	617,524	605,993	1,223,517	487,872	378,803	866,675
Yasothon	293,680	293,562	587,242	211,590	210,424	422,014	179,824	136,252	316,076
Chaiyaphum	566,937	558,338	1,125,274	421,217	415,477	836,693	352,616	294,913	647,528
Amnat Charoen	182,825	180,441	363,266	129,054	128,393	257,447	106,265	84,059	190,324
Nong Bua Lam Phu	245,511	237,998	483,509	173,085	166,986	340,071	137,312	101,039	238,350
Khon Kaen	914,945	907,153	1,822,099	674,571	674,361	1,348,931	511,070	399,273	910,343

Location	Population 2001			Population over 15 years 2001			Employment 2001		
							No. of employed persons		
	Male 1	Female 2	Total 3	Male 4	Female 5	Total 6	Male 7	Female 8	Total 9
Udon Thani	747,517	726,720	1,474,236	533,367	522,203	1,055,569	397,710	290,767	688,477
Loei	307,500	287,973	595,473	229,608	208,431	438,039	184,436	133,847	318,282
Nong Khai	452,918	436,680	889,598	319,917	304,620	624,537	246,145	154,820	400,965
Maha Salakam	488,151	494,910	983,060	356,038	366,224	722,262	294,456	251,042	545,498
Roi Et	631,751	627,572	1,259,322	457,925	459,414	917,338	372,149	281,709	653,858
Kalasin	473,381	461,348	934,728	344,102	334,371	678,473	264,421	191,547	455,968
Sakhon Nakhon	525,808	517,376	1,043,184	369,956	362,180	732,136	312,171	219,454	531,625
Nakhon Phanom	347,066	344,783	691,848	244,911	241,545	486,456	196,846	161,435	358,281
Mukdahan	148,584	142,040	290,624	103,682	98,479	202,161	90,559	70,767	161,325
Northern Region	**5,695,549**	**5,611,240**	**11,306,789**	**4,385,476**	**4,332,925**	**8,718,401**	**3,501,628**	**2,824,495**	**6,326,123**
Chiang Mai	750,802	719,335	1,470,138	604,025	578,237	1,182,261	469,590	385,590	855,180
Lamphun	225,156	217,479	442,635	181,879	173,127	355,006	147,199	129,197	276,396
Lampang	400,623	386,162	786,784	318,495	306,188	624,683	250,036	192,601	442,637
Uttaradit	229,805	234,035	463,840	177,227	181,445	358,672	140,247	111,362	251,609
Phrae	262,431	258,521	520,952	208,098	205,016	413,114	173,475	137,127	310,602
Nan	224,346	215,599	439,945	171,020	163,608	334,628	146,919	113,205	260,124
Phayao	260,284	244,555	504,839	204,462	190,757	395,219	162,655	120,947	283,602
Chiang Rai	573,928	544,114	1,118,041	450,763	420,596	871,359	366,576	272,374	638,949
Mae Hong Son	91,109	83,952	175,061	65,071	60,188	125,259	57,236	45,187	102,424
Nakhon Sawan	550,375	565,864	1,116,238	420,356	440,943	861,299	342,355	297,495	639,850
Uthai Thani	153,494	158,458	311,952	115,162	121,481	236,643	89,755	79,449	169,204
Kamphaeng Phet	342,721	341,478	684,199	251,214	251,682	502,896	206,305	158,669	364,974
Tak	182,049	175,398	357,447	133,530	127,368	260,898	110,303	83,423	193,727
Sukhothai	291,252	301,895	593,147	220,504	233,020	453,524	176,822	156,492	333,315
Phitsanulok	404,542	403,511	808,053	304,590	306,910	611,500	228,571	184,166	412,737
Phichit	285,683	302,056	587,739	213,634	231,696	445,330	168,948	137,259	306,207
Phetchabun	466,952	458,831	925,782	345,449	340,666	686,115	264,635	219,950	484,585
Southern Region	**4,236,134**	**4,197,282**	**8,433,416**	**2,903,214**	**2,930,494**	**5,833,708**	**2,353,844**	**1,898,967**	**4,252,811**
Nakhon Si Thammarat	838,098	834,683	1,672,780	563,485	578,776	1,142,260	433,208	368,556	801,764
Krabi	169,660	163,272	332,932	110,867	109,781	220,648	93,710	72,271	165,981
Phangnga	129,007	124,506	253,513	89,424	87,660	177,084	77,198	50,575	127,773
Phuket	102,436	101,896	204,332	74,284	74,559	148,843	59,376	44,724	104,100
Surat Thani	450,634	450,737	901,370	315,299	323,117	638,416	261,313	214,807	476,120
Ranong	73,332	66,997	140,329	50,275	44,872	95,147	41,517	22,119	63,636
Chumphon	229,833	224,820	454,653	163,615	160,996	324,611	136,913	105,099	242,013
Songkhla	667,003	670,098	1,337,100	468,326	483,052	951,378	368,085	317,279	685,364
Satun	131,625	129,389	261,014	86,775	86,205	172,980	73,622	55,142	128,764
Trang	313,592	316,758	630,350	211,847	218,331	430,178	181,967	157,205	339,173
Phattalung	261,101	266,340	527,441	179,475	183,392	362,867	155,704	131,847	287,551
Pattani	315,028	312,190	627,217	212,136	215,457	427,593	170,938	133,945	304,883
Yala	213,457	206,221	419,678	146,760	140,794	287,554	116,906	86,998	203,904
Narathiwat	341,331	329,378	670,708	230,648	223,504	454,152	183,386	138,400	321,786

Table 4. Employment *(continued)*

Location	Employment 2001							Labour having social security 2001 %
	Unemployment	Current labour force	Unemployment rate	No. of underemployed			Underemployment rate	
	Number	Number		Male	Female	Total		
	10	11	12	13	14	15	16	17
Kingdom	**896,308**	**34,380,032**	**2.6**	**482,032**	**280,177**	**762,208**	**2.3**	**17.1**
Bangkok Metropolis	**151,071**	**4,431,011**	**3.4**	**20,767**	**10,336**	**31,103**	**0.7**	**47.5**
Bangkok Vicinity	**62,125**	**2,181,669**	**2.8**	**8,138**	**7,083**	**15,222**	**0.7**	**62.9**
Nakhon Pathom	10,075	513,690	2.0	2,262	1,401	3,664	0.7	29.4
Nonthaburi	11,613	455,394	2.6	308	564	871	0.2	28.5
Pathum Thani	8,302	310,672	2.7	318	419	737	0.2	78.2
Samut Prakan	26,215	634,127	4.1	3,549	3,019	6,568	1.1	91.6
Samut Sakon	5,920	267,787	2.2	1,701	1,680	3,381	1.3	99.6
Central Region	**42,783**	**1,557,206**	**2.7**	**27,620**	**13,392**	**41,011**	**2.7**	**24.6**
Chai Nat	7,185	206,979	3.5	6,901	4,308	11,209	5.6	4.3
Phra Nakhon Si Ayutthaya	12,965	364,722	3.6	2,626	2,284	4,910	1.4	53.6
Lop Buri	14,500	433,494	3.3	11,334	3,814	15,148	3.6	11.5
Saraburi	4,528	280,295	1.6	3,604	606	4,211	1.5	39.1
Sing Buri	2,025	127,713	1.6	375	274	650	0.5	9.3
Ang Thong	1,581	144,002	1.1	2,778	2,106	4,884	3.4	5.4
Eastern Region	**36,743**	**2,242,039**	**1.6**	**7,642**	**6,912**	**14,554**	**0.7**	**29.1**
Chanthaburi	1,871	264,046	0.7		347	347	0.1	7.1
Chachoengsao	8,310	348,990	2.4	66	390	456	0.1	32.3
Chon Buri	7,322	573,233	1.3		192	192	0.0	49.7
Trat	724	110,305	0.7				-	4.3
Nakhon Nayok	3,240	135,628	2.4	961	735	1,696	1.3	6.9
Prachin Buri	5,638	237,441	2.4	1,788	2,397	4,185	1.8	30.0
Rayong	6,656	298,249	2.2	4,826	2,852	7,678	2.6	47.9
Sa Kaeo	2,982	274,147	1.1				-	2.9
Western Region	**30,026**	**1,936,997**	**1.6**	**23,357**	**22,196**	**45,553**	**2.4**	**9.2**
Ratchaburi	12,217	466,466	2.6	9,403	7,863	17,266	3.8	12.9
Kanchanaburi	10,095	390,423	2.6	4,702	7,608	12,310	3.2	7.0
Suphan Buri	671	469,159	0.1	6,510	4,432	10,942	2.3	4.3
Samutshongkhram	833	114,167	0.7	423	307	730	0.6	7.0
Phetchaburi	2,423	241,829	1.0				-	9.9
Prachuap Khiri khan	3,788	254,954	1.5	2,319	1,987	4,306	1.7	15.3
Northeastern Region	**356,601**	**11,235,217**	**3.2**	**239,510**	**121,236**	**360,746**	**3.3**	**3.4**
Nakon Ratchasima	51,588	1,463,072	3.5	20,217	5,415	25,632	1.8	9.1
Buri Ram	21,548	731,259	2.9	14,993	3,195	18,188	2.6	2.1
Surin	5,692	683,404	0.8	1,946	1,579	3,525	0.5	1.8
Si Sa Ket	29,732	825,865	3.6	20,547	13,632	34,179	4.3	0.9
Ubon Ratchathani	26,031	892,707	2.9	2,401	281	2,682	0.3	2.9
Yasothon	9,128	325,204	2.8	3,252	1,498	4,750	1.5	1.6
Chaiyaphum	14,018	661,547	2.1	22,402	19,212	41,614	6.4	1.8
Amnat Charoen	10,271	200,595	5.1	8,151	4,629	12,781	6.7	1.4
Nong Bua Lam Phu	16,994	255,345	6.7	4,394	3,865	8,258	3.5	1.7
Khon Kaen	32,289	942,632	3.4	23,203	10,226	33,429	3.7	7.1

Location	Employment 2001							Labour having social security 2001 %
	Unemployment	Current labour force	Unemployment rate	No. of underemployed			Underemployment rate	
	Number	Number		Male	Female	Total		
	10	11	12	13	14	15	16	17
Udon Thani	54,126	742,603	7.3	41,007	25,784	66,790	9.7	4.5
Loei	9,374	327,657	2.9	5,314	1,785	7,099	2.2	2.2
Nong Khai	6,969	407,934	1.7	8,579	1,140	9,719	2.4	2.0
Maha Salakam	3,646	549,144	0.7	2,137	1,612	3,749	0.7	1.9
Roi Et	22,623	676,482	3.3	18,721	9,686	28,406	4.3	1.9
Kalasin	4,957	460,924	1.1	2,618	418	3,036	0.7	2.2
Sakhon Nakhon	17,287	548,912	3.1	17,770	4,420	22,190	4.2	1.7
Nakhon Phanom	19,019	377,301	5.0	15,772	10,550	26,322	7.3	1.4
Mukdahan	1,307	162,633	0.8	6,086	2,310	8,396	5.2	2.6
Northern Region	**125,681**	**6,451,803**	**1.9**	**73,520**	**44,546**	**118,066**	**1.9**	**5.9**
Chiang Mai	23,508	878,688	2.7	15,096	13,396	28,492	3.3	12.8
Lamphun	4,562	280,958	1.6	1,559	1,054	2,613	0.9	17.8
Lampang	7,366	450,003	1.6	3,029	235	3,264	0.7	8.3
Uttaradit	5,861	257,470	2.3				-	3.3
Phrae	5,549	316,151	1.8	9,327	8,150	17,476	5.6	3.0
Nan	2,188	262,312	0.8	611	1,470	2,081	0.8	2.5
Phayao	2,564	286,166	0.9	2,381	1,580	3,960	1.4	2.8
Chiang Rai	9,268	648,217	1.4	16,546	4,011	20,556	3.2	4.3
Mae Hong Son	879	103,303	0.9	859	419	1,278	1.2	2.5
Nakhon Sawan	15,178	655,028	2.3	5,573	1,993	7,567	1.2	4.9
Uthai Thani	683	169,886	0.4		48	48	0.0	3.5
Kamphaeng Phet	15,233	380,207	4.0	9,140	2,978	12,118	3.3	2.6
Tak	3,924	197,650	2.0	904	551	1,454	0.8	6.4
Sukhothai	4,604	337,919	1.4	4,528	4,792	9,320	2.8	2.4
Phitsanulok	6,263	419,000	1.5	87	87		0.0	7.2
Phichit	3,956	310,163	1.3	749	62	811	0.3	2.8
Phetchabun	14,095	498,680	2.8	3,132	3,809	6,940	1.4	2.5
Southern Region	**91,278**	**4,344,089**	**2.1**	**81,478**	**54,475**	**135,953**	**3.2**	**9.4**
Nakhon Si Thammarat	26,620	828,384	3.2	13,253	17,611	30,865	3.8	4.2
Krabi	1,305	167,286	0.8	4,967	3,171	8,137	4.9	10.7
Phangnga	3,404	131,176	2.6	20,569	12,632	33,201	26.0	5.2
Phuket	1,888	105,988	1.8	448	351	799	0.8	55.8
Surat Thani	3,866	479,986	0.8	1,903	1,483	3,386	0.7	11.6
Ranong	1,143	64,779	1.8	873	15	888	1.4	9.7
Chumphon	1,673	243,686	0.7	63		63	0.0	7.0
Songkhla	11,091	696,455	1.6	2,488	457	2,945	0.4	18.7
Satun	3,565	132,329	2.7	7,785	4,443	12,228	9.5	4.3
Trang	4,863	344,036	1.4	2,618	283	2,901	0.9	8.4
Phattalung	9,925	297,476	3.3	13,613	6,643	20,256	7.0	2.1
Pattani	7,640	312,523	2.4	5,964	3,564	9,528	3.1	4.8
Yala	2,875	206,779	1.4	1,017	1,776	2,793	1.4	6.9
Narathiwat	11,420	333,207	3.4	5,918	2,046	7,964	2.5	2.8

Table 5. Income

Location	Household income 1998 (Baht/month) 1	Household income 2000 (Baht/month)			Household income change % 1998-2000 5	Household expenditure (Baht/month)		Household expenditure change % 1998-2000 8	Poverty incidence 2000 % 9	Number of Poor 2000 10
		Male headed households 2	Female headed households 3	Household income 4		1998 6	2000 7			
Kingdom	**12,765**	**12,416**	**10,760**	**11,988**	**-6.09**	**9,275**	**8,558**	**-0.08**	**14.2**	**8,891,459**
Bangkok Metropolis	**25,790**	**28,392**	**22,691**	**26,831**	**4.04**	**17,732**	**17,413**	**-0.02**	**0.3**	**19,910**
Bangkok Vicinity	**19,262**	**19,439**	**15,974**	**18,509**	**-3.91**	**13,563**	**13,553**	**-0.00**	**1.4**	**50,486**
Nakhon Pathom	15,861	20,026	13,249	18,205	14.78	12,485	13,121	0.05	1.3	11,125
Nonthaburi	25,118	25,933	20,751	24,393	-2.88	18,372	16,606	-0.10	0.1	407
Pathum Thani	20,720	20,573	15,479	19,160	-7.53	13,457	15,203	0.13	2.0	11,195
Samut Prakan	17,973	15,704	15,563	15,672	-12.80	12,284	12,138	-0.01	0.6	6,109
Samut Sakon	16,893	13,857	13,309	13,694	-18.93	10,553	9,765	-0.07	5.1	22,057
Central Region	**11,473**	**12,641**	**12,132**	**12,464**	**8.63**	**8,985**	**8,921**	**-0.01**	**6.1**	**177,450**
Chai Nat	10,403	9,618	18,805	12,475	19.91	8,473	7,702	-0.09	8.7	32,692
Phra Nakhon Si Ayutthaya	13,045	15,890	13,295	14,812	13.55	10,415	10,405	-0.00	4.9	35,980
Lop Buri	10,474	10,705	9,945	10,474	0.00	8,336	8,002	-0.04	8.2	62,020
Saraburi	12,768	13,254	10,310	12,286	-3.77	9,488	9,042	-0.05	3.2	17,271
Sing Buri	10,592	12,595	10,868	11,876	12.12	7,908	9,228	0.17	6.4	15,632
Ang Thong	10,354	14,048	9,396	12,523	20.95	8,071	8,800	0.09	5.0	13,855
Eastern Region	**12,178**	**12,480**	**10,874**	**11,991**	**-1.53**	**9,893**	**9,447**	**-0.05**	**5.2**	**207,735**
Chanthaburi	15,203	11,973	8,502	11,162	-26.58	10,861	8,759	-0.19	7.4	33,788
Chachoengsao	13,019	13,875	12,860	13,482	3.55	11,280	11,131	-0.01	0.4	2,319
Chon Buri	13,851	14,429	12,703	13,778	-0.53	11,886	11,361	-0.04	0.1	501
Trat	11,736	7,546	6,895	7,391	-37.02	7,788	6,983	-0.10	15.0	29,743
Nakhon Nayok	11,110	12,432	10,790	11,977	7.80	8,653	9,037	0.04	4.8	12,586
Prachin Buri	9,609	11,449	7,743	10,300	7.18	7,606	8,715	0.15	2.2	9,051
Rayong	12,598	15,655	11,631	14,727	16.90	9,872	9,061	-0.08	1.3	6,718
Sa Kaeo	6,845	8,152	7,655	8,035	17.40	6,220	6,511	0.05	22.9	113,531
Western Region	**12,461**	**14,310**	**9,801**	**12,849**	**3.11**	**8,551**	**7,941**	**-0.07**	**6.1**	**210,805**
Ratchaburi	13,206	17,365	11,043	14,717	11.44	9,881	10,152	0.03	1.7	13,558
Kanchanaburi	12,829	13,447	7,620	11,578	-9.75	8,342	7,218	-0.13	10.2	71,099
Suphan Buri	12,122	14,820	9,235	13,331	9.97	8,061	5,839	-0.28	7.7	67,555
Samutshongkhram	11,239	13,091	12,416	12,856	14.38	9,196	10,366	0.13	0.1	116
Phetchaburi	14,003	13,307	9,977	12,387	-11.54	8,061	8,086	0.00	3.8	16,762
Prachuap Khiri khan	10,246	11,302	9,541	10,761	5.03	7,736	7,944	0.03	9.4	41,716
Northeastern Region	**8,411**	**7,823**	**6,871**	**7,604**	**-9.58**	**6,307**	**5,766**	**-0.09**	**28.1**	**5,930,040**
Nakon Ratchasima	9,464	8,334	8,393	8,348	-11.80	6,089	5,819	-0.04	21.3	565,731
Buri Ram	8,192	8,122	7,894	8,069	-1.51	5,913	5,873	-0.01	25.8	386,432
Surin	6,313	6,461	5,069	6,148	-2.62	5,639	4,615	-0.18	41.0	550,231
Si Sa Ket	7,363	7,658	6,250	7,319	-0.60	6,286	5,401	-0.14	26.5	375,275
Ubon Ratchathani	9,897	10,140	7,761	9,669	-2.30	7,437	6,978	-0.06	18.1	307,637
Yasothon	7,614	4,949	4,090	4,753	-37.58	6,527	5,594	-0.14	50.3	293,592
Chaiyaphum	6,328	7,088	8,688	7,492	18.40	4,441	5,274	0.19	16.5	183,759
Amnat Charoen	8,026	8,007	5,733	7,666	-4.48	6,409	5,736	-0.10	21.6	78,104
Nong Bua Lam Phu	8,283	5,035	6,887	5,358	-35.32	6,387	4,665	-0.27	50.0	240,445
Khon Kaen	11,377	9,867	8,103	9,485	-16.63	7,981	6,236	-0.22	17.2	310,767

Location	Household income 1998 (Baht/month) 1	Household income 2000 (Baht/month)			Household income change % 1998-2000 5	Household expenditure (Baht/month)		Household expenditure change % 1998-2000 8	Poverty incidence 2000 % 9	Number of Poor 2000 10
		Male headed households 2	Female headed households 3	Household income 4		1998 6	2000 7			
Udon Thani	7,873	6,896	6,496	6,815	-13.44	5,037	4,651	-0.08	34.5	505,681
Loei	9,397	7,327	7,116	7,296	-22.35	7,905	5,989	-0.24	36.8	217,491
Nong Khai	11,706	7,084	6,354	6,916	-40.92	9,017	6,792	-0.25	35.9	317,383
Maha Salakam	8,322	8,921	6,303	8,285	-0.44	6,405	7,036	0.10	13.1	127,685
Roi Et	6,021	7,216	6,323	7,003	16.31	4,556	5,512	0.21	22.2	278,207
Kalasin	6,636	6,648	5,358	6,328	-4.63	6,383	6,108	-0.04	39.9	370,694
Sakhon Nakhon	7,794	8,519	6,124	7,664	-1.66	6,275	5,393	-0.14	40.5	419,996
Nakhon Phanom	7,748	5,138	5,404	5,209	-32.77	5,789	5,027	-0.13	48.1	331,087
Mukdahan	9,359	9,735	6,065	9,114	-2.61	7,758	6,843	-0.12	24.2	69,844
Northern Region	**9,502**	**8,651**	**7,755**	**8,422**	**-11.37**	**7,040**	**6,357**	**-0.10**	**12.2**	**1,372,830**
Chiang Mai	10,005	9,241	8,280	9,012	-9.93	6,961	6,462	-0.07	5.2	75,755
Lamphun	8,677	10,121	9,709	10,027	15.56	7,231	7,421	0.03	6.2	27,464
Lampang	13,539	9,576	9,954	9,676	-28.53	7,624	6,685	-0.12	12.8	100,257
Uttaradit	9,362	7,674	6,133	7,171	-23.40	6,631	6,071	-0.08	9.7	44,763
Phrae	7,954	8,661	7,788	8,461	6.36	5,344	6,757	0.26	6.7	34,718
Nan	7,548	7,142	7,498	7,220	-4.34	6,093	6,072	-0.00	19.3	84,835
Phayao	7,393	6,195	4,684	5,865	-20.66	5,655	5,272	-0.07	9.6	48,404
Chiang Rai	9,171	7,338	7,822	7,450	-18.76	6,787	5,739	-0.15	10.3	115,314
Mae Hong Son	5,938	6,281	6,356	6,291	5.95	4,711	4,824	0.02	28.0	48,789
Nakhon Sawan	9,349	7,484	7,255	7,417	-20.67	8,896	6,568	-0.26	19.0	211,739
Uthai Thani	7,719	9,767	9,192	9,577	24.07	6,044	6,380	0.06	19.7	61,485
Kamphaeng Phet	9,282	12,713	9,443	11,834	27.49	8,047	9,111	0.13	0.5	3,735
Tak	9,392	10,141	7,948	9,542	1.60	6,617	6,488	-0.02	21.9	78,370
Sukhothai	9,599	7,436	6,347	7,121	-25.82	5,807	5,152	-0.11	18.1	107,383
Phitsanulok	11,677	8,828	8,576	8,762	-24.96	8,730	6,321	-0.28	14.6	117,407
Phichit	10,580	9,110	6,214	8,212	-22.38	7,309	7,043	-0.04	15.7	92,351
Phetchabun	7,868	8,785	6,575	8,326	5.83	6,323	5,080	-0.20	13.0	120,060
Southern Region	**11,368**	**11,536**	**9,275**	**11,012**	**-3.13**	**8,350**	**8,055**	**-0.04**	**11.0**	**922,204**
Nakhon Si Thammarat	11,029	11,535	7,985	10,675	-3.21	7,457	7,392	-0.01	13.6	224,632
Krabi	12,047	10,189	7,723	9,847	-18.26	8,819	8,676	-0.02	7.4	24,533
Phangnga	7,538	9,886	10,825	10,054	33.37	7,411	7,536	0.02	1.7	4,313
Phuket	18,422	21,160	17,278	20,200	9.65	13,445	16,166	0.20	0.1	101
Surat Thani	11,868	10,771	10,734	10,765	-9.30	8,720	8,744	0.00	2.4	21,597
Ranong	9,279	10,319	6,150	9,318	0.42	8,462	8,519	0.01	10.0	13,969
Chumphon	10,135	11,141	8,775	10,438	3.00	8,058	7,474	-0.07	4.6	20,555
Songkhla	14,784	13,663	10,920	13,057	-11.68	9,906	8,465	-0.15	3.5	45,853
Satun	9,051	10,003	8,517	9,710	7.28	7,095	6,923	-0.02	9.2	23,620
Trang	12,879	12,122	13,462	12,518	-2.80	9,245	8,376	-0.09	3.0	18,788
Phattalung	11,582	12,481	7,526	11,320	-2.26	8,167	7,951	-0.03	3.2	16,548
Pattani	10,945	10,488	6,911	9,597	-12.31	7,187	8,043	0.12	25.5	157,895
Yala	7,417	10,481	7,835	9,863	32.99	7,507	7,966	0.06	28.1	116,672
Narathiwat	6,470	8,121	6,622	7,736	19.56	6,207	5,945	-0.04	35.1	233,227

Table 5. Income *(continued)*

Location	Poverty line 2000 Baht/person/month 11	Welfare 2000 % 12	Per capita current income 2000 Baht/month 13	Per capita consumption expenditure 2000 Baht/month 14	Per capita current income 1998 Baht/month 15	Per capita consumption expenditure 1998 Baht/month 16	Per capita current income change (%) 1998-2000 17	Household Debt 2000	
								Household with debt (%) 18	Average debt Baht 19
Kingdom	**882**	**372**	**3,462**	**2,461**	**3,448**	**2,505**	**0.41**	**56.3**	**121,569**
Bangkok Metropolis	**1,101**	**748**	**8,246**	**5,352**	**7,807**	**5,368**	**5.63**	**37.2**	**363,674**
Bangkok Vicinity	**948**	**585**	**5,613**	**4,120**	**5,396**	**3,800**	**4.01**	**45.1**	**216,952**
Nakhon Pathom	893	551	5,004	3,617	4,389	3,455	14.01	62.5	185,423
Nonthaburi	1,014	721	7,395	5,029	6,586	4,817	12.29	39.6	260,232
Pathum Thani	927	621	5,774	4,548	5,585	3,627	3.38	37.9	368,729
Samut Prakan	963	551	5,295	4,104	5,407	3,696	-2.07	38.0	177,327
Samut Sakon	925	430	4,030	2,886	4,818	3,010	-16.35	46.3	138,536
Central Region	**873**	**413**	**3,667**	**2,621**	**3,247**	**2,543**	**12.92**	**47.7**	**104,265**
Chai Nat	869	464	4,172	2,587	3,250	2,647	28.37	49.6	124,832
Phra Nakhon Si Ayutthaya	884	488	4,340	3,046	3,483	2,781	24.58	35.7	66,233
Lop Buri	854	357	3,081	2,352	2,985	2,376	3.21	58.6	81,550
Saraburi	893	392	3,546	2,603	3,394	2,522	4.49	45.2	137,096
Sing Buri	863	371	3,283	2,549	3,334	2,489	-1.52	42.9	115,984
Ang Thong	876	381	3,363	2,368	2,963	2,310	13.50	56.3	143,855
Eastern Region	**887**	**394**	**3,584**	**2,826**	**3,424**	**2,781**	**4.67**	**50.3**	**150,887**
Chanthaburi	889	362	3,269	2,564	4,208	3,006	-22.32	54.9	210,344
Chachoengsao	867	389	3,470	2,862	3,499	3,031	-0.82	67.8	177,050
Chon Buri	930	495	4,709	3,930	4,122	3,537	14.23	28.0	238,169
Trat	862	257	2,262	2,116	3,631	2,410	-37.70	34.6	67,390
Nakhon Nayok	860	385	3,362	2,514	3,122	2,431	7.70	63.4	194,213
Prachin Buri	848	328	2,835	2,393	2,546	2,015	11.34	49.7	67,620
Rayong	910	484	4,428	2,720	3,533	2,769	25.33	51.4	120,562
Sa Kaeo	856	242	2,121	1,717	1,848	1,679	14.78	66.6	73,584
Western Region	**874**	**409**	**3,606**	**2,230**	**3,393**	**2,328**	**6.30**	**55.7**	**124,591**
Ratchaburi	878	472	4,077	2,814	3,524	2,637	15.69	55.5	107,048
Kanchanaburi	864	355	3,147	1,963	3,456	2,247	-8.95	65.3	129,096
Suphan Buri	867	436	3,815	1,672	3,326	2,212	14.71	57.5	122,774
Samutshongkhram	896	388	3,535	2,831	2,806	2,296	25.98	39.3	116,158
Phetchaburi	885	389	3,516	2,295	3,978	2,290	-11.62	52.8	164,948
Prachuap Khiri khan	876	354	3,177	2,334	2,882	2,176	10.25	48.8	116,262
Northeastern Region	**864**	**224**	**1,983**	**1,495**	**2,072**	**1,554**	**-4.29**	**69.1**	**75,923**
Nakon Ratchasima	882	249	2,257	1,568	2,462	1,584	-8.34	64.2	78,532
Buri Ram	855	235	2,038	1,482	1,910	1,379	6.68	86.1	84,129
Surin	851	186	1,609	1,205	1,663	1,486	-3.24	70.0	78,171
Si Sa Ket	849	218	1,897	1,399	1,703	1,454	11.42	81.2	83,522
Ubon Ratchathani	872	276	2,486	1,793	2,284	1,716	8.87	73.1	89,062
Yasothon	852	146	1,274	1,451	1,785	1,530	-28.64	48.5	36,602
Chaiyaphum	855	253	2,157	1,514	1,779	1,248	21.24	73.0	57,892
Amnat Charoen	864	218	1,916	1,433	1,943	1,551	-1.35	75.1	71,302
Nong Bua Lam Phu	847	154	1,316	1,143	1,826	1,408	-27.93	74.7	62,357
Khon Kaen	885	282	2,580	1,686	2,931	2,056	-11.99	65.7	97,778

Location	Poverty line 2000 Baht/person/month 11	Welfare 2000 % 12	Per capita current income 2000 Baht/month 13	Per capita consumption expenditure 2000 Baht/month 14	Per capita current income 1998 Baht/month 15	Per capita consumption expenditure 1998 Baht/month 16	Per capita current income change (%) 1998-2000 17	Household Debt 2000	
								Household with debt (%) 18	Average debt Baht 19
Udon Thani	867	183	1,622	1,105	1,866	1,194	-13.09	62.0	54,960
Loei	870	207	1,831	1,488	2,359	1,984	-22.36	79.4	78,745
Nong Khai	858	198	1,728	1,691	2,731	2,104	-36.72	66.9	56,178
Maha Salakam	862	238	2,092	1,760	2,059	1,585	1.60	70.6	78,293
Roi Et	852	223	1,931	1,515	1,521	1,151	26.99	74.5	58,861
Kalasin	865	184	1,627	1,553	1,573	1,513	3.41	71.1	58,258
Sakhon Nakhon	859	217	1,911	1,333	1,873	1,508	2.00	50.3	88,458
Nakhon Phanom	852	152	1,312	1,263	1,939	1,449	-32.31	50.9	61,907
Mukdahan	884	258	2,380	1,787	2,183	1,810	9.02	71.5	165,251
Northern Region	**777**	**316**	**2,506**	**1,892**	**2,760**	**2,045**	**-9.19**	**58.7**	**95,726**
Chiang Mai	798	369	3,015	2,176	3,101	2,157	-2.76	53.0	99,171
Lamphun	789	386	3,062	2,267	2,616	2,180	17.06	55.9	117,692
Lampang	786	360	2,860	1,973	3,932	2,214	-27.25	49.9	138,649
Uttaradit	768	286	2,227	1,886	2,705	1,916	-17.67	46.9	50,868
Phrae	785	315	2,504	1,990	2,373	1,594	5.53	62.8	76,979
Nan	770	271	2,157	1,807	2,044	1,650	5.52	69.0	76,027
Phayao	772	230	1,789	1,608	2,330	1,783	-23.23	59.5	66,046
Chiang Rai	777	268	2,118	1,628	2,651	1,962	-20.09	41.6	67,839
Mae Hong Son	765	229	1,796	1,368	1,516	1,203	18.42	39.8	79,479
Nakhon Sawan	782	282	2,249	1,989	2,757	2,624	-18.42	76.4	86,888
Uthai Thani	758	359	2,788	1,852	2,340	1,832	19.13	52.3	91,093
Kamphaeng Phet	760	435	3,387	2,603	2,482	2,151	36.46	70.2	122,094
Tak	770	338	2,694	1,824	2,730	1,923	-1.31	54.7	101,868
Sukhothai	760	266	2,052	1,481	2,712	1,641	-24.35	65.9	66,109
Phitsanulok	780	307	2,488	1,793	3,311	2,475	-24.85	59.6	109,675
Phichit	769	310	2,426	2,066	3,217	2,222	-24.58	58.5	107,978
Phetchabun	765	294	2,284	1,392	2,079	1,671	9.87	69.1	122,198
Southern Region	**841**	**339**	**2,957**	**2,151**	**2,905**	**2,134**	**1.77**	**49.8**	**108,684**
Nakhon Si Thammarat	825	318	2,663	1,844	2,687	1,817	-0.87	56.6	96,519
Krabi	818	303	2,600	2,266	2,893	2,117	-10.13	79.4	105,404
Phangnga	815	318	2,627	1,958	2,045	2,011	28.46	26.4	107,555
Phuket	912	690	6,239	5,008	5,660	4,131	10.22	35.1	116,028
Surat Thani	861	343	3,065	2,470	3,032	2,228	1.09	45.0	127,597
Ranong	832	322	2,750	2,490	2,467	2,250	11.46	47.9	104,223
Chumphon	844	370	3,183	2,272	2,775	2,207	14.68	54.2	181,495
Songkhla	879	410	3,741	2,421	4,202	2,815	-10.98	44.2	83,646
Satun	816	297	2,520	1,776	2,118	1,660	18.97	50.5	143,881
Trang	847	372	3,245	2,162	3,262	2,342	-0.53	65.1	78,857
Phattalung	835	381	3,277	2,294	3,123	2,202	4.95	68.3	135,518
Pattani	804	262	2,277	1,873	2,590	1,701	-12.11	49.3	94,407
Yala	847	273	2,374	1,910	1,734	1,755	36.90	35.4	166,993
Narathiwat	814	214	1,822	1,382	1,484	1,424	22.78	24.7	61,071

Table 6. Housing and living conditions

Location	Housing conditions 2000			Households in slum 2001	Living Conditions 2000						
	Permanent building material % 1	Persons per room Number 2	Persons per sleeping room Number 3	% 4	Safe sanitation % 5	Clean drinking water % 6	Electricity in dwelling % 7	Telephone in structure % 8	Electric fan % 9	Refrigerator % 10	Cooking with fuel gas or electric stove % 11
Kingdom	**97.5**	**1.4**	**2.1**	**26.9**	**98.9**	**98.9**	**98.3**	**24.5**	**92.5**	**71.5**	**61.6**
Bangkok Metropolis	**99.7**	**1.3**	**1.8**	**12.7**	**100.0**	**99.8**	**99.9**	**65.4**	**98.4**	**76.9**	**76.6**
Bangkok Vicinity	**97.9**	**1.4**	**2.0**	**30.5**	**99.8**	**99.5**	**99.7**	**47.3**	**99.1**	**80.9**	**89.5**
Nakhon Pathom	97.7	1.3	2.0	5.5	99.3	98.6	99.4	36.5	98.2	82.3	89.8
Nonthaburi	100.0	1.2	1.7	13.7	100.0	100.0	100.0	67.0	100.0	90.0	90.3
Pathum Thani	97.8	1.6	2.2	29.1	100.0	100.0	99.5	47.3	98.6	81.5	81.9
Samut Prakan	99.7	1.5	1.9	38.7	100.0	99.5	99.6	48.4	99.4	73.3	92.7
Samut Sakon	90.8	1.7	2.3	83.6	100.0	100.0	100.0	30.6	99.0	76.9	90.8
Central Region	**97.1**	**1.6**	**2.2**	**33.5**	**99.7**	**97.8**	**98.0**	**26.5**	**96.9**	**82.8**	**80.6**
Chai Nat	96.3	1.3	2.0	11.0	98.8	98.2	96.4	12.8	92.8	71.5	65.4
Phra Nakhon Si Ayutthaya	94.7	1.9	2.2	15.5	99.9	93.3	97.4	36.9	97.5	85.6	90.8
Lop Buri	98.6	1.4	2.1	35.5	100.0	99.3	100.0	17.2	99.0	85.0	79.8
Saraburi	98.3	1.8	2.1	50.5	100.0	99.9	97.2	33.0	97.0	82.9	82.8
Sing Buri	94.8	2.0	2.6	47.2	100.0	100.0	97.2	31.9	95.4	81.8	66.1
Ang Thong	100.0	1.6	2.8	38.3	99.2	99.2	98.9	26.8	97.5	86.5	87.4
Eastern Region	**98.0**	**1.7**	**2.3**	**22.3**	**99.0**	**99.5**	**97.9**	**27.7**	**95.0**	**79.5**	**81.5**
Chanthaburi	97.2	1.5	2.1	28.9	97.7	99.0	95.4	32.4	90.9	75.6	86.1
Chachoengsao	98.8	2.4	2.6	10.8	100.0	100.0	97.5	29.6	95.0	76.0	83.8
Chon Buri	98.9	1.4	1.9	8.9	100.0	99.3	99.7	35.4	98.9	82.9	82.9
Trat	100.0	1.6	2.1	19.4	94.8	99.4	94.9	19.1	89.3	75.0	89.0
Nakhon Nayok	95.7	1.8	2.4	10.4	100.0	98.9	96.6	20.8	95.2	79.9	68.0
Prachin Buri	94.7	1.7	2.5	26.3	99.5	100.0	99.0	16.2	97.6	79.4	80.7
Rayong	100.0	2.1	2.5	53.7	100.0	99.3	100.0	37.5	97.8	93.5	97.0
Sa Kaeo	96.8	1.9	2.8	44.4	97.0	100.0	96.4	13.4	88.3	68.4	61.3
Western Region	**95.5**	**1.7**	**2.3**	**16.1**	**99.0**	**98.2**	**97.4**	**23.5**	**94.1**	**80.8**	**81.1**
Ratchaburi	96.8	1.6	2.1	16.2	99.2	99.9	98.6	31.3	96.5	82.9	74.1
Kanchanaburi	89.6	1.6	2.4	6.3	98.3	97.5	96.9	17.2	94.4	81.9	73.5
Suphan Buri	99.8	1.7	2.5	13.6	99.4	96.3	98.4	19.0	95.6	80.5	86.1
Samutshongkhram	98.0	1.8	2.3	39.5	100.0	100.0	99.5	39.0	98.5	83.0	94.7
Phetchaburi	97.4	2.1	2.4	5.7	99.1	98.8	94.9	25.4	87.2	74.2	82.8
Prachuap Khiri Khan	90.4	1.6	2.1	32.5	98.0	98.7	95.1	18.4	91.3	81.4	87.0
Northeastern Region	**97.9**	**1.4**	**2.2**	**48.8**	**98.8**	**99.9**	**98.7**	**9.0**	**91.3**	**60.4**	**36.2**
Nakon Ratchasima	99.6	1.5	2.4	29.5	100.0	100.0	97.9	13.2	91.4	68.8	69.6
Buri Ram	97.7	1.4	2.3	66.8	98.3	99.3	98.9	5.9	90.8	51.9	41.3
Surin	94.8	1.7	2.5	18.7	97.4	99.6	99.6	8.4	90.2	40.0	27.8
Si Sa Ket	99.4	1.5	2.2	53.0	96.2	100.0	99.5	6.7	86.4	39.6	26.7
Ubon Ratchathani	96.0	1.3	2.0	53.1	96.2	100.0	96.4	13.3	85.9	51.2	22.7
Yasothon	96.9	1.5	2.2	36.1	100.0	100.0	100.0	4.8	96.9	72.6	32.8
Chaiyaphum	97.0	1.4	2.1	39.9	99.9	100.0	97.5	9.2	91.8	66.8	44.1
Amnat Charoen	93.7	1.8	2.4	75.5	99.2	100.0	97.5	8.7	92.8	66.2	16.8
Nong Bua Lam Phu	97.9	1.7	2.1	40.0	99.9	100.0	100.0	3.1	98.4	77.3	34.2
Khon Kaen	98.3	1.0	1.8	66.0	99.9	100.0	99.4	12.5	94.8	71.4	36.7

Location	Housing conditions 2000			Households in slum 2001	Living Conditions 2000						
	Permanent building material % 1	Persons per room Number 2	Persons per sleeping room Number 3	% 4	Safe sanitation % 5	Clean drinking water % 6	Electricity in dwelling % 7	Telephone in structure % 8	Electric fan % 9	Refrigerator % 10	Cooking with fuel gas or electric stove % 11
Udon Thani	99.2	1.6	2.1	41.8	100.0	100.0	100.0	6.5	95.7	70.7	43.0
Loei	99.9	1.7	2.1	41.0	100.0	100.0	100.0	7.1	88.6	65.4	47.5
Nong Khai	99.1	1.5	2.1	58.7	98.9	98.7	98.6	9.8	94.0	63.3	32.4
Maha Salakam	97.4	1.4	2.3	80.7	100.0	100.0	98.6	7.6	93.2	56.8	36.4
Roi Et	97.0	1.3	2.0	30.6	100.0	100.0	99.3	4.6	96.4	66.9	25.6
Kalasin	99.2	1.6	2.3	47.4	99.4	100.0	98.0	7.8	91.5	62.5	18.3
Sakhon Nakhon	98.1	1.7	2.1	78.7	98.5	100.0	98.4	11.2	82.1	54.9	22.8
Nakhon Phanom	96.9	1.6	2.3	52.9	96.3	100.0	98.0	4.9	88.9	53.4	10.9
Mukdahan	97.3	1.3	2.0	65.2	95.4	98.5	98.5	8.6	86.5	62.9	20.3
Northern Region	**95.5**	**1.4**	**2.1**	**45.9**	**99.2**	**97.1**	**97.4**	**19.8**	**90.4**	**74.2**	**54.6**
Chiang Mai	90.6	1.1	1.6	59.1	99.9	96.7	98.7	27.3	86.5	79.0	48.7
Lamphun	97.1	1.1	1.6	48.7	100.0	100.0	99.8	37.8	95.0	85.4	65.9
Lampang	97.9	1.4	1.9	54.6	99.8	99.2	99.8	25.0	91.0	81.4	49.6
Uttaradit	100.0	1.5	2.1	35.0	99.3	100.0	99.8	12.8	95.7	79.0	62.2
Phrae	98.4	1.7	2.0	49.0	100.0	98.5	99.8	24.0	85.7	84.3	54.0
Nan	98.1	1.0	1.7	22.4	100.0	97.2	98.0	15.8	89.9	77.2	45.0
Phayao	98.3	1.2	1.8	45.3	100.0	100.0	100.0	14.0	92.7	81.5	63.7
Chiang Rai	92.5	1.7	2.0	39.9	97.2	86.2	90.3	17.4	81.3	70.7	48.4
Mae Hong Son	95.2	1.4	2.3	22.6	91.8	85.8	63.2	10.5	53.0	36.7	26.2
Nakhon Sawan	93.7	1.5	2.7	41.6	98.8	100.0	97.8	20.4	94.3	69.7	57.6
Uthai Thani	98.4	1.3	2.2	82.3	99.9	99.7	98.9	18.5	95.3	71.9	57.5
Kamphaeng Phet	95.3	1.4	2.0	26.7	98.7	99.7	98.5	17.3	96.5	65.4	54.5
Tak	94.9	1.2	2.1	52.4	100.0	98.6	96.8	20.1	84.7	73.0	52.6
Sukhothai	97.8	1.8	2.4	49.7	100.0	100.0	97.3	14.4	94.2	80.3	75.2
Phitsanulok	98.2	2.2	2.9	29.4	99.7	95.3	99.6	19.0	99.4	71.0	53.4
Phichit	96.9	1.5	2.4	32.9	98.2	95.6	97.6	18.5	95.9	71.8	60.6
Phetchabun	94.2	1.7	2.6	54.4	99.3	100.0	98.8	11.5	89.2	64.6	52.4
Southern Region	**97.9**	**1.4**	**2.2**	**24.8**	**96.6**	**98.7**	**97.2**	**20.3**	**86.4**	**73.9**	**83.7**
Nakhon Si Thammarat	96.8	1.4	2.2	22.9	96.2	99.9	97.5	17.2	86.7	78.4	83.3
Krabi	98.0	1.3	2.3	112.9	98.2	98.8	94.2	18.9	81.5	75.7	90.8
Phangnga	89.2	1.4	2.2	20.8	93.8	98.9	90.3	26.5	80.9	71.2	82.7
Phuket	96.4	1.2	2.0	11.5	99.7	100.0	99.3	41.0	97.8	76.7	89.9
Surat Thani	98.0	1.7	2.3	56.4	99.4	100.0	99.2	22.7	93.2	79.1	89.7
Ranong	94.2	1.4	2.1	22.9	93.2	88.8	89.5	23.8	71.4	61.2	68.6
Chumphon	98.8	1.3	1.9	2.2	99.0	97.6	94.2	20.9	85.4	77.1	86.9
Songkhla	98.9	1.2	1.8	11.7	100.0	99.5	100.0	21.8	96.6	82.5	90.2
Satun	100.0	1.6	2.5	7.7	98.5	100.0	98.7	15.7	80.6	74.6	90.1
Trang	97.4	1.3	1.9	4.8	96.3	100.0	97.5	20.1	86.9	71.0	89.0
Phattalung	99.3	0.9	1.7	11.8	99.4	100.0	98.6	15.8	85.2	75.9	82.8
Pattani	99.4	2.1	2.7	34.9	89.9	98.7	97.2	20.3	75.0	54.0	70.7
Yala	99.1	1.3	2.5	8.5	90.9	86.8	94.9	26.3	83.5	69.3	74.7
Narathiwat	98.5	1.5	2.9	35.4	91.2	99.8	95.4	13.6	75.8	57.6	68.8

Table 7. Family and Community life

Location	Family Life											Safety 2000	
	Female headed households 2000		Elderly headed households 2000		Children aged 15-17 2001			Divorce incidence per 1,000 marriages	Disability 2001			Violent crimes reported per 100,000	Drug-related crimes arrested per 100,000
					Working number	Total number	Working %		Male	Female	% of population		
	Number 1	% 2	Number 3	% 4	5	6	7	8	Number 9	Number 10	11	12	13
Kingdom	**4,160,004**	**25.9**	**3,692,535**	**23.0**	**724,548**	**3,353,528**	**21.6**	**234**	**657,769**	**442,992**	**1.75**	**13**	**438**
Bangkok Metropolis	**536,836**	**27.4**	**238,938**	**12.2**	**77,850**	**391,678**	**19.9**	**351**	**50,145**	**27,300**	**1.00**	**21**	**1,015**
Bangkok Vicinity	**245,717**	**26.8**	**125,128**	**13.7**	**40,942**	**176,331**	**23.2**	**304**	**26,597**	**22,833**	**1.30**	**17**	**903**
Nakhon Pathom	57,111	26.9	37,883	17.8	13,035	41,101	31.7	241	7,853	6,662	1.65	17	1,043
Nonthaburi	60,427	29.7	35,871	17.6	2,404	35,933	6.7	350	4,131	3,025	0.86	14	670
Pathum Thani	40,787	27.7	20,985	14.3	4,162	26,767	15.5	318	2,509	5,116	1.31	20	963
Samut Prakan	53,242	22.4	16,055	6.8	11,555	48,977	23.6	323	10,315	6,225	1.57	16	1,001
Samut Sakon	34,150	29.6	14,333	12.4	9,786	23,553	41.5	221	1,790	1,804	0.81	23	794
Central Region	**275,301**	**34.9**	**263,757**	**33.4**	**25,223**	**141,617**	**17.8**	**243**	**37,633**	**23,751**	**2.10**	**13**	**626**
Chai Nat	34,170	31.1	33,224	30.2	3,633	17,492	20.8	229	8,109	2,743	2.89	13	469
Phra Nakhon Si Ayutthaya	80,436	41.5	68,940	35.6	5,907	36,179	16.3	284	7,551	6,601	1.92	17	944
Lop Buri	60,480	30.4	74,045	37.3	9,646	37,795	25.5	271	9,366	6,382	2.08	14	470
Saraburi	47,633	32.9	39,864	27.5	2,798	27,988	10.0	179	7,243	4,134	2.13	15	705
Sing Buri	28,062	41.6	28,874	42.8	2,147	10,212	21.0	303	3,264	1,658	2.01	8	458
Ang Thong	24,520	32.8	18,810	25.1	1,092	11,951	9.1	299	2,099	2,234	1.57	6	487
Eastern Region	**316,762**	**30.4**	**211,710**	**20.3**	**54,502**	**201,490**	**27.0**	**247**	**33,743**	**24,759**	**1.46**	**15**	**523**
Chanthaburi	28,077	23.4	25,167	21.0	6,245	23,125	27.0	277	4,893	2,831	1.69	15	334
Chachoengsao	63,109	38.7	49,404	30.3	11,410	31,522	36.2	197	5,394	4,572	1.55	17	637
Chon Buri	97,562	37.8	30,931	12.0	11,646	50,396	23.1	302	10,073	7,861	1.78	19	871
Trat	12,817	23.9	14,195	26.4	3,336	10,254	32.5	211	1,580	1,247	1.42	17	223
Nakhon Nayok	19,461	27.7	21,070	30.0	2,501	11,644	21.5	253	2,066	747	1.07	15	427
Prachin Buri	33,983	31.0	31,772	29.0	5,351	19,893	26.9	239	3,843	2,701	1.56	13	367
Rayong	30,343	23.1	19,048	14.5	8,265	28,803	28.7	223	2,973	1,388	0.82	14	445
Sa Kaeo	31,408	23.4	20,122	15.0	5,748	25,853	22.2	203	2,920	3,411	1.27	10	235
Western Region	**287,184**	**32.4**	**241,987**	**27.3**	**45,309**	**181,145**	**25.0**	**216**	**34,632**	**25,147**	**1.71**	**13**	**624**
Ratchaburi	87,376	41.9	77,643	37.2	12,301	42,044	29.3	236	8,335	9,295	2.17	13	598
Kanchanaburi	54,466	32.1	34,209	20.1	11,171	38,444	29.1	192	11,570	4,989	2.38	15	630
Suphan Buri	61,346	26.7	55,768	24.2	11,504	42,158	27.3	192	5,328	3,245	0.97	11	827
Samutshongkhram	18,520	34.8	14,898	28.0	2,119	10,457	20.3	232	1,533	1,586	1.46	11	460
Phetchaburi	31,175	27.6	31,683	28.1	4,062	24,020	16.9	244	3,129	3,755	1.55	14	578
Prachuap Khiri khan	34,302	30.7	27,785	24.9	4,152	24,022	17.3	228	4,737	2,278	1.57	16	410
Northeastern Region	**1,196,554**	**23.0**	**1,257,183**	**24.1**	**266,454**	**1,208,679**	**22.0**	**179**	**246,355**	**162,825**	**1.93**	**7**	**211**
Nakon Ratchasima	157,230	23.1	174,809	25.7	32,989	138,432	23.8	237	31,017	33,669	2.42	7	283
Buri Ram	81,473	23.3	78,059	22.4	19,212	89,244	21.5	146	28,247	10,420	2.57	5	98
Surin	77,374	22.5	90,776	26.4	9,421	68,916	13.7	112	14,003	12,926	2.00	4	76
Si Sa Ket	84,832	24.0	80,194	22.7	17,685	77,498	22.8	106	38,817	17,810	3.98	5	137
Ubon Ratchathani	80,399	19.8	83,885	20.7	33,585	100,422	33.4	109	21,975	8,911	1.81	6	199
Yasothon	32,586	22.8	28,900	20.2	4,356	32,086	13.6	170	5,399	4,464	1.68	4	214
Chaiyaphum	72,512	25.3	93,774	32.7	12,603	61,284	20.6	182	17,785	8,772	2.36	6	306
Amnat Charoen	13,128	15.0	25,689	29.3	5,699	20,016	28.5	113	2,787	3,055	1.61	4	350
Nong Bua Lam Phu	19,432	17.4	20,282	18.2	10,301	31,694	32.5	200	1,863	2,406	0.88	9	95
Khon Kaen	98,265	21.7	91,752	20.2	6,850	100,364	6.8	220	19,873	10,250	1.66	8	140

Location	Family Life											Safety 2000	
	Female headed households 2000		Elderly headed households 2000		Children aged 15-17 2001			Divorce incidence per 1,000 marriages	Disability 2001			Violent crimes reported per 100,000	Drug-related crimes arrested per 100,000
					Working number	Total number	Working %		Male	Female	% of population		
	Number 1	% 2	Number 3	% 4	5	6	7	8	Number 9	Number 10	11	12	13
Udon Thani	71,036	20.3	88,549	25.4	22,178	92,434	24.0	254	6,720	4,943	0.79	11	167
Loei	22,277	14.7	33,360	21.9	6,588	33,412	19.7	189	6,013	2,835	1.49	16	405
Nong Khai	49,445	23.0	57,011	26.5	15,444	57,246	27.0	193	6,436	3,128	1.08	7	212
Maha Salakam	59,409	24.3	65,628	26.8	13,211	54,992	24.0	137	4,260	5,338	0.98	11	188
Roi Et	75,099	23.9	75,127	23.9	14,818	69,710	21.3	285	9,810	6,910	1.33	8	249
Kalasin	57,888	24.8	53,217	22.8	8,924	55,729	16.0	113	10,486	9,012	2.09	9	255
Sakhon Nakhon	87,949	35.7	67,199	27.3	16,612	64,813	25.6	162	7,806	7,096	1.43	5	307
Nakhon Phanom	44,583	26.7	40,741	24.4	10,212	41,412	24.7	169	8,770	8,537	2.51	7	242
Mukdahan	11,638	16.9	8,232	12.0	5,766	18,976	30.4	168	4,287	2,342	2.28	17	422
Northern Region	**813,284**	**25.6**	**870,123**	**27.3**	**115,072**	**579,084**	**19.9**	**283**	**151,974**	**105,477**	**2.28**	**11**	**405**
Chiang Mai	103,261	23.9	137,426	31.8	13,897	63,606	21.8	384	22,800	12,012	2.37	12	434
Lamphun	27,984	22.8	38,409	31.3	3,866	17,705	21.8	313	5,838	4,397	2.31	7	280
Lampang	59,828	26.6	73,980	32.9	3,918	35,135	11.2	361	6,287	5,669	1.52	7	337
Uttaradit	42,057	32.6	31,918	24.8	3,208	25,243	12.7	279	6,778	3,604	2.24	10	330
Phrae	35,085	22.9	41,334	27.0	1,156	24,699	4.7	366	10,556	6,886	3.35	14	306
Nan	27,550	21.9	31,882	25.3	6,494	21,867	29.7	219	4,476	2,942	1.69	10	258
Phayao	31,501	21.8	40,523	28.0	1,907	25,623	7.4	330	5,497	4,062	1.89	7	317
Chiang Rai	73,862	23.1	64,638	20.2	13,635	57,056	23.9	362	19,107	10,239	2.63	12	489
Mae Hong Son	6,527	13.8	9,746	20.6	4,758	9,903	48.0	159	833	371	0.69	7	246
Nakhon Sawan	91,063	29.3	75,044	24.2	11,420	59,230	19.3	231	19,059	12,478	2.83	12	422
Uthai Thani	29,394	33.0	22,284	25.0	2,380	16,565	14.4	229	2,708	2,229	1.58	13	382
Kamphaeng Phet	51,182	26.9	50,051	26.3	9,714	39,854	24.4	188	5,293	1,312	0.97	10	517
Tak	27,068	27.3	23,592	23.8	8,100	20,146	40.2	192	3,975	4,067	2.25	14	553
Sukhothai	49,033	28.9	39,257	23.1	5,847	33,724	17.3	209	8,499	6,714	2.56	13	466
Phitsanulok	59,220	26.4	63,035	28.1	6,565	44,494	14.8	346	9,653	8,513	2.25	12	341
Phichit	47,978	31.0	52,516	33.9	6,703	29,057	23.1	173	10,483	8,383	3.21	6	325
Phetchabun	50,692	20.8	74,487	30.5	11,504	55,177	20.8	193	10,131	11,600	2.35	15	484
Southern Region	**488,363**	**23.2**	**483,712**	**23.0**	**99,196**	**473,504**	**20.9**	**163**	**76,691**	**50,901**	**1.52**	**23**	**273**
Nakhon Si Thammarat	102,992	24.2	116,012	27.3	17,084	95,412	17.9	151	14,142	10,870	1.50	21	254
Krabi	11,435	13.9	14,458	17.5	7,169	19,635	36.5	143	1,960	1,678	1.10	30	280
Phangnga	12,469	17.9	14,547	20.9	4,556	13,182	34.6	175	754	2,391	1.24	15	270
Phuket	12,165	24.7	5,643	11.5	2,596	11,062	23.5	280	1,221	1,012	1.10	16	634
Surat Thani	39,883	17.4	57,374	25.1	7,597	51,098	14.9	186	9,454	4,410	1.54	29	428
Ranong	9,031	24.0	5,845	15.5	838	8,053	10.4	181	985	1,513	1.78	15	543
Chumphon	37,146	29.7	39,390	31.5	5,330	24,057	22.2	163	3,928	2,250	1.36	23.1	393.8
Songkhla	73,052	22.1	63,770	19.3	15,433	73,701	20.9	193	8,369	1,689	0.75	27.9	223.5
Satun	12,059	19.7	13,816	22.6	2,933	15,581	18.8	125	2,846	1,652	1.73	31.5	340.8
Trang	46,089	29.6	33,529	21.5	9,824	35,831	27.4	150	6,504	5,326	1.88	33.8	178.4
Phattalung	32,256	23.4	29,150	21.2	6,270	31,287	20.0	173	6,219	6,123	2.35	23.8	86.4
Pattani	35,913	24.9	38,280	26.5	7,644	35,452	21.6	95	9,773	6,478	2.60	12.4	185.6
Yala	24,205	23.4	22,378	21.6	3,706	22,790	16.3	100	3,736	1,534	1.26	21.5	199.0
Narathiwat	39,670	25.7	29,520	19.1	8,216	36,363	22.6	95	6,799	3,975	1.61	14.9	235.6

Table 8. Transport and Communication

Location	Transportation 2001			Communication						
	Villages	Villages with convenient access to nearest district	Vehicle registration per 1,000 population	Television 2000	Radio 2000	Telephone 2002			Internet access 2000 (%)	
	Number	%		%	%	Available lines	Leased lines	Persons per leased line	household	population
	1	2	3	4	5	6	7	8	9	10
Kingdom	**66,153**	**82.3**	**344**	**89.3**	**71.8**	**7,873,202**	**6,434,950**	**10**	**14.1**	**5.6**
Bangkok Metropolis	**na.**	**100.0**	**734**	**91.6**	**85.4**	**3,041,118**	**2,406,000**	**2**	**34.4**	**16.0**
Bangkok Vicinity	**2,134**	**92.7**	**196**	**90.3**	**82.9**	**1,514,663**	**1,207,684**	**3**	**25.0**	**9.8**
Nakhon Pathom	850	95.2	347	92.0	81.6	93,512	79,561	10	16.1	5.9
Nonthaburi	291	91.1	155	96.3	95.7	469,523	371,466	2	39.5	15.9
Pathum Thani	432	93.8	109	92.9	83.3	360,830	285,473	2	23.8	10.3
Samut Prakan	316	85.8	118	81.2	78.1	537,298	425,086	2	27.2	10.1
Samut Sakon	245	93.1	320	91.8	72.1	53,500	46,097	9	12.8	5.1
Central Region	**4,360**	**91.4**	**367**	**90.1**	**80.1**	**266,401**	**242,718**	**12**	**11.0**	**3.9**
Chai Nat	476	96.4	346	84.0	83.2	22,602	19,346	18	9.2	3.3
Phra Nakhon Si Ayutthaya	1,210	89.8	308	91.1	75.7	81,960	72,957	10	13.0	4.6
Lop Buri	1,051	87.3	352	89.4	86.1	50,360	42,727	18	10.1	3.3
Saraburi	885	90.4	411	92.5	72.8	65,821	56,649	11	14.1	5.2
Sing Buri	292	98.3	518	90.1	81.4	23,370	19,734	11	9.3	3.2
Ang Thong	446	97.5	376	93.1	83.8	22,288	31,305	9	6.4	2.0
Eastern Region	**4,326**	**70.7**	**436**	**91.3**	**74.7**	**515,514**	**428,875**	**10**	**14.0**	**5.1**
Chanthaburi	632	91.5	461	89.3	71.2	57,575	45,297	11	18.3	6.5
Chachoengsao	813	89.3	297	88.5	65.4	68,092	56,789	11	10.8	3.9
Chon Buri	549	94.9	621	94.1	87.9	206,972	175,996	6	23.2	8.6
Trat	247	87.0	383	85.9	67.4	21,113	16,218	14	13.6	4.5
Nakhon Nayok	393	84.0	334	94.0	85.7	21,592	18,829	13	7.0	2.4
Prachin Buri	665	83.3	302	88.2	76.7	27,391	23,415	19	10.1	3.8
Rayong	380	96.6	633	97.0	80.4	92,186	76,180	7	15.6	4.9
Sa Kaeo	647	76.5	184	88.6	53.9	20,593	16,151	33	2.1	0.9
Western Region	**3,831**	**91.1**	**387**	**89.6**	**77.2**	**300,229**	**243,407**	**15**	**11.6**	**4.1**
Ratchaburi	822	94.6	395	92.6	71.5	78,671	68,943	12	15.8	6.4
Kanchanaburi	832	88.9	350	88.0	69.8	46,335	39,900	20	12.8	3.8
Suphan Buri	949	91.0	347	87.8	88.1	60,904	38,807	22	5.8	2.0
Samutshongkhram	270	86.3	218	96.1	81.5	22,865	20,437	10	17.1	5.5
Phetchaburi	585	92.5	441	86.1	74.8	49,877	41,079	11	11.7	4.2
Prachuap Khiri khan	373	89.3	526	90.3	77.1	41,577	34,241	14	11.2	3.8
Northeastern Region	**29,253**	**75.4**	**206**	**90.1**	**63.6**	**724,541**	**612,985**	**35**	**7.4**	**2.6**
Nakon Ratchasima	3,277	74.1	236	91.0	74.2	127,747	113,510	23	6.2	2.4
Buri Ram	2,270	74.5	178	88.4	61.5	35,440	29,507	52	4.4	1.4
Surin	1,972	68.5	151	87.9	62.1	30,684	24,366	57	5.6	1.7
Si Sa Ket	2,413	61.3	151	81.4	50.7	31,549	24,973	58	7.6	2.3
Ubon Ratchathani	2,405	75.1	222	86.2	64.7	66,568	57,278	31	9.2	3.3
Yasothon	809	77.6	248	94.4	53.7	13,937	12,073	46	11.0	3.6
Chaiyaphum	1,356	78.8	168	90.7	60.4	34,662	29,379	38	5.6	1.9
Amnat Charoen	554	84.5	162	92.4	56.9	8,625	8,201	45	5.4	2.2
Nong Bua Lam Phu	545	81.1	115	95.2	72.2	10,806	8,198	61	3.6	1.0
Khon Kaen	2,030	82.1	313	93.8	64.8	94,340	83,353	21	13.0	5.4

Location	Transportation 2001			Communication						
	Villages	Villages with convenient access to nearest district	Vehicle registration per 1,000 population	Television 2000	Radio 2000	Telephone 2002			Internet access 2000 (%)	
	Number	%		%	%	Available lines	Leased lines	Persons per leased line	household	population
	1	2	3	4	5	6	7	8	9	10
Udon Thani	1,522	75.8	236	92.7	66.4	61,531	50,844	30	6.2	3.4
Loei	789	82.3	249	95.5	67.5	21,674	17,814	35	10.1	3.5
Nong Khai	1,122	80.7	163	91.4	59.4	34,338	25,885	35	3.8	1.2
Maha Salakam	1,846	78.4	185	86.7	68.3	29,819	25,369	37	11.3	3.6
Roi Et	2,228	76.0	244	91.0	65.6	34,650	28,448	46	7.1	2.6
Kalasin	1,328	73.6	176	88.7	60.5	26,977	19,808	50	6.1	2.0
Sakhon Nakhon	1,320	81.1	165	93.0	62.9	29,286	26,124	42	5.8	1.8
Nakhon Phanom	996	78.8	190	94.3	50.2	19,625	17,216	42	7.5	2.4
Mukdahan	471	73.9	219	85.1	69.9	12,283	10,639	32	8.9	2.7
Northern Region	**14,249**	**82.7**	**364**	**87.6**	**72.0**	**874,810**	**762,914**	**16**	**12.0**	**4.6**
Chiang Mai	1,749	79.5	532	86.7	78.2	232,906	195,536	8	16.6	6.4
Lamphun	456	89.0	586	95.2	76.4	45,019	41,685	10	17.2	5.8
Lampang	758	89.4	445	88.3	70.1	67,896	62,954	13	17.8	6.5
Uttaradit	536	86.9	335	89.0	63.4	24,516	22,899	21	13.3	5.1
Phrae	588	87.2	400	93.9	75.2	39,899	37,455	13	18.2	7.2
Nan	805	77.3	315	84.0	73.8	22,666	19,656	25	9.9	3.5
Phayao	622	92.0	384	92.2	74.6	28,480	27,511	19	9.9	5.1
Chiang Rai	1,450	79.2	376	85.4	78.8	88,930	77,515	16	15.2	5.6
Mae Hong Son	392	41.1	114	51.2	62.5	10,237	8,703	27	5.8	2.1
Nakhon Sawan	1,293	85.8	341	84.8	61.2	77,068	64,278	18	15.1	6.1
Uthai Thani	575	89.6	400	87.4	71.6	15,716	12,919	26	10.9	3.9
Kamphaeng Phet	858	77.9	254	88.6	68.9	26,352	23,053	33	5.4	2.3
Tak	468	79.3	256	81.3	61.7	31,080	28,125	18	8.0	2.7
Sukhothai	740	88.6	318	92.7	73.5	32,238	28,133	22	9.6	3.3
Phitsanulok	913	83.8	324	87.6	77.3	56,856	49,720	17	6.5	2.6
Phichit	818	91.0	331	89.6	68.0	33,548	27,606	21	5.4	2.1
Phetchabun	1,228	81.7	231	90.0	70.0	41,403	35,166	29	4.5	1.9
Southern Region	**8,000**	**92.2**	**398**	**85.8**	**67.2**	**635,926**	**530,367**	**16**	**12.5**	**4.7**
Nakhon Si Thammarat	1,419	84.2	310	88.3	61.3	80,572	68,591	22	15.4	6.1
Krabi	370	91.6	356	84.8	53.9	18,159	16,934	22	7.0	2.4
Phangnga	313	96.2	229	79.1	57.7	20,765	16,643	14	7.0	2.8
Phuket	94	97.9	888	87.7	76.7	80,012	64,925	4	21.1	10.6
Surat Thani	946	96.4	413	92.6	67.5	83,548	69,598	13	12.0	3.3
Ranong	166	89.2	270	80.6	56.8	18,046	15,368	11	13.9	5.6
Chumphon	683	90.5	405	88.1	73.6	29,976	24,914	19	12.7	4.6
Songkhla	940	94.9	502	92.3	72.5	138,759	114,243	11	19.2	7.6
Satun	253	98.0	328	85.5	62.6	15,065	12,888	21	9.8	4.2
Trang	699	98.3	414	88.7	65.9	40,660	32,261	18	9.5	3.2
Phattalung	635	96.7	384	90.9	70.9	24,345	18,808	27	6.3	2.0
Pattani	603	87.7	261	67.2	71.4	27,239	24,707	25	11.7	4.1
Yala	345	91.3	449	77.3	77.6	32,748	26,759	17	11.7	4.8
Narathiwat	534	91.2	424	73.0	66.7	26,032	23,728	29	4.6	1.5

Table 9. Participation

Location	Political participation 2001		Civil society participation 2001		
	Eligible voters Number 1	Vote turnout % 2	Community groups per 100,000 pop. Number 3	Households participate in local groups % 4	Households participate in social services % 5
Kingdom	**42,707,241**	**69.8**	**203**	**88.3**	**96.0**
Bangkok Metropolis	**3,900,578**	**66.7**	**8**	**37.8**	**88.2**
Bangkok Vicinity	**2,554,221**	**68.5**	**47**	**69.1**	**95.9**
Nakhon Pathom	542,571	75.1	103	94.9	98.8
Nonthaburi	626,739	69.9	33	88.5	98.3
Pathum Thani	344,997	70.9	42	57.8	95.8
Samut Prakan	749,766	60.8	19	37.8	98.3
Samut Sakon	290,148	70.5	40	66.3	88.2
Central Region	**2,126,948**	**70.5**	**127**	**88.0**	**96.2**
Chai Nat	261,829	68.8	132	85.1	95.6
Phra Nakhon Si Ayutthaya	526,021	72.4	135	92.5	97.9
Lop Buri	553,392	67.6	98	86.6	95.7
Saraburi	406,673	71.6	145	83.4	95.6
Sing Buri	167,100	73.6	201	91.8	95.8
Ang Thong	211,933	70.6	93	88.4	96.5
Eastern Region	**2,803,922**	**70.9**	**99**	**86.5**	**95.2**
Chanthaburi	339,574	73.4	140	91.0	95.4
Chachoengsao	451,259	68.7	66	86.8	96.3
Chon Buri	741,921	66.7	43	84.5	95.0
Trat	148,047	70.1	253	92.0	97.4
Nakhon Nayok	179,070	72.0	95	77.9	94.1
Prachin Buri	222,942	94.8	112	81.8	93.8
Rayong	356,794	71.8	73	87.0	93.4
Sa Kaeo	364,315	64.5	167	90.8	96.0
Western Region	**2,565,231**	**70.5**	**100**	**88.5**	**95.3**
Ratchaburi	576,825	72.1	72	85.1	94.8
Kanchanaburi	573,849	70.3	95	85.9	95.2
Suphan Buri	610,544	67.9	100	87.9	96.2
Samutshongkhram	147,841	68.5	107	96.5	97.9
Phetchaburi	325,119	75.5	149	87.0	93.4
Prachuap Khiri khan	331,053	68.5	107	88.6	94.0
Northeastern Region	**14,857,905**	**67.4**	**117**	**92.6**	**97.8**
Nakon Ratchasima	1,774,057	69.6	84	87.5	97.6
Buri Ram	1,071,367	66.8	128	83.9	95.6
Surin	943,046	65.3	118	93.6	98.9
Si Sa Ket	1,053,151	64.3	148	93.8	98.0
Ubon Ratchathani	1,175,559	70.2	122	89.3	97.5
Yasothon	388,801	68.7	171	93.8	96.6
Chaiyaphum	799,715	67.1	101	90.2	96.9
Amnat Charoen	258,180	67.9	166	93.7	99.0
Nong Bua Lam Phu	333,169	68.1	159	93.0	98.6
Khon Kaen	1,230,970	69.6	109	93.3	97.4

Location	Political participation 2001		Civil society participation 2001		
	Eligible voters Number 1	Vote turnout % 2	Community groups per 100,000 pop. Number 3	Households participate in local groups % 4	Households participate in social services % 5
Udon Thani	1,038,644	66.7	97	93.5	98.5
Loei	435,189	74.2	113	93.9	97.6
Nong Khai	617,586	62.3	70	92.4	97.1
Maha Salakam	676,282	69.7	146	95.1	99.1
Roi Et	929,390	66.7	162	92.3	97.6
Kalasin	684,775	70.7	106	93.8	97.1
Sakhon Nakhon	747,106	66.4	93	94.6	98.1
Nakhon Phanom	475,231	69.0	107	96.3	98.5
Mukdahan	225,687	37.4	150	94.7	98.2
Northern Region	**8,462,722**	**72.0**	**132**	**91.8**	**95.4**
Chiang Mai	1,106,980	78.8	123	92.4	96.5
Lamphun	306,187	83.8	169	96.8	98.6
Lampang	595,624	76.1	163	98.4	99.1
Uttaradit	356,150	71.7	172	92.9	96.1
Phrae	370,242	77.7	136	97.9	98.4
Nan	337,653	79.5	211	95.6	99.0
Phayao	371,932	74.8	221	97.9	97.1
Chiang Rai	803,294	73.6	117	93.5	97.3
Mae Hong Son	136,183	75.9	174	85.0	94.5
Nakhon Sawan	794,246	66.5	77	87.5	94.5
Uthai Thani	235,072	72.6	137	95.0	97.8
Kamphaeng Phet	525,395	61.6	126	86.5	92.2
Tak	297,126	70.6	109	89.6	96.2
Sukhothai	460,735	68.6	163	90.9	92.2
Phitsanulok	612,660	67.2	100	83.2	88.3
Phichit	419,157	65.7	82	91.0	93.5
Phetchabun	734,086	66.3	124	87.3	91.3
Southern Region	**5,435,714**	**74.8**	**102**	**80.5**	**93.1**
Nakhon Si Thammarat	1,040,126	70.1	97	78.4	92.2
Krabi	232,417	77.4	83	81.3	92.8
Phangnga	161,228	76.5	175	88.7	97.1
Phuket	171,943	76.1	35	88.6	97.3
Surat Thani	596,657	74.5	106	81.9	90.0
Ranong	103,220	73.9	134	76.2	92.2
Chumphon	320,902	74.8	97	79.3	89.5
Songkhla	824,476	76.9	106	88.9	94.6
Satun	168,012	82.2	151	70.8	93.4
Trang	394,513	76.5	113	80.4	89.3
Phattalung	352,058	78.0	149	83.5	89.0
Pattani	384,489	74.3	71	72.8	92.4
Yala	267,882	76.3	70	78.5	96.5
Narathiwat	417,791	72.8	85	77.2	96.8

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