

Thai Health 2012

FOOD SECURITY

The Illusion of Money VS The Reality of Food



11 Thai Population and Health Indicators

10 Outstanding Health Situations



Institute for Population and Social Research, Mahidol University (IPSR)
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Thai Health 2012

Preface

For nine consecutive years, the *Thai Health Working Group* has been issuing annual reports containing academic information on health in its physical, mental, social, wisdom and cultural dimension. This latest report, *Thai Health 2012*, focuses on food security so as to reflect the ongoing insecurity in the global food market which continues to experience many crises arising from toxic residue to price hikes and increasing food shortages. These food related problems are intensifying and deepening such that the general public is increasingly worried and concerned about the safety and quality of their lives.

The main section of this report discusses the different aspects of food security. Food security is defined as “*access for consumption by the population to available and adequate food with safety and age appropriate nutritional values for wellbeing as well as to ensure a secure food production system which supports and maintains ecological balance and the country’s natural food resource base in normal times as well as during natural disasters and/or in case of terrorism threats against food supplies.*”

This discussion article aims to shake Thai society from its position of complacency regarding food issues so as to ensure the society begins to take steps to ensure Thailand’s food security, with policy awareness that locally produced food should serve, first and foremost, the Thai people. Although food security is a recurring issue which has caused significant challenges in the past, it is now time to raise awareness at a national level to ensure effective policy making and concrete measures to prepare for future food crises. Debunking the myth of fertility and food security, this report aims to project the real situation where, as the Thai popular saying, “Money is illusory, food is tangible.”

This year’s “11 Health Indicators” put a spotlight on Thailand’s decreasing population growth, which results from low birth rates. According to the latest Population and Household Census, over the past decade Thailand’s population growth rate has fallen to only 0.5% per year. If this trend continues, the rate will drop to 0% within 20 years. And if Thailand’s growth rate plunges deeper into negative growth, in 50 years children will account for less than 10% of the population while approximately 70% of the country’s population will be of working age and senior citizens over 65 will

make up as much as 20% of the total population. Thailand would then turn into a completely ageing society.

In addition, other indicators related to shrinking number of children, youth and working age populations and swelling elderly populations create concern on issues of economic and social dependency such that appropriate policy is required to ensure quality of life which focuses on education, workforce development, technological progress and environmental improvement.

The report moves onto the “10 Outstanding Health Situations” and “4 Achievements” sections. Natural disasters have become the most talked-about topic as Thailand recovered from its worst flooding in 50 years. The floods were worst in decades both in terms of the volume of water involved as well as the numbers of people affected. Thailand’s recent floods sent a strong warning on the immediate need for improvement and preparedness to cope with future natural disasters.

Other topics Wang Nam Khiao “Model”: Reflecting the Problems of people, forest and land, Right to refuse treatment When death is the only dignified option, Thailand Reform Unfinished Uprooting of the Poisonous Tree ,Hurdles towards the ASEAN Community, Thai–Cambodian Border Conflict Tension continues after ceasefire, Revoking licenses for four toxic chemicals, Time to lay foundation for the first Thai Traditional Medicine Hospitals, Child ID cards and unanswered questions, BOI and Investment Promotion Policy to Strengthen Health System

Thai Health 2012 remains committed to academic excellence and providing a wide source of information. The *Thai Health Working Group* continues to refine its conceptual framework, methodology and format to ensure presentation of this report is optimal, easy to understand, accessible and practical for a diverse group of people. It is hoped that this report will raise awareness, contribute to knowledge and promote social movements working on the impact of health risks and the importance of healthy behaviors in Thai society.

11 Thai Population and Health Indicators Taking the Pulse of Thailand's Populational Health

6-31

1. Changing Demographics	10
2. Birth	12
3. Morbidity and Mortality	14
4. Internal Migration	16
5. International Migration	18
6. Quality of Life and Human Development	20
7. Workforce and Economy	22
8. Family and Social Support	24
9. Eco-Friendliness	26
10. Health Service System	28
11. Evolution of Thailand's Population Policies	30

10 Outstanding Health Situations

32-81

1. Flood of the Century: Warning of Things To Come	34
2. Wang Nam Khiao "Model": Reflecting the Problems of People, Forest and Land	41
3. Right to Refuse Treatment When Death Is The Only Dignified Option	45
4. Thailand Reform Unfinished Uprooting of the Poisonous Tree	49
5. Hurdles towards the ASEAN Community	53
6. Thai-Cambodian Border Conflict Tension Continues After Ceasefire	58
7. Revoking Licenses for Four Toxic Chemicals	63
8. Time to Lay Foundation for the First Thai Traditional Medicine Hospitals	68
9. Child ID Cards and Unanswered Questions	73
10. BOI and Investment Promotion Policy to Strengthen Health System	77

Contents

4 Notable Thai Contribution to the Health of Thais	82-83
1. Thai Traditional Medicine Won Gold Medal for Food Supplement Product at the International Exhibition of Inventions in Geneva, Switzerland	82
2. National Health Security Office (NHSO) Provided 170 Million Baht to Promote Health of Senior Citizens	82
3. Chambers of Commerce Set Up Anti-Corruption Network (CAN)	83
4. Promoting Virtues in the Deep South	83

Special Feature	84-110
Food Security: The Illusion of Money vs The Reality of Food	84

Appendix:	111-119
References	111
The Process of Producing the Thai Health Report	116
Members of Steering committee	118
Lists of Reviewers	119
Lists of Experts Health on Indicators: 11 Thai Population and Health Indicators	119
Writers for 10 Outstanding Health Situations	119
The Thai Health Report Team	119

11 Thai Population and Health Indicators

**Taking the Pulse of
Thailand's Populational Health**

“Because of the changing demographics and characteristics of the Thai population in various dimensions, anticipation and preparedness for future impacts, especially in relation to health, is a priority and a challenge for Thai society.”

11 Health Indicators

Taking the Pulse of Thailand's Populational Health

This year Thai Health 2012 takes Thailand's pulse through utilising 11 indicators to actually reflect the reality of population changes and the implications of births, deaths and migration on the wellbeing of the country and the health of its people. Quality of life and human development, impacts on the workforce, economy, family, social support, the environment, healthcare services, as well as the evolution of the country's population policies from the past to the future are considered.

Currently, Thailand is experiencing low population growth. According to the latest Population and Household Census in 2010, the Thai population consists of 65.9 million people (advance report). Among these, almost 3 million are without Thai nationality. Even though the population size remains stable, demographics are drastically changing. While the proportion of children and young people shrinks, that of the older population (aged 60 and over) has now reached 13% and will continue to climb. Thailand is fully becoming an “ageing society”

The main reason for these demographic changes is the continual decline in birth rates and fertility rates. Only 30–50 years ago, the number of births in the country topped one million per year. Nowadays only 700,000 to 800,000 babies are born each year. Fertility rates have also dropped from 6 to only 1.6.

Another reason for the changing demographics is better health and increased longevity of the population. From a life expectancy of about 50 years in the past, Thais are now expected to live to 73 years on average as a result of improved quality of life and better healthcare. Worryingly, the present mortality rates at around 400,000 per year and other non-fatal morbidities are largely caused by non-communicable diseases, dietary behaviour and unhealthy lifestyles.

Internal migration still hinges on the state of the economy but seems to be decreasing at 3% in 2009. A likely explanation for this change is increasing urbanisation which brings the city to the people rather than the other way around. There's

no doubt that migration impacts significantly on physical and mental health of migrants as well as their left-behind family members, especially children and the elderly. It is important that Thai society remains watchful and supportive of these people.

The demand for foreign workers, especially from neighboring countries, continues to increase. However, many foreign workers still face problems regarding their status and health security barring access to necessary healthcare services. As a result of the promotion of Thailand as Asia's medical hub, the number of foreign patients in Thailand continues to grow also. Although this benefits the economy, it is important to be vigilant and prepared for possible negative impacts on the country's public health system and the service quality for Thais from these developments.

One of the ongoing populational changes, the drops in childbirths, may not be as much a concern as the question on how to ensure the quality of birth and development for every child. Human development and educational opportunities continue to improve for Thai people. School attendance rates have increased at every level. However, there are considerable gaps in educational opportunities among different socioeconomic statuses and regions.

An "ageing society" also affects the size of the workforce and employment in Thailand, as well as increased dependency of senior citizens on working age populations. Changing social conditions, decreased childbirths and smaller family size also reduce the caretaking capability of families to support senior citizens. Capacity enhancement and

skill-building should be promoted to ensure the ageing workforce stay longer in the labour market and so as to allow them to be self-dependent for a longer period of time. Similarly savings and extension of income security to include senior citizens and community support should be encouraged.

Under the guise of development, our resource consumption and pollution have strongly affected the environment in the country at an alarming rate. Eco-friendliness and more "green" behaviors should be encouraged and campaigned for both in relation to resource and energy use as well as other activities which contribute to global warming.

The graying of Thai society also should lead to greater preparedness and planning in the healthcare system for the expected rise in access required, especially to costly services. On one hand, the success of the Universal Coverage Scheme has allowed all Thai people, and especially senior citizens, to access necessary services. On the other hand, the costs have also risen significantly, especially in the public sector. Monitoring and evaluation of the impending impacts from rising costs and congestion of health resources as well as personnel and facilities is required.

During the past four decades, Thailand's population policy successfully focused on cutting growth rates under fear of overpopulation. In today's reverse situation, appropriate policy revisions are required such as measures to promote fertility and population quality to respond to this new challenge and to ensure appropriate population in Thailand both in term of size and quality.



Changing Demographics



*Professor Dr.Pramote Prasartkul and Associate Professor Dr.Patama Vapattanawong
IPSR, Mahidol University*

“It’s possible that Thailand will have almost twice as many senior citizens than children in 40 years.”

Thailand is currently experiencing very low population growth. Population growth is likely to disappear within 20 years. Due to these changing demographics, the average age of the Thai population will increase and Thailand will fully become an “ageing society.”

During the past century, the size of the Thai population has significantly increased. The first Thai census in 1910 counted only 8 million people in the Kingdom. This number increased to 26 million people in 1960 and 65.9 million people according to the latest census undertaken in 2010 (advance report).

There are as many as 2.7 million people in Thailand who, according to the latest census, do not have Thai nationality. In the past 10 years, growth of the Thai population has slowed significantly as a result of the constant decline in birth rates. Currently, Thailand’s growth rate stands at only 0.8% compared to 3% 40 years ago. The domestic growth rate—likely continues to drop to 0% in the next 20 years and may even become negative thereafter.

Although Thailand’s population size has more or less stabilized at around 65 million people, the demographic structure has changed drastically over the past 50 years from a largely young population to an ageing population. In 1960, the proportion of Thailand’s population aged 65 years and over constituted less than 3%. Today these senior citizens make up as many as 7.9% of Thai people at around 5 million people. The number of young persons in Thailand below 15 years old used to make up as many as 40% of the population in 1960. Now such individuals make up only around 20% of the population. The decline in fertility rates and increased longevity will further increase the average age of the Thai population in the near future.

In 40 years’ time, and if fertility rates drop further, the Thai population will consist of only 12% children, 65% working-age people and as many as 23% of the population will be aged 65 years and over—almost a quarter of Thai people will be elderly.

Maintaining fertility rates and preparedness for ageing society are important measures and a significant challenge in the context of Thailand’s changing demographics.



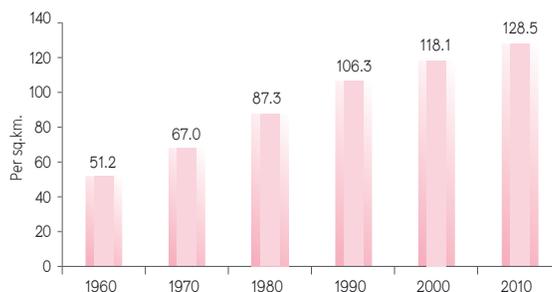
Population size and growth rates, 1909-2010



Source: Population and Housing Census, 1960, 1970, 1980, 1990, 2000 and 2010 (advance report)

Note: The displayed growth rates are 10-year average from the Population and Household Census. The growth rates between 2007-2010 calculated from Civil Registration data is around 0.5%.

Thailand's population density, 1960-2010



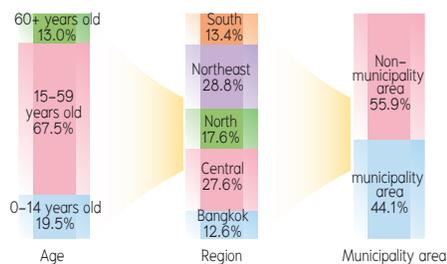
Region	2010 population density (Per sq.km.)
Bangkok	5,278.8
Central	177.7
North	68.6
Northeast	112.3
South	125.4
National	128.5

Bangkok's population density is 41 times the national average.

Source: Population and Housing Census 2010 (advance report)

Proportion of Thai population in 2010 by age group, region, and municipality area

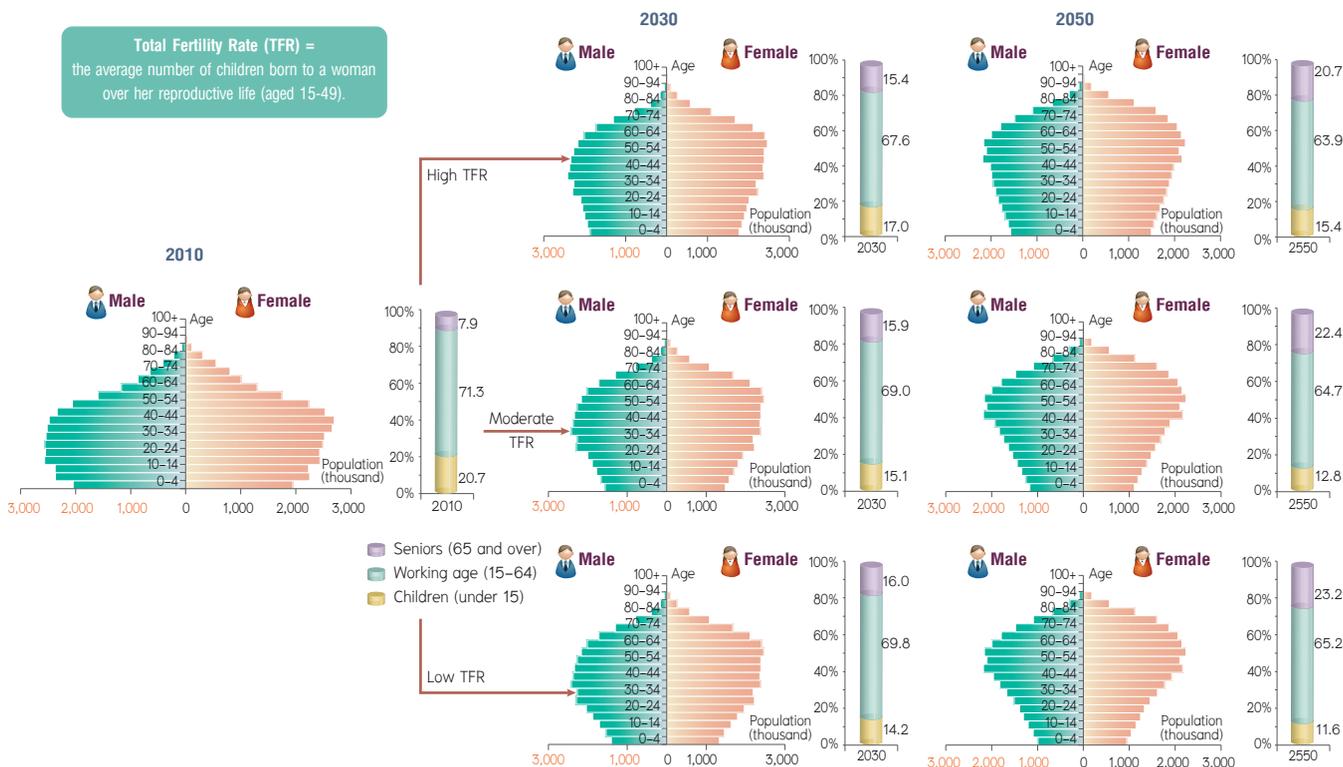
Total Thai population in 2010 = 65.9 million



Source: Population and Housing Census 2010 (advance report)

Projected Thailand's population pyramid in 2010, 2030 and 2050 at high, moderate and low TFRs

Total Fertility Rate (TFR) = the average number of children born to a woman over her reproductive life (aged 15-49).



Source: Institute for Population and Social Research, Mahidol University

Note: 1) Total fertility rates calculated at 1.65, 1.45 and 1.25, respectively.

2) Seniors refers to those aged 65 years old and over

3) Because it was estimated from 2000 Population and Housing Census data, the population proportions in 2010 may differ from the actual 2010 Population and Housing Census data, which is not yet complete as Thai Health goes to print.

Birth

2

*Professor Dr.Pramote Prasartkul and Associate Professor Dr.Patama Vapattanawong
IPSR, Mahidol University*

“Thailand’s birth rate dropped to 760,000 births per year from more than a million births thirty years ago. Meanwhile the mortality rate is now at 400,000 deaths per year. The gap between birth rates and death rates has shrunk very quickly.”

“Fewer babies are born these days.” “People this generation are hesitant to marry. Those who do marry also have fewer children.” “In the past, you hear children crying in the villages. These days you only see old people.”

These sayings reflect the reality of Thailand’s fast declining fertility rate over the past few decades. Every year between 1963 and 1983, Thailand witnessed more than a million births per year. Since then however, the number of babies born each year decreased to only 760,000 in 2010. It is likely the annual birth numbers will drop below 700,000 during the next 20 years.

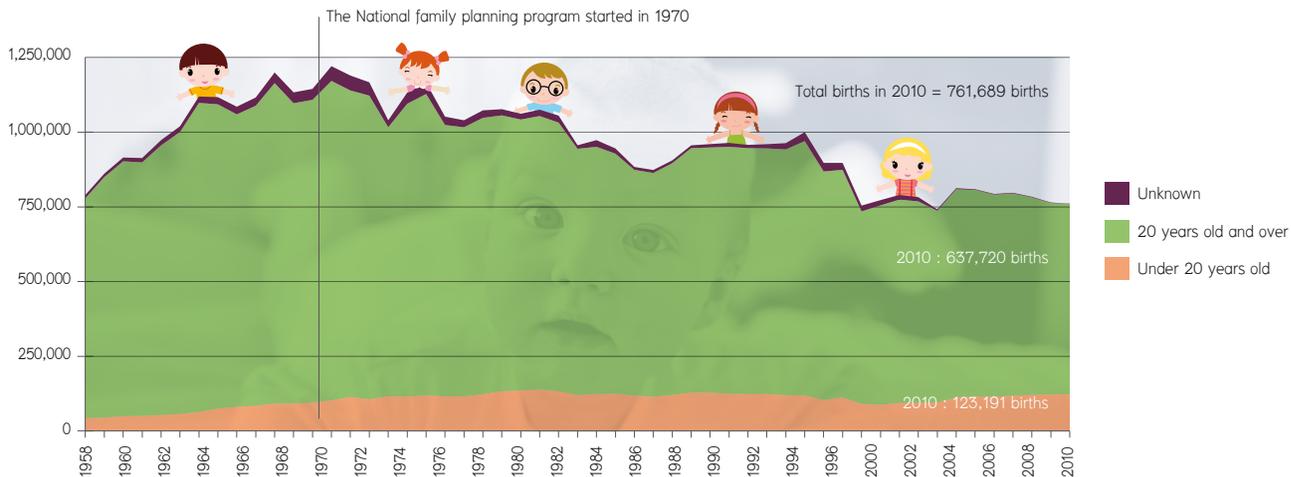
Only 40 to 50 years ago, a Thai woman had on average six children over her reproductive life. This average number of children also has quickly

declined. Today the average number of children is only 1.6 children per Thai woman which is below the two-child “replacement level”. However, despite the below-replacement fertility rates in Thailand, the Thai population continues to increase as the number of births still exceeds the number of deaths.

Important causes of fertility decline include the reluctance of Thais to get married, improved status of Thai women who have their own jobs, lower numbers of desired children among married couples who employ birth control methods and spacing between children. Thailand should now begin to pay more attention to quality rather than quantity in relation to births.

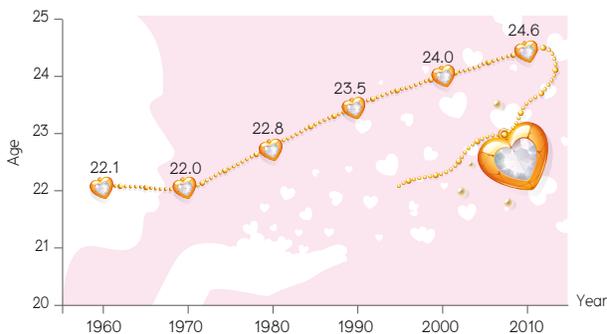


Number of births by mother's age in 1958-2010



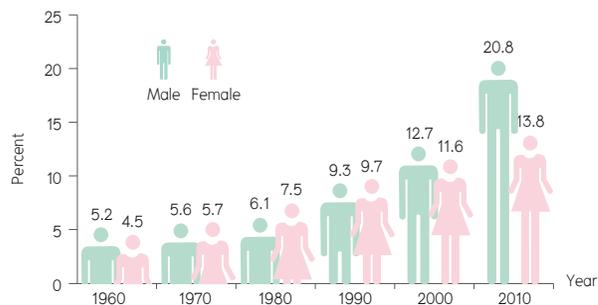
Source: Bureau of Registration Administration, Department of Provincial Administration, Ministry of Interior

Average age at first marriage of Thai women, 1960-2010



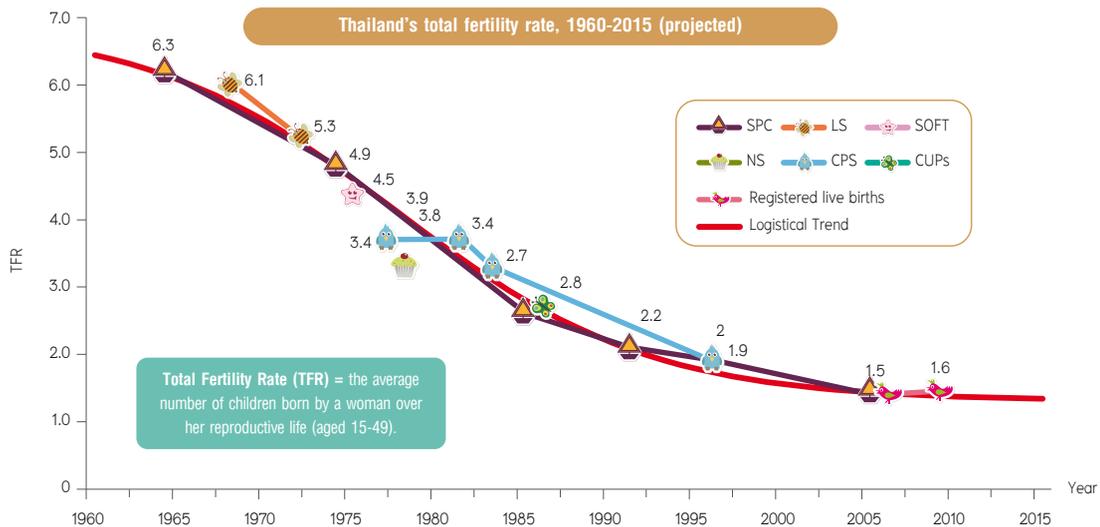
Source: Population and Housing Census 1960, 1970, 1980, 1990, 2000, and 2010 (advance report)

Proportion of unmarried individuals among 30-49 years old



Source: Population and Housing Census 1960, 1970, 1980, 1990, 2000, and 2010 (advance report)

Thailand's total fertility rate, 1960-2015 (projected)



Source: Prasartkul, Vapattanawong, and Thongthai, 2011

Note:

- SPC = Survey of Population Change
- LS = Longitudinal Survey
- SOFT = Survey of Fertility in Thailand
- NS = National Survey
- CPS = Contraceptive Prevalence Survey
- CUPS = Contraceptive Use Patterns in Thailand
- Registered live births is calculated from registered births in 2009

Morbidity and Mortality 3

*Professor Dr.Pramote Prasartkul and Associate Professor Dr.Patama Vapattanawong
IPSR, Mahidol University*

“The number of deaths increases not because of more diseases and illnesses but because the Thai population is ageing. About 60% of deaths are among those over 65 years old”

Thai people today are healthier and live longer than ever before. The life expectancy of those born 40 to 50 years ago was only 50 years. Now Thai people can expect to live 73 years. People hope that the life expectancy will continue to increase in the next few decades to 80 years, close to the average life expectancy of Japanese people today.

There are around 400,000 deaths per year in Thailand but the number is expected to increase in the next 10 to 20 years to more than 600,000 deaths (or a mortality rate of about 10 per thousand), a figure close to the number of annual births. This demographic change will result in the stabilising or even decline of the Thai population.

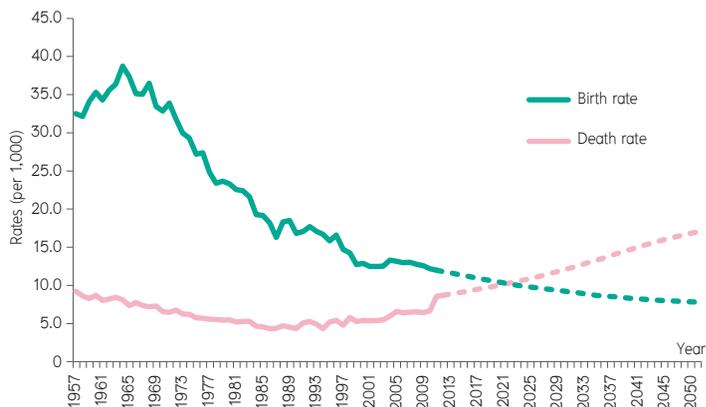
Increased longevity over the past few decades has mostly been the result of a decline in child mortality. Forty years ago, 80 out of 1,000 children would die before reaching their first birthday. Now the child mortality rate has dropped to only 13 per thousand live births as a result of better maternal care, improved hygiene and child vaccinations. Mortality rates in other age groups also greatly declined due to advances in medicine, public health, hygiene as well as economic, social and environmental developments.

Causes of deaths among the Thai population have also significantly changed. In the past, many Thais died of infectious diseases which spread through water, air and insects. Today’s leading causes of death in Thailand however are related to personal behaviour, diet and lifestyle. The most significant causes of death of Thai people are respiratory and vascular diseases, cancer, AIDS, heart disease, hypertension and motor accidents. Many of these modern diseases can be prevented or avoided all together by behavioural changes involving diet, exercise, abstinence from smoking and avoiding drink-driving.

As Thailand becomes more of an ageing society with senior citizens (aged 60 and over) making up more than 10% of the population and the overall Thai population becoming older, future trends of morbidity among the population can be anticipated. Senior citizens are naturally more prone to illnesses as vulnerability increases with age. Older persons’ illnesses are likely to include chronic diseases which require long term care such as diabetes, Alzheimer’s, strokes and skeletal diseases. These diseases will increase the healthcare burden on future Thai societies.

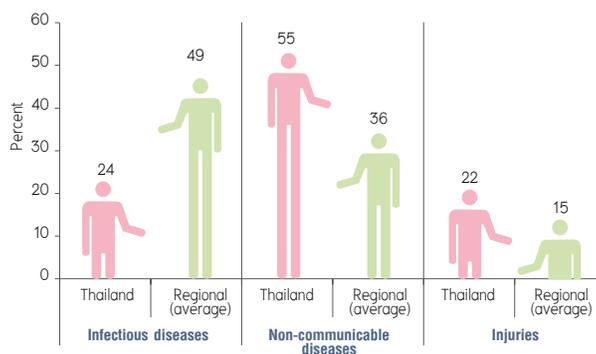


Birth rates and Death rates, 1957-2050 (projected)



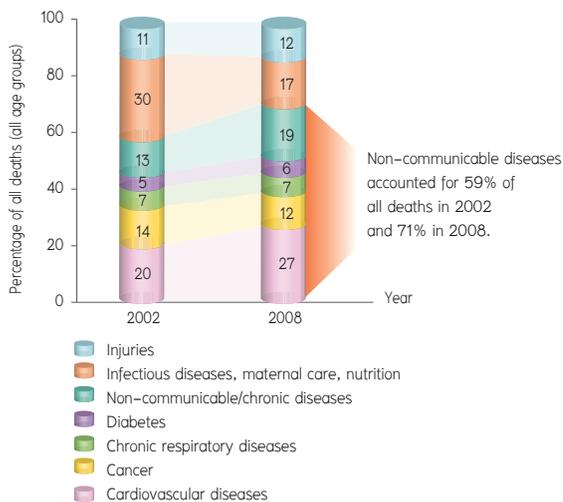
Source: Patama Vapattanawong. 1957-2010 calculated from Civil Registration data (no revision for omissions). 2011-2050 calculated from population projection.

Years of Life Lost (YLL) by cause, 2008



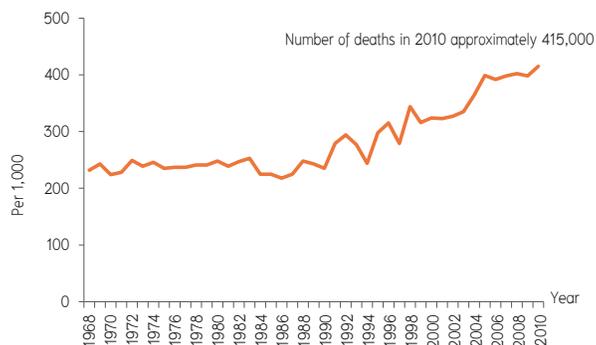
Source: Global Health Observatory (GHO), WHO; [http://www.who.int/gho/countries/en/; accessed on 30 Nov 2011]
 Note: "Region" refers to South-East Asia region as defined by WHO

Causes of death, 2002 and 2008



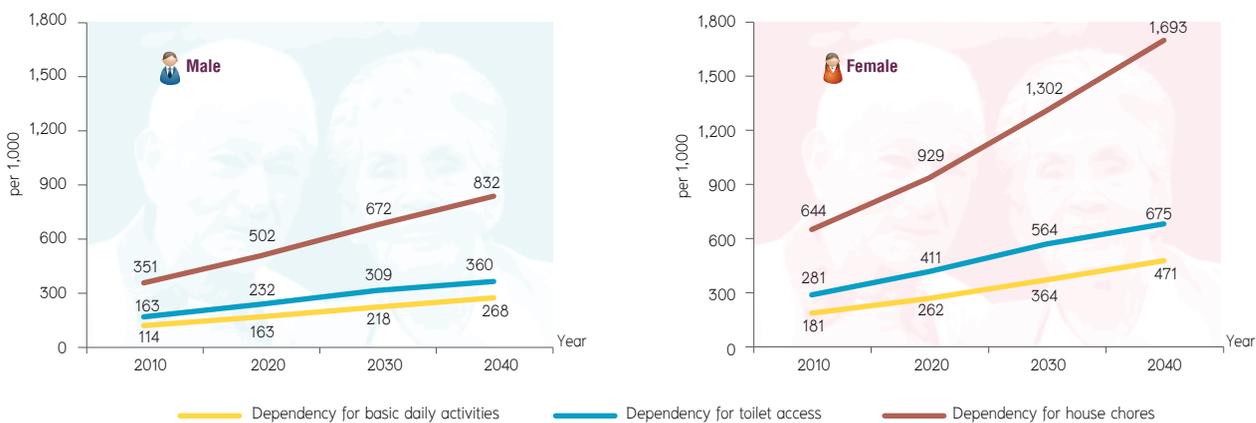
Source: Global Health Observatory (GHO), WHO. [http://www.who.int/gho/countries/en/; accessed on 30 Nov 2011]

Number of deaths 1968-2010



Source: Bureau of Registration Administration

Number of senior citizens categorized by daily dependency and gender 2010-2040 (projected)



Source: Authors' estimate based on the result of Health Exam Survey III, 2003-2004

Dependency refers to the condition in which the elderly cannot independently conduct activities and need assistance or care from others.

Internal Migration

4

*Associate Professor Dr. Sureeporn Punpuing
IPSR, Mahidol University*

“Thai people now appear to migrate less. It’s been found that the level of wellbeing improved two years after migration but decreased from year four onwards, especially in relation to mental and psychosocial wellbeing.”

The number of internal migrants and internal migration rates in Thailand continue to decrease. However, the impact on physical, mental and social health of migrants, especially among those in working age, and their left-behind family members who are mostly children and the elderly, remains an important issue that needs to be monitored.

In the past 5 years, the internal migration rates continued to decline in Thailand from 4.3% of the total population in 2005 to 3.0% in 2009. Migration between urban and rural areas varies according to economic situations. During the economic crisis of 1997 and 2008–09, there was more migration from cities to villages while migration from villages to the cities dropped.

For migrant workers mostly in their early teens to mid working-age who move from rural areas to find work in big cities migration can have both positive and negative impacts on them as well as the family and community they leave behind. The remittances from these workers are used for housing improvements, childrens education and small business investments. But migrant workers

themselves and family members may face physical and mental health problems as a result of their migration also.

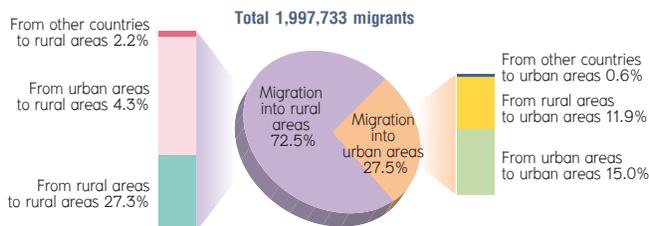
Before migrating, migrant workers are often healthier than those who remain. Migrant’s overall health may improve in the initial period after migration. However, a long-term follow-up study found that as time passes internal migrants in Thailand experience a decrease in their overall health, especially in relation to their mental and social health. In addition, migration often worries elderly parents. Children left behind by migrants are more likely to experience mental health and malnutrition problems also.

At present, there are community programmes which take care of the elderly and children generally but there are not yet any programmes focusing specifically on children and the elderly left behind by migrant workers. Prevention and solutions require a particularly delicate approach, especially in relation to psychological impacts and will require professional planning and assistance.



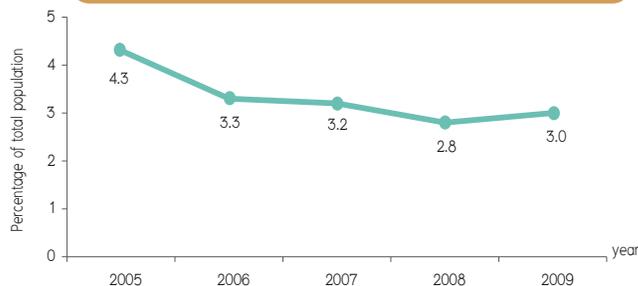
The Migration Survey by the National Statistics Office defines "migrants" as those who have moved from other localities to the present area within one year prior to the survey.

Direction of migration by area 2009



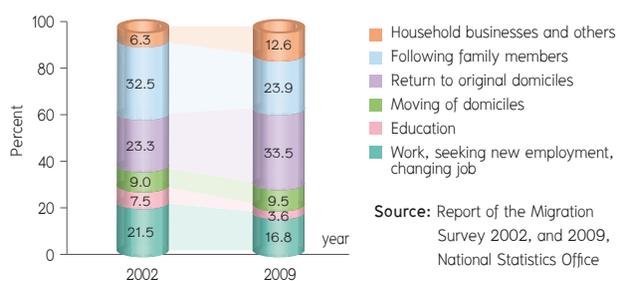
Source: Report of the Migration Survey 2009, National Statistics Office

Migration rates, 2005-2009



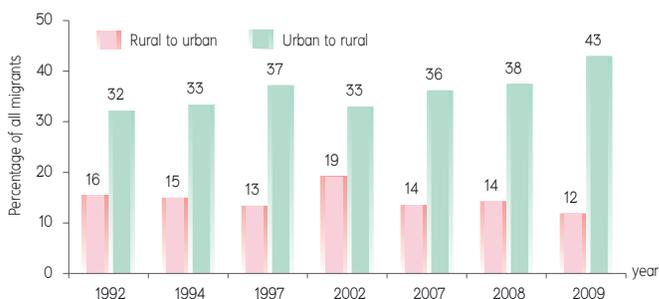
Source: Report of the Migration Survey 2009, National Statistics Office

Percentage of all migrants by reason for migration, 2002 and 2009



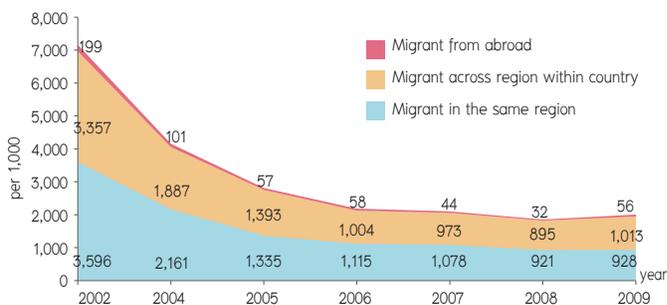
Source: Report of the Migration Survey 2002, and 2009, National Statistics Office

Internal migration flow, 1992-2009



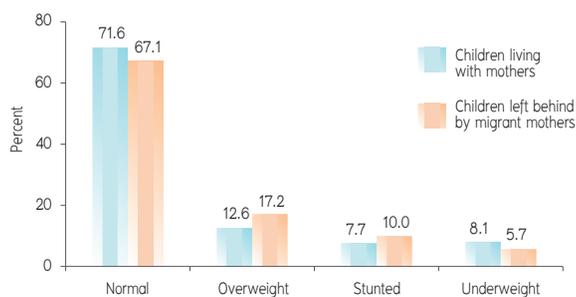
Source: Report of the Migration Survey 1992, 1994, 1997, 2002, 2007 and 2009, National Statistics Office, and 1992-2008 data from Thailand health profile, 2008-2010

Type of migration, 2002-2009



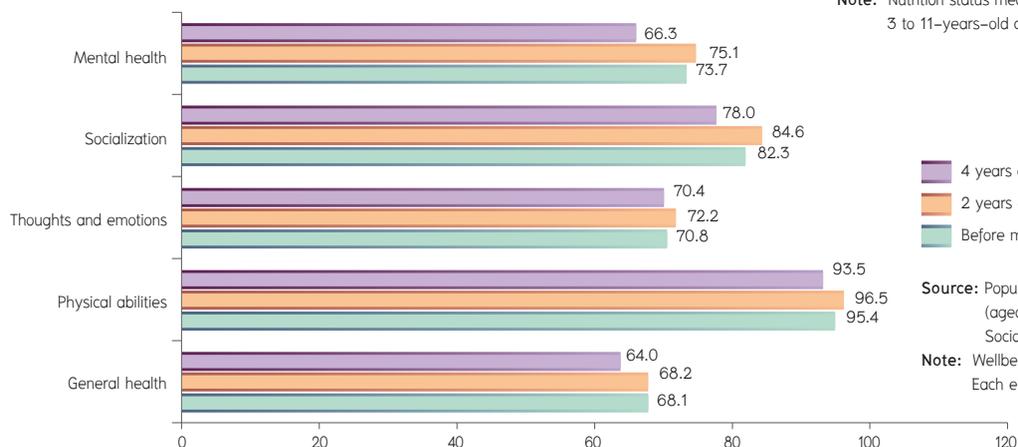
Source: Report of the Migration Survey, National Statistics Office

Maternal migration and Nutritional status of children



Source: CHAMPSEA project (2011): IPSR, Mahidol University
Note: Nutrition status measured by the weight and height of 3 to 11-years-old children, using WHO model.

Average wellbeing scores of migrants at 2 and 4 years after migration



Source: Population migration and health project (aged 15-33); Institute for Population and Social Research, Mahidol University
Note: Wellbeing is measured by SF36 questionnaire. Each element has a full score of 100.

International Migration

5

*Associate Professor Dr. Wathinee Boonchalaksi and Kanya Apipornchaisakul
IPSR, Mahidol University*

“One in twenty five people in Thailand does not have Thai nationality.”

A large number of foreign workers in Thailand still lack health security and access to necessary services including promotion and prevention of communicable diseases. Due to the rising number of foreign patients, monitoring impacts on healthcare systems from this important population and long-term planning are necessary.

According to the 2010 Population and Household Census approximately 4.1% of the population or 2.7 million do not have Thai nationality. More than half of these individuals live in Bangkok and the Central Region. Almost 90% are thought to be migrant workers, the biggest group of whom are from Thailand's three neighboring countries, namely Myanmar, Laos and Cambodia. This group also includes dependents who do not have legal employment or work permits, which is likely to exceed one million persons.

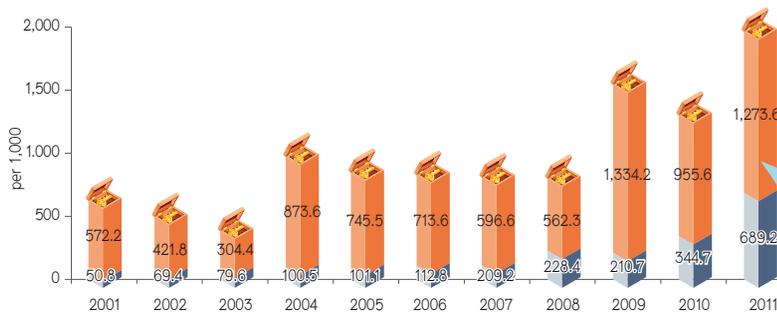
As Thailand is becoming an “ageing society” and experiencing demographical change in its workforce, the need to employ foreign workers, especially unskilled labor, will increase in the future. Improvement in healthcare systems to ensure

health security and welfare for foreign migrants will become a more pressing issue. In addition, the nature of illnesses among foreign workers will necessitate particular surveillance and prevention of certain diseases, especially communicable diseases such as malaria, TB and sexually transmitted diseases.

On the other hand, the number of foreign patients in private hospitals in Thailand in 2007 was 1.37 million persons, a significant increase from 0.55 million in 2001. This increase in numbers is thought to be a result of the promotion of Thailand as the “Centre of Excellent Healthcare of Asia” since 2003. This number does not include patients who are migrant workers and foreigners who receive services at border hospitals and hence the total of foreign patients in Thailand could exceed 3 million persons. This significant increase is another reason why Thailand's healthcare system should take into consideration an increase in capability, resources and personnel to maintain the same quality of health services for Thais as in the past.



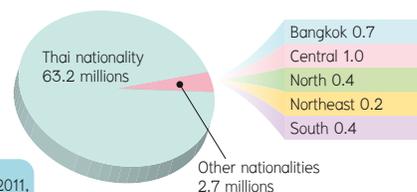
Number of migrant workers permitted to work in Thailand by immigration status (2001-November 2011)



Source: Registration and information technology section, Office of Foreign Worker Administration, Ministry of Labor

Illegal immigration
Legal immigration

Thailand's population by nationality and region, 2010



Source: Population and Housing Census 2010 (advance report)

As of November 2011, there are 1.96 million migrant workers with work permits.

Estimates of foreign populations in Thailand, 2009-2010

Type	Estimated Number	Percent
Non-working residents	373,251	10.6%
Temporary residents	121,109	3.4%
Tourists and those in transit	92,014	2.6%
Students (higher education)	19,052	0.5%
Refugees, asylum seekers	141,076	4.0%
Working residents	3,141,580	89.4%
Professional workers, skilled and semi-skilled workers (and family members)	106,486	3.0%
Visa over-stayers (2007 data)	65,558	1.9%
Ethnic minorities	303,610	8.6%
Stateless persons or those without registration status	210,182	6.0%
Migrant workers from Myanmar, Laos and Cambodia (and family members)	2,455,744	69.9%
Total	3,514,831	100.0%

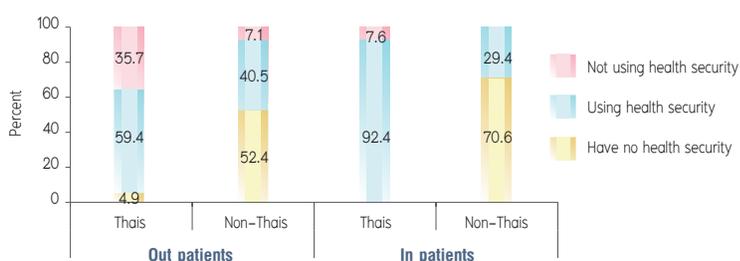
Source: International Migration in Thailand 2011 (Jerrold W. Huguet and Aphichart Chamratrithong (editors), 2011)
Note: *refugees/asylum seekers are not included in the Population and Household Census

Top ten diseases among foreign and Thai patients, 2010

Top ten diseases	Foreign patients	Thai patients
1	Acute diarrhea	Acute diarrhea
2	Fever of unknown cause	Fever of unknown cause
3	Malaria	Pneumonitis
4	Dengue fever	Dengue fever
5	Pneumonitis	Flu
6	Conjunctivitis	Conjunctivitis
7	Tuberculosis	Food poisoning
8	Sexually transmitted disease	Chickenpox
9	Food poisoning	Tuberculosis
10	Flu	Herpes Zoster

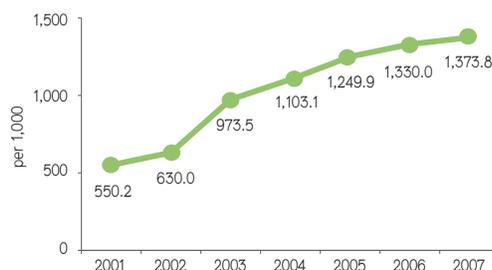
Source: Report of disease surveillance in foreigners in 2010, Bureau of Epidemiology, Ministry of Public Health (as of 21st December 2010). This data is compiled from the data of all foreign patients receiving treatments at healthcare facilities across the country.

Health security among Thais and non-Thais (over 15 years old) for the last care utilization



Source: Wathinee et al (2012) calculated from results of the national survey on "Knowledge, attitude and practice of TB among Thai population, Migrant workers and ethnic groups 2011"
Note: Non-Thais means cross-border migrant workers and ethnic groups without Thai nationality.

Foreign patients receiving medical services in private hospitals in Thailand, 2001-2007



Source: Office of Service Trade Promotion, Department of International Trade Promotion, Ministry of Commerce as quoted in Abchana, Viraj and Sirachai, 2009

Note: 1. Compiled from hospital reports (55 hospitals as of 2007) which may be incomplete
2. Data from 2003 may include revisiting patients.

Estimate of additional doctors needed per year to fulfill the Medical Hub policy

Years	Additional doctors needed per year ^a		Percentage of doctors needed for foreign patients	
	Assumption 1 ^b	Assumption 2 ^c	Assumption 1	Assumption 2
2006-2007	856-999	971-1,159	6.7%-8.0%	17.8%-20.7%
2008-2009	969-1,132	1,092-1,313	6.3%-8.0%	16.9%-20.7%
2010-2011	899-1,174	1,133-1,416	7.3%-10.3%	19.2%-25.6%
2014-2015	1,034-1,239	1,210-1,542	8.5%-12.2%	21.8%-29.5%

Note: A) Total number of additional physicians needed for both Thai and foreign patients, based on the assumption that a physician can see no more than 72-80 Thai patients (considered by some to be work overload)
B) Assumption 1: a physician can see no more than 40-48 foreign patients
C) Assumption 2: a physician can see no more than 14-16 foreign patients

Source: NaRanong and NaRanong, 2011

Quality of Life and Human Development

6

Thai Health Working Group

“Only a quarter of Thai youth aged 18 to 21 are studying at university level.”

“Quality of life” is difficult to measure and subject to comparisons. There are various relevant concepts which can be interpreted differently whether considered objectively or subjectively, from a development-oriented or security-oriented standpoint or within the framework of sustainable development.

Last year, Thailand ranked 86th from 192 countries in the “Quality of Life Index” with high scores for health and low costs of living and low scores in climate, economic and freedom aspects. Although Thailand’s cost of living may be low, a survey of 100,000 Thais across the country found that 77% experienced problems from rising costs of living. Those experiencing problems from insufficient incomes and stress were the second most significant challenge for Thai people.

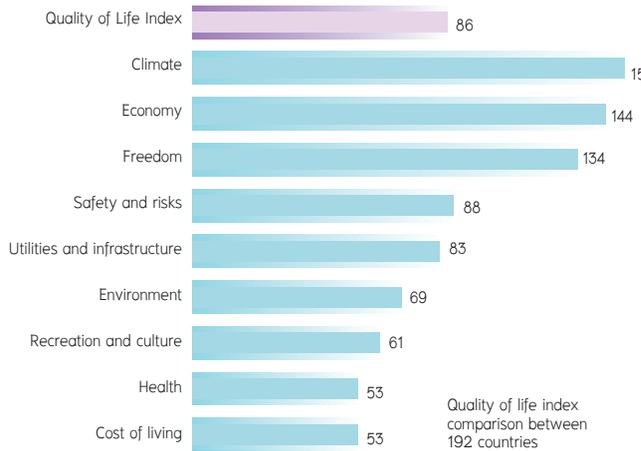
Education is another key factor for human development and quality of life. In 2011, Thailand ranked 103rd of 187 countries in the “Human Development Index.” Although the average number

of school years attended by Thais over 15 years old continues to increase, and is now at 8.2 years, there is still a challenge arising from the large disparity in access to education in Thailand, especially at high school and university levels. Out of 100 children of the poorest households only 57 went to high schools and 2 went to universities while 100 and 71 children from the richest households respectively participated in this form of education.

Aiming at sustainable development, attempts to improve quality of life for the current generation in Thailand should not undercut developmental opportunities and quality of life for following generations. New indicators for quality of life such as the “Happy Planet Index” or “Sustainable Society Index” put emphasis on issues or elements pertaining to the environment, natural resources and ecology.

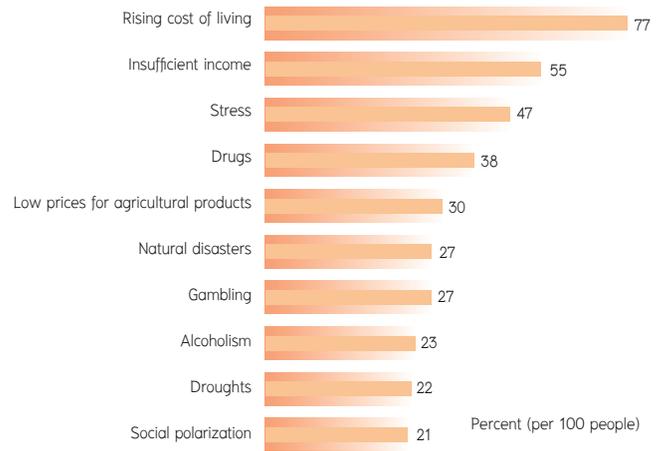


Thailand's ranking in each aspect of quality of life index (out of 192 countries), 2011



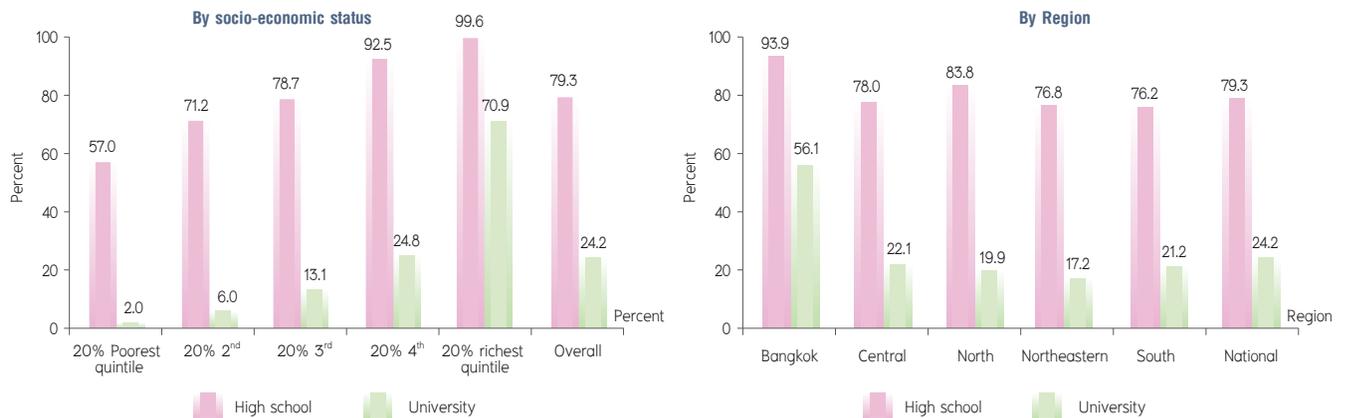
Source: Quality of Life Index, 2011 by International Living;
http://www1.internationalliving.com/qofl2011/show_country.php?country=Thailand

Top ten problems besetting Thais



Source: 10 Voices of " Thai people " (29 August 2011)
<http://www.khonthaifoundation.org>
 Note: A survey of 100,000 Thais in 77 provinces across the country under the "Thai Monitor, Powerful Voices" project.

Crude school attendance rates in 2010 (High school and university levels)



Source: Social Data-based and Indicator Development Office (SDIO), Office of the National Economics and Social Development Board
 Note: 1) Socio-economic status is measured by expenses on consumer products
 2) Crude school attendance rate for high school level means total number of high school students x 100 / total number of population aged 15-17
 3) Crude school attendance rate for university level means total number of university students x 100 / total number of population aged 18-21

International indices measuring quality of life and human development

	Quality of Life Index	Human Development Index	Happy Planet Index	Sustainable Society Index
Conceptual framework	Measuring quality of life in 9 dimensions	Measuring human development in each country with consideration to longevity and health, knowledge and quality of life	Measuring quality of life with consideration of longevity, life satisfaction against diminishing planetary resources	Measuring social sustainability on the basis of human well-being, environmental well-being and economic well-being
Factors	Cost of living, recreation and culture, economy, environment, freedom, health, infrastructure, risks and safety, climate	Life expectancy at birth, average and expected number of years of school attendances, national income per capita	Life expectancy multiplied by life satisfaction divided by ecological footprint	24 factors measuring human well-being, environmental well-being and economic well-being
Most recent ranking	2011	2011	2009 (HPI 2.0)	2010
Thailand's world ranking	86 (out of 192 countries)	103 (out of 187 countries)	41 (out of 143 countries)	38 (out of 151 countries)
Ranked by	International Living	UNDP	New Economics Foundation	Sustainable Society Foundation

Workforce and Economy



Professor Dr.Direk Patamasiriwat

School of Development Economics, National Institute of Development Administration

“Thailand’s workforce is ageing as a quarter is over 50 years old as of 2011.”

As the Thai population ages and dependency increases, the impact on the country’s labour demographics and poverty among senior citizens must be monitored and prepared for.

With increasing numbers of senior citizens, dependency also rises. In 2011, the dependency ratio was around 18 senior citizens per 100 people of working age (aged 15–59 years), or one senior citizen per 5.5 workers. In the next 20 years, this ratio will increase to 41 senior citizens per 100 workers or one senior citizen per 2.4 workers.

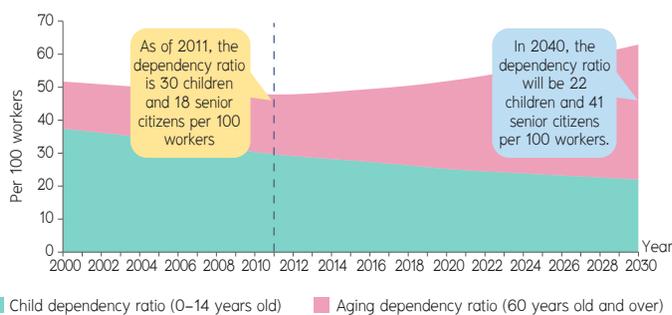
Until now, although the productivity of the Thai workforce has increased, it is still rather low, especially in the agricultural sector which employs almost 40% of the total workforce but accounts for less than 10% of GDP. In the near future a large number of people will become elderly, the proportion of workers will decline and the average age of the workforce will increase. Capacity building and enhancing productivity are important, as are alternative policies such as promoting post-retirement employment or extending

retirement age, which can benefit the country’s overall economy. Senior citizens themselves will also benefit from continued contribution to the Thai economy, decreased dependency and adequate income for their life in old age.

Savings are another management tool and immunity against risks, in accordance with the sufficiency economy philosophy. According to the 2009 National Income Account, household savings make up only 11% of total household income. This is a rather low proportion of saving if we consider the guideline of “three parts expenses, one part savings.” Different forms of savings promotion for old-age security must be encouraged along with an elimination of poverty among senior citizens as the proportion of senior citizens living in poverty has increased. This is likely a result of insufficient income to meet expenses as well as lack of savings and income security.



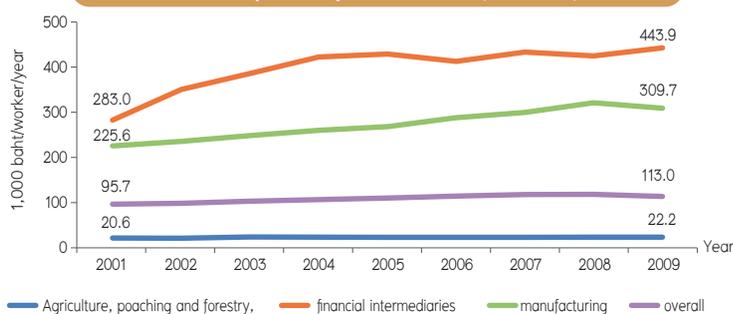
Dependency ratio of the Thai population 2000-2030 (projected)



Source: Population Projections for Thailand 2000-2030, Office of the National Economics and Social Development Board

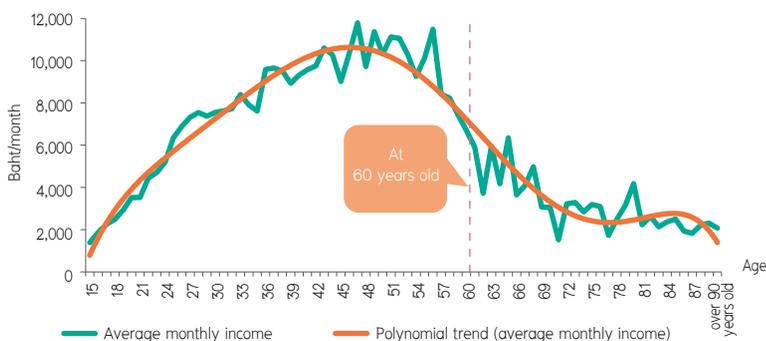
Note: Total dependency ratio equals (number of children + number of senior citizen) x 100 / number of working age population
 Child dependency ratio = number of children x 100 / number of working age population
 Senior citizen dependency ratio = number of senior citizens x 100 / number of working age population

Overall productivity of the Thai workforce, and productivity in some sectors (2001-2009)



Source: The Labor Force Survey, National Statistics Office. Data processing by averaging four trimesters, by Office of the National Economics and Social Development Board

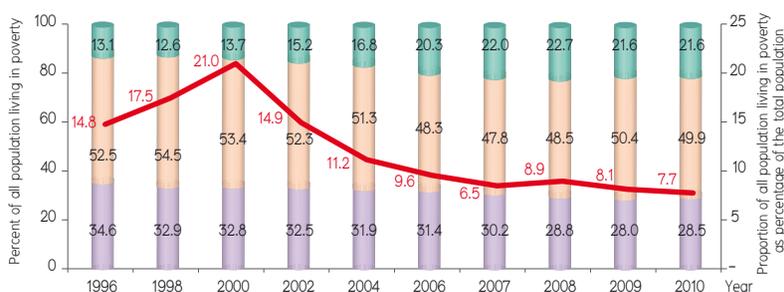
Average income of population (aged 15 and over) in 2009



Source: Calculated from the data in "Analyzing the relationships between changing demographics and income disparity in Thailand" (Sawarai et al, 2011)

Note: Here "income" refers to earnings from working, support from other people or the government), earnings on assets (such as interests) and earnings in the form of welfare / goods and services.

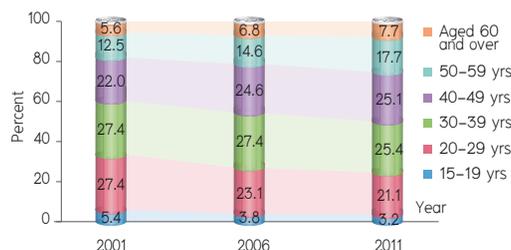
Proportion of those living in poverty by age group (1996-2010)



Source: Thailand's national incomes (2009), Office of the National Economics and Social Development Board

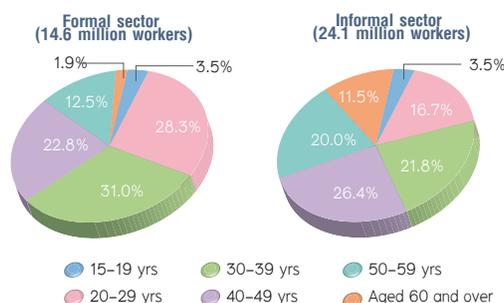
Source: Household Socio-economic Survey, National Statistics Office. Data processing by Social Data-based and Indicator Development Office (SDIO), Office of the National Economics and Social Development Board

Age structure of Thailand's workforce, 2001, 2006 and 2011



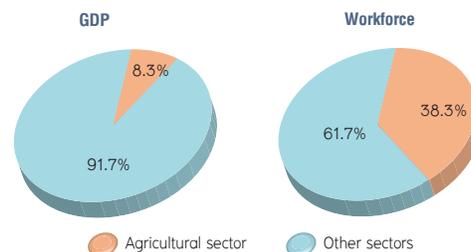
Source: The Labor Force Survey (1st quarterly), National Statistics Office

Age structure of Thailand's workforce in 2010 by sector



Source: Informal Employed Person Survey (3rd quarterly), National Statistics Office

Proportions of GDP and workforce, 2010



Source: Thailand's poverty and disparity situations, Office of the National Economics and Social Development Board, 2011

Proportions of household incomes by expense categories, 2001-2009



Source: Thailand's national incomes (2009), Office of the National Economics and Social Development Board

Family and Social Support

8

Thai Health Working Group

“Compared to 40 or 50 years ago, family size has shrunk by 1.8 times. In 2010, the average family size was just three members.”

With increasing life expectancy and declining birth rates, Thailand is genuinely becoming an “ageing society”. Strengthening social support for senior citizens in different ways such as promoting old-age income security is an urgent issue.

The family is still an institution with important roles in providing social support to older members. But the institution of the family itself is also in transition. Due to a larger number of senior citizens who live with younger generations, the number of extended families has increased, now accounting for more than a third of the total number of households, while the proportion of “nuclear families” has dropped. However, the average family size in Thailand continues to shrink to only 3 members in 2010.

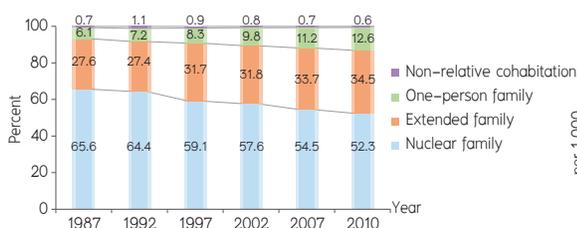
If one or two of the three family members are senior citizens the question arising whether the rest of the family will be able to support them as in the past. This debate reflects a changing

perception in Thai society that the main source of incomes in old age in the future should come from self-employment rather than dependency on children and grandchildren.

Of Thailand’s 38 million workers less than a third have income security for old age if the government’s monthly living allowances of 500 baht is not taken into account. Among these workers, 9.7 million people are under the Social Security Scheme, which provides old-age benefits, and 1.2 million are under the Government Pension Fund. When family support decreases and the social safety net is not comprehensive, what sources of social support senior citizens can expect needs to be discussed. Fortunately the “Index of Well-being and Common Happiness in Thai Society” shows improved strength of Thai communities in the past five years which gives hope that Thailand’s communities may well be the solution to these challenges in the future.



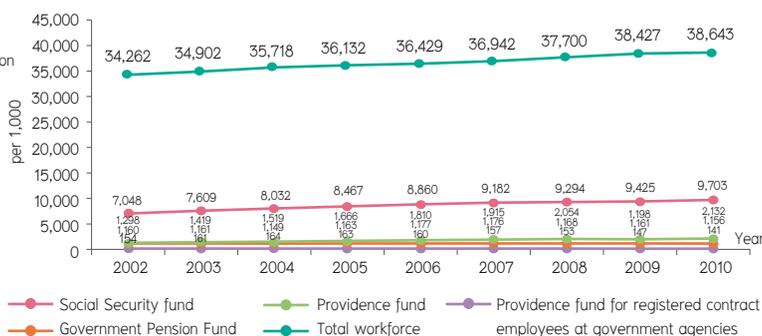
Households by type, 1987-2010



Source: Gender Dimensions, National Statistical Office and International Health Policy Program, 2011

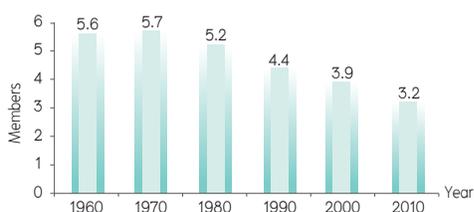
Note: (1) Nuclear family refers to families with only husband, wife and children (if any).
 (2) Extended family refers to families with members from different generations living together, not limited only to husband, wife and children.

Thailand's workforce and number of members of funds for old-age income security, 2002-2010



Source: Social and Quality of Life Database System, Office of the National Economics and Social Development Board, 2011

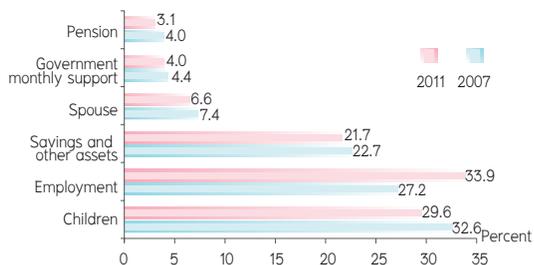
Average family size, 1960-2010



Source: Population and Housing Census

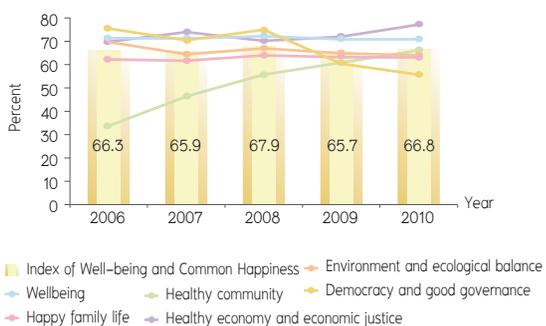
Note: 2010 data from Population and Housing Census 2010 (advance report)

The most potential sources of income in old-age in 2007 and 2011



Source: Population Survey of Knowledge and Attitude toward the Elderly in 2007 and 2011, National Statistics Office

Index of Well-being and Common Happiness in Thai Society in 2006 to 2010



Source: Monitoring and evaluation results of the 10th National Economic and Social Development Plan, Office of the National Economics and Social Development Board

Note: (1) Index of Well-being and Common Happiness consists of 6 sub-indices on wellbeing, happy family, health community, healthy economy and economic justice, balanced environment and ecology, democracy and good governance.
 (2) 90-100% = Very good; 80-89.9% = good; 70-79.9% = moderate; 60-69.9% = needs improvement; Less than 60% = needs urgent improvement

Community programs to support senior citizens

Program	Concepts and nature	Performances
1 Home care volunteers (since 2002)	Recruits volunteers to take care of senior citizens at their houses, especially those without caretakers and experiencing social problems	2003-2010 implemented in 2,800 Local Administrative Offices (LAOs), 4,970 more LAOs to implement by 2013
2 Elderly club	Encourages socialisation among senior citizens with regular activities and community involvements	23,069 members as of the end of 2011
3 Community welfare fund for the elderly (since 2000)	Provides welfare support for the elderly including monthly 300 baht support for elderly members who have been members for more than 15 years.	At the end of the 2010 budget year, 3,443 funds established in 26,549 villages with 1,446,262 members and 790.72 million baht in total
4 Home Health Care for the elderly (since 2005)	Provides long-term home care to elderly patients with chronic diseases by professional healthcare workers	One pilot sub-district in every province
5 Health promotion temples (since 2003)	Improves the environment in temples for organising healthy activities for the elderly and other community members	In 2010, there were 669 outstanding temples and 2,284 temples which passed basic evaluation.
6 Multipurpose community centers for the elderly (since 2006)	Activity center for the elderly to increase knowledge, skills as well as develop physical, mental, emotional, social and wisdom dimensions among themselves and together with other community members	Pilot centers increased from 7 to 9 centers in 6 provinces
7. Quality of life promotion for the elderly in community (since 2008)	Prepares community members before entering old age through quality of life enhancing activities as well as care provisions	16,640 community members trained 21,095 given family-relationship training 2,523 homes of the elderly improved 32 elderly savings group initiated in 10 provinces. 5,234 elderly members producing income from their expertise
8. Peer volunteers	Elderly volunteers provide care for other elderly persons with home visits and other assistance	150 groups with 3,750 members in 2009
9. Community Based Integrated Services of Health Care and Social Welfare for Thai Older Persons (CTOP)	Develops health services and social welfare for elderly groups in 4 provinces including Chiangrai Khonkaen Nonthaburi and Suratthani	A model to be replicated in 15% of sub-districts in every province by 2014

Source: Elderly Health, Department of Health, Senior Citizens Council of Thailand, Foundation of Thai Gerontology Research and Development; CTOP data from Ministry of Public Health, Ministry of Social Development and Human Security, and JICA.

Note: Projects funded by government agencies, particularly Ministry of Public Health, Ministry of Social Development and Human Security and JICA.

Eco-Friendliness

9

Thai Health Working Group

“Thai people will soon be releasing more greenhouse gases into the environment than the global average.”

All daily human activities leave ecological “footprints,” whether as a result of consumption, production of goods and services, transportation, communication and even office work. These activities take up energy and at the same time release waste into the environment.

The level of energy use and release of carbon dioxide or other green house gases into the environment has a clear correlation with a country’s development level. The rates among OECD countries are 2.5 to 3 times those of Thailand. But Thailand’s rates have been on the rise, especially during 1987–1996 which was a period of high economic growth. In 2008, Thailand’s energy use was equivalent to 1,503.7 kilograms of petrol and in 2009 the amount of released greenhouse gases was 4.2 tons per person, only slightly lower than the global average. If this trend continues, Thailand’s level of energy use and green house gases release will soon exceed the global average.

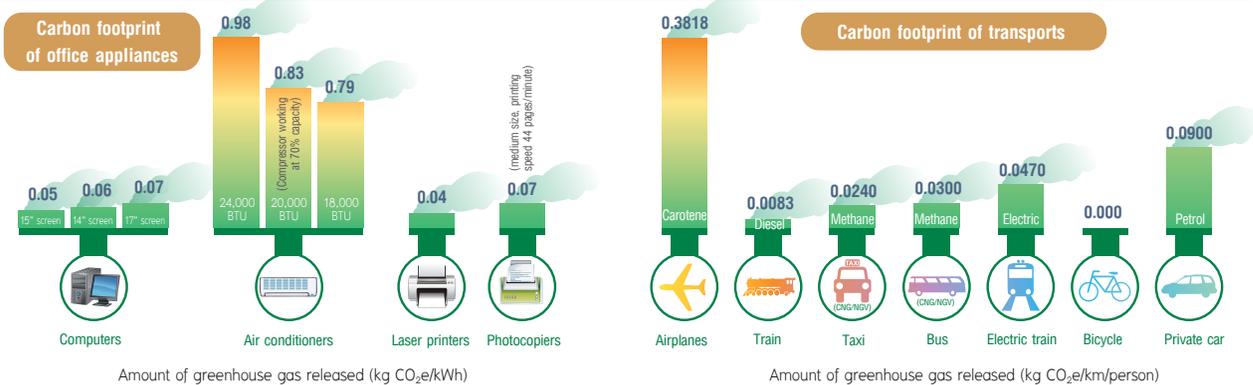
Eco-friendliness becomes an important issue for most sectors of the economy. There are existing efforts to evaluate environmental impacts of products or activities on global warming using the measurement of a “carbon footprint” and issuing of “eco-friendly” product labels to encourage behavioural changes in consumer choices.

A recent survey found behaviours among Thai people which reflect a good level of awareness on global warming related to energy and fuel conservation, recycling and “greener” consumer choices. However, waste management behaviours such as separating garbage for recycling still needs to be campaigned on and supported.





Carbon Footprint (CF) means the amount of greenhouse gases released from the production of products or other activities calculated in the equivalent of direct or indirect carbon dioxide release.
Direct: Measuring the amount of greenhouse gases released directly from activities such as fuel combustion including fuel burning in households and vehicles
Indirect: Measuring the amount of greenhouse gases from production or products by calculating the whole production process from the acquisition of raw materials, farming, processing, transportation, utilisation as well as disposal of the products or packaging after use or LCA (Life Cycle Assessment).

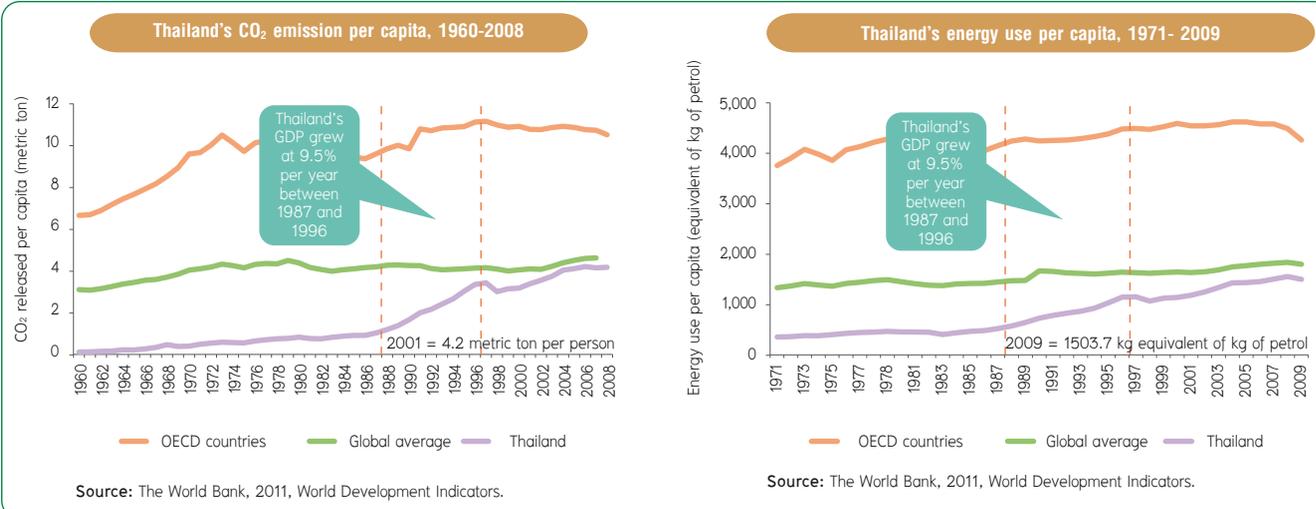
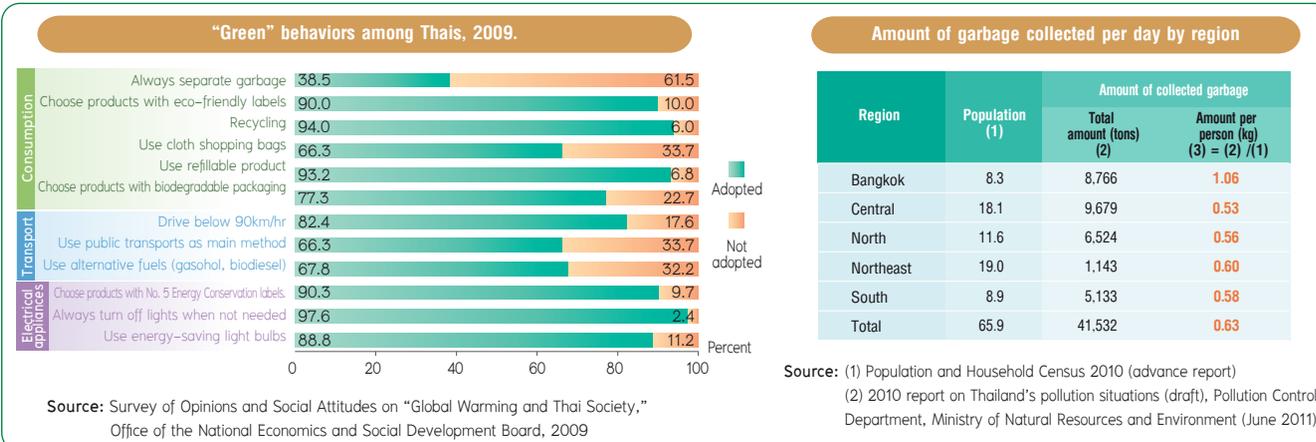


Source: The Green Manual, Department of Environment, Bangkok Metropolitan Administration and JICA

Labels for eco-friendly products

- No. 5 energy conservation label:** Guarantees that electrical appliances pass the standard for energy conservation.
- Green label:** Guarantees that the product is of standard quality and has low impact on the environment.
- Carbon Footprint (XXXg):** Shows the Life Cycle Assessment (LCA) amount of greenhouse gases released per each unit.
- Energy-efficiency label:** Guarantees that the product is energy-efficient, saving energy and reducing electricity bills.
- Carbon-reducing label:** Shows that carbon dioxide release has been reduced in the production process.
- Cool Mode:** Is a label for anti-global warming clothing made of ventilating fibers, enduring and carcinogen-free.

Source: The Green Manual, Department of Environment, Bangkok Metropolitan Administration and JICA



Health Service System

10

Dr. Phusit Prakongsai

International Health Policy Program

“Forty thousand nurses, physical therapists and social workers will be needed to take care of the elderly in 2020.”

Thailand’s transition into an ageing society will increase the demand for healthcare services, especially those costly services. Although almost all Thais now have health security, there is considerable disparity in access to services in Thailand.

Since the Universal Coverage Scheme was implemented in 2001 it has become easier for Thais to access essential healthcare services without financial barriers. Using tax money to fund health, the proportion of health-related expenses in both the private sector and households in the national health expenses decreased from 44% in 2001 to only 25% in 2009–10.

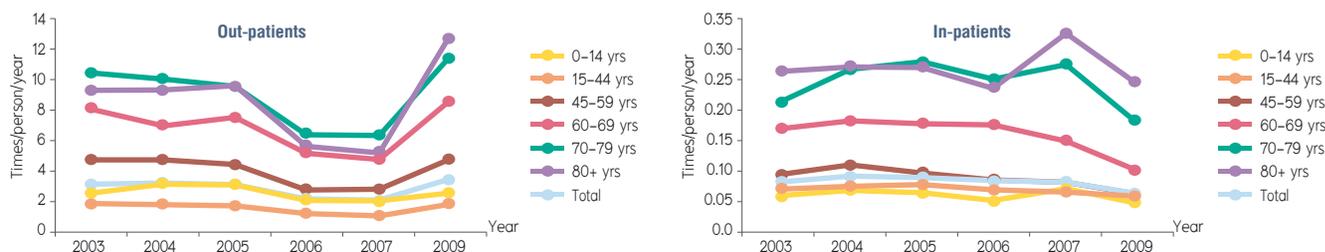
The Universal Coverage Scheme facilitates access to essential services, especially costly ones which will witness a rise in their utilisation. However, there is still disparity in access to these services under different schemes.

The national health expenses continue to rise, especially in the last decade since the beginning of the Universal Coverage Scheme. Per capita expenses more than doubled from 2,732 baht in 2001 to 6,142 baht in 2010 with the government shouldering around three quarter of these expenses. This burden will likely increase in the long-term as the demographical make up of Thailand changes and there are more cases of chronic diseases and increased use of expensive technology and medicines. Cost-effectiveness analysis and cost control will become necessary.

Senior citizens (aged 60 years and over) will have 2 to 3 times higher utilisation rates than other age groups. Preparedness in the healthcare system, especially for essential resources such as facilities, personnel and budget to inclusively provide quality services and take care of senior citizens needs to be planned in advance. Skull, brain and meninges

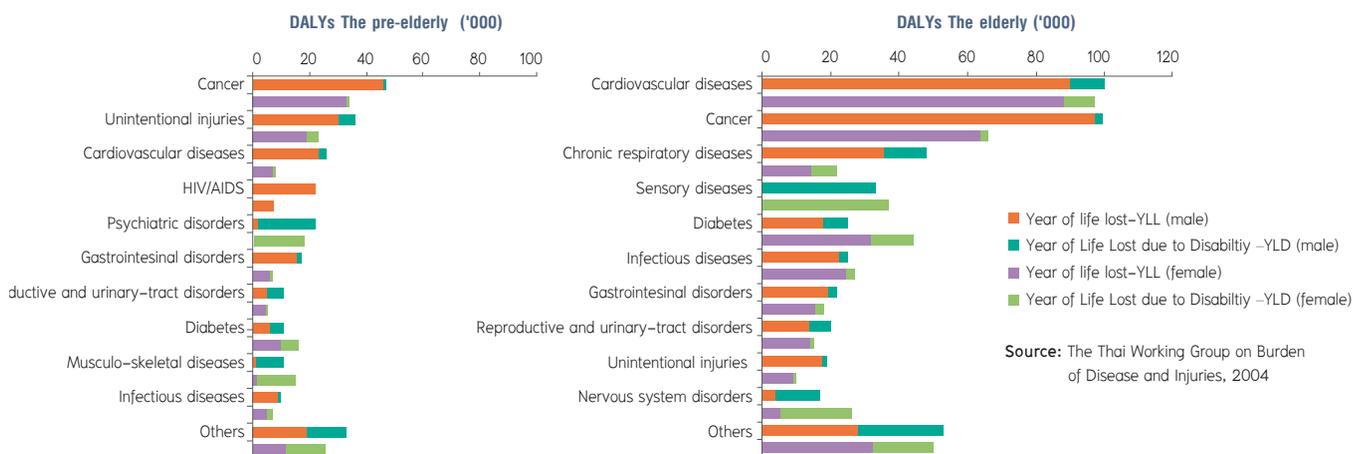


Healthcare utilisation rates by age group from 2003 to 2009



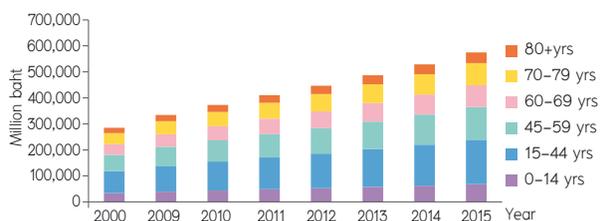
Source: The United Nations Population Fund (UNFPA), and National Economic and Social Development Board (NESDB), 2011.

Disease burdens of the pre-elderly (45-59) and the elderly (60+) by sex in 2004



Source: The Thai Working Group on Burden of Disease and Injuries, 2004

Estimates of personal health expenditure by age group 2008-2015



Source: The United Nations Population Fund (UNFPA), and National Economic and Social Development Board (NESDB), 2011

Use of high-cost medical procedures 2004-2007

Procedures	2004	2005	2006	2007
Intracranial surgery	35,474	36,398	36,930	37,021
Optic lens replacement	175,396	213,539	241,884	244,000
Retinal surgery	50,704	53,411	56,682	59,756
Heart valve replacement	70,850	73,034	72,406	73,227
Coronary artery surgery	39,460	42,099	45,340	48,019
Assisted delivery	43,470	51,429	54,021	50,970
Caesarian delivery	186,774	226,143	243,108	257,763

Source: Administrative data of the CSMBs, SSS, and the UHC schemes, 2004-2007

Estimates of personnel capacity needed for taking care of the elderly in 2010 and 2020

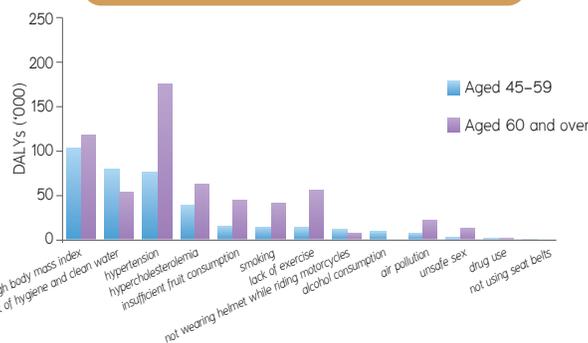
Needed personnel (ratio)		Existing capacity (2008)	2010	2020
Formal service providers	Nurses (1:200)	97942	23,888	33,880
	Physical therapists (1:200)	2000	2,499	3,708
	Social workers (1:5000)	214	1,528	2,155
Informal service providers	Family members (1:1)	-	499,873	741,766
	Caretakers (1:7)	-	71,410	105,967

Source: The United Nations Population Fund (UNFPA), and National Economic and Social Development Board (NESDB), 2011

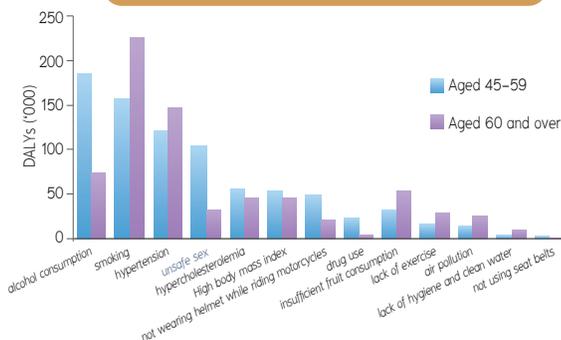
Note: 2008 estimates

The disability-adjusted life year (DALY) is a holistic measure of population health, measuring health-related loss or gaps, expressed as the number of years of life lost due to premature death (YLL) plus years lived with disability (YLD).

Risk factors of the pre-elderly (45-59) and the elderly (60+) in 2004; Female



Risk factors of the pre-elderly (45-59) and the elderly (60+) in 2004; Male



Source: The Thai Working Group on Burden of Disease and Injuries, 2004



Evolution of Thailand's Population Policies

Thai Health Working Group

“The 11th development plan aims to remain Thailand’s total fertility rate not to be below 1.6 and increase education level to at least 12 years.”

During the past four decades Thailand has been very successful in quickly reducing the population growth rate. This success is a result of different policies both to reduce the population growth rate and increase the quality of life for the population with better education and healthcare systems.

Thailand’s population policy can be divided into three phases. The first phase between 1970 to 1996 was part of the first seven development plans and was during the phase of “population growth rate reduction” exemplified by the slogan “The more

children, the poorer” to promote voluntary family planning. This phase started in 1970 and intensified in the 3rd development plan (1972–1976) with campaigns on family planning and incentives to reduce fertility. This first phase was so successful in reducing population growth rate that the 6th and 7th development plans (1987–1996) turned to focus on family planning of specific population groups only.

After the first phase success, the second phase during 1997–2011 paid attention to “maintaining fertility rates at replacement levels” through the 8th development plan (1997–2001). Family

Evolution of Thailand's Population Policies

Thailand's population policies		Before 1964-1966	1967-1971	1972-1976	1977-1981	1982-1986
International		1954 The 1 st World Population Conference held in Rome, Italy. 1961 The UN Population Commission announced population policy. 1962 UN General Assembly adopted resolution on population growth and development 1965 The 2 nd World Population Conference held in Belgrade, Yugoslavia 1960's: birth control became widespread due to inventions of birth control devices such as contraceptive pills and intra uterine devices	1965-1967 The concept of parental rights to determine family size led to advocacy of family planning 1970 UNFPA founded to replace UN Population Trust Fund	1974 The 3 rd World Population Conference in Bucharest, Romania adopted the World Population Plan of Action (WPPA) as a guideline for national population policies.		1984 The World Population Conference in Mexico City followed up on the implementation of WPPA
National	Fertility		1970 Voluntary family planning	Reduction of growth rate from 3.0 to 2.5 by 1976	Welfare policies and laws promoted smaller population.	Reduction of growth rate to 1.5 by 1986
	Quality	Disseminating knowledge on nutrition, maternal and child health.	Rural nutrition programs Maternal and child health programs	Compulsory education extended from 4 to 7 years		
	Health service systems					Primary health Care Policy (PHC)

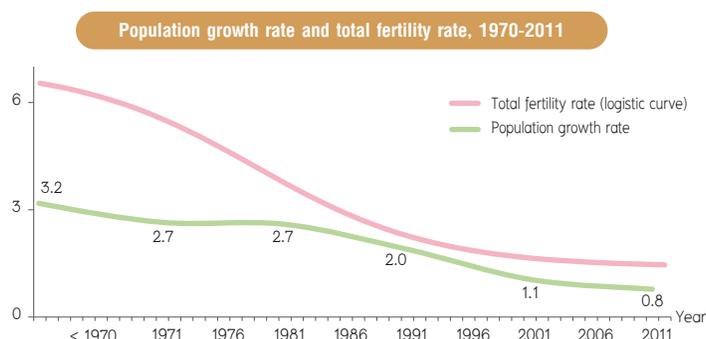
planning was withheld in areas with fertility rates at or below replacement level such as the Northern and Central Regions of Thailand and Bangkok but continued to be promoted in areas with high birth rates such as some areas in the Southern and Northeastern regions of Thailand.

The 9th and 10th development plans (2002–2011) aimed to achieve a balanced demographic situation in Thailand with optimal family size by maintaining the fertility of the population at replacement levels. However, this second-phase strategic plan lacked clear action plans and fertility rates continued to drop to around 1.5 in 2011, the last year of the 10th development plan.

A third phase since 2011 concentrates on preventing the fertility rate in Thailand from falling further by promoting pregnancies in married couples, providing tax incentives and child-related welfare incentives as well as paying attention to birth quality and human development.

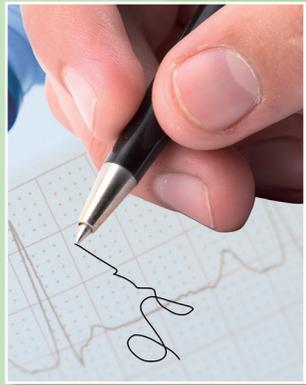
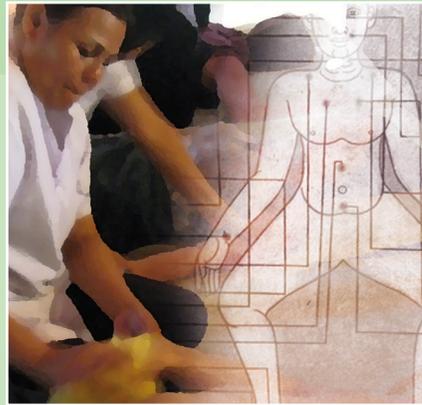
Thailand's population policies have been considerably influenced by an international agenda, especially in the

first phase of growth rate reduction. However, in the second phase of maintaining fertility rates at replacement level, there has been no concrete success abroad and Thailand has also lacked clear measures to address the issues at hand. As a result the fertility rate in Thailand has continued to fall. It will be a challenge for the country to reverse the situation for a better demographic profile by initiating fertility-promotion policies like in countries with low growth rates because of all the present economic, social and family conditions that favour smaller rather than bigger numbers of children.



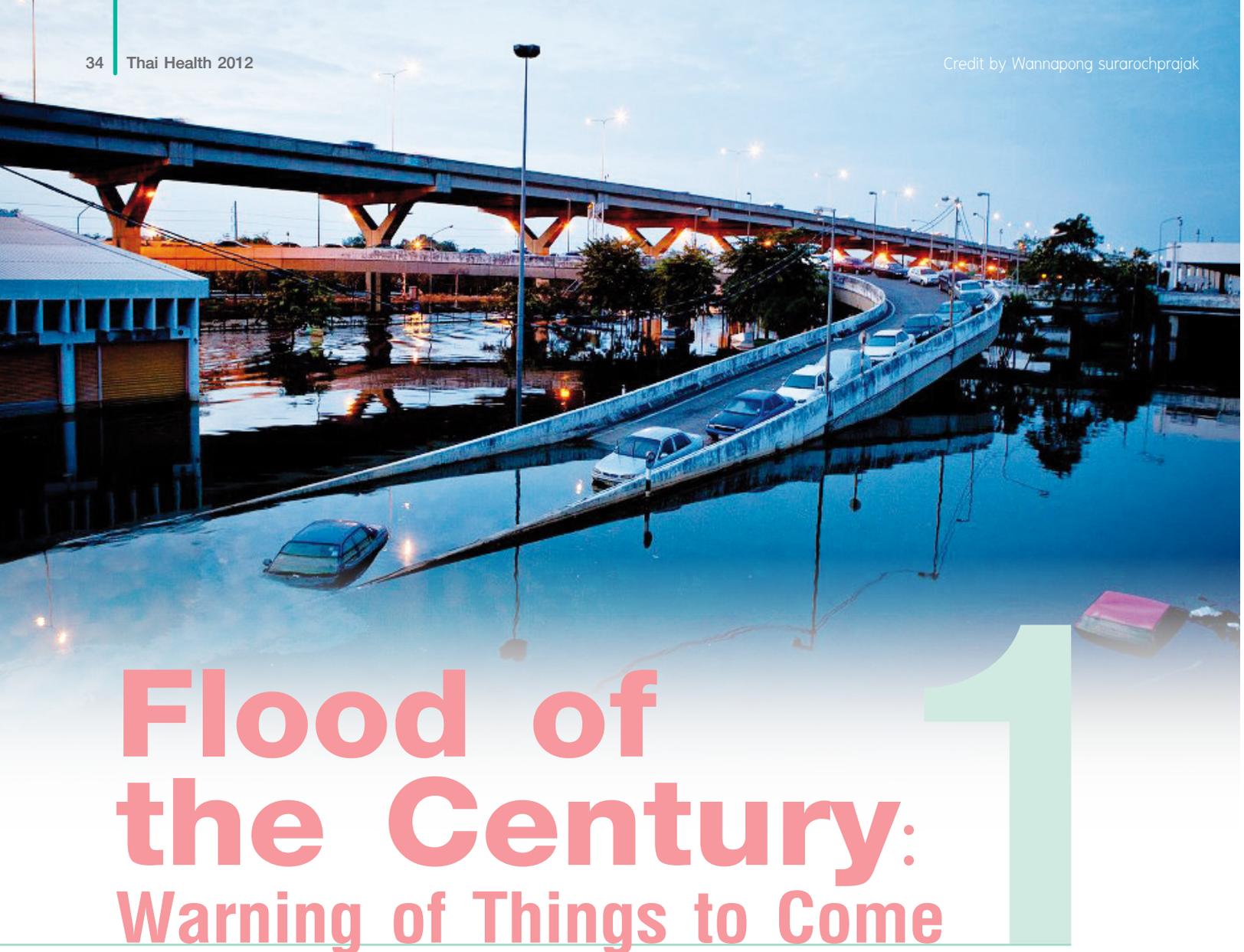
Note: Population growth rate is an average annual growth rate for past decade years of the Census period.

1987-1991	1992-1996	1997-2001	2002-2006	2007-2011	2012-2016
	1989 The International Conference on Population and Development (ICPD) held in Cairo, Egypt proposed a program of action to integrate population and development and focused on gender equality	2000 Millennium Development Goals (MDG) consist of 8 goals, namely, <ul style="list-style-type: none"> ● eradicating extreme poverty, ● achieving universal primary education, ● promoting gender equality and empowering women ● reducing child mortality rates, ● improving maternal health, ● combating HIV/AIDS, malaria, and other diseases, ● ensuring environmental sustainability, and ● developing a global partnership for development 			
Family planning extensively promoted	Reduction of growth rate to 1.2 by 1996	Optimal family size	Maintenance of growth rate at replacement level	Maintenance of total fertility rate at replacement level	Maintaining growth rate not to below 1.6, fertility-promoting measures
	Compulsory education extended from 6 to 9 years Reduction of infant mortality rates from 29 to 23 per 1,000 live births. Long-term policy on the elderly Monthly living allowance for the Elderly began in 1993.	Target of not-less-than 9 years of education Living allowance for the Elderly increased from 300 to 500 baht per month.	Target to have education average of ten years	Fifteen years of free education (2008-2011) Ladder-scale living allowance for the Elderly	Target of 12 years of education among Thais, Thai children's average IQ at 100 or higher
Health for All policy by setting basic minimum need indicators (BMNs)		Universal Coverage Scheme started in 2001			



10

**Outstanding
Health Situations**



Flood of the Century: Warning of Things to Come

The worst flood in a century, in terms of water volume and number of those affected, caused severe suffering for millions of Thais and incalculable damage to the country. The World Bank estimated the damage at 1.4 trillion baht.¹ Thailand's floods were also the world's third largest disaster to beset the insurance industry in 2011.² But the Thai government's measures to address the floods and provide redress are still woefully inadequate, demonstrating the complacency at every level of Thai society in dealing with disasters. The "Flood of the Century" has become a warning of the need for a serious transformation so that Thai society can cope with future disasters in a more systemic manner than what has been seen recently.

Thailand's floods began around the end of July 2011 covering more than 150 million rais in 684 districts of 65 provinces and affecting 4,086,138 households and 13,595,192 people. 815 people were killed and 3 are still missing.³ The damage from the floods extended to all sectors of the economy including agriculture, industry, culture,

infrastructure and the environment, costing more than 1.42 trillion baht in damage. Seven industrial estates were flooded affecting 993,944 workers.⁴ 12.99 million rais of farmland and 540,000 housing units were under water.⁵ In addition, there was significant physical and mental trauma, stress, other dangers that came with the flood, evacuation

expenses and costs of repair, difficulties in daily life, food and water shortage due to panic hoarding, transportation paralysis and traffic dangers caused by kilometer after kilometer of cars left in the street on high ground.

Whither water?

Satellite images showed an enormous water volume covering the Central region coming right up to Bangkok's doorstep. The obvious question is where all the water came from.

From the usually hot and dry month of March 2011, the Northern part of the country was experiencing an unusually cool climate with sporadic rains. The coolness even extended to the Central region of Thailand for a short period. Meanwhile several areas in the South experienced heavy rainfalls with severe flooding and mudslides. The weather for Thailand had become very unusual.⁶

From June to October 2011, Thailand was in the path of five tropical storms—'Hai Ma', 'Nok Ten', 'Hai Tang', 'Nesat' and 'Nalgae'. Even though 'Nok Ten' was the only storm that directly hit the country, all of the storms exerted a strong influence on the weather trough that cut across the Northern and Central regions of the country strengthening the seasonal Southwestern storms and leading to an unbroken period of heavy rainfall.

Dr.Seri Suparathit of the Rangsit University Centre on Climate Change and Disaster and Director of Energy for Environmental Centre, Sirindhorn International Environmental Park said that the total amount of rainfalls exceeded the 1995–2006 average by 30%. The 34,000 cubic meters of run-off from August to December 2011 also exceeded the average of the same period.⁷ Several dams were retaining more than 100% of capacity. Bhumibol Dam on one day took in more than 300 million cubic meters—the highest on record.⁸

Inevitability or mismanagement?

Even though the floods were a natural disaster, it should not be denied that the inept management of the Thai government and the Flood Relief Operation Center (FROC) also made the damage more extensive and long-lasting.

(1) A slow start. From Hai Ma's late June arrival and Nok Ten's arrival in July to Nalgae's entry in October, it took the government more than three months to recognise the impending disaster. FROC was founded on October 8th 2011 when the situation was already critical. A mass of water had already ravaged many provinces in the North in its path before entering the Central plains flooding virtually all of Lopburi, Nakhon Sawan, Singburi, Uthaitani, Chainat, Ang Thong and Ayutthaya Provinces. The immense water mass of 16 billion cubic meters on its way to the Gulf of Thailand inundated Nonthaburi and Pathumthani Provinces before surrounding Bangkok between 15th to 18th October 2011.⁹

(2) Crisis of leadership. FROC's mismanagement was criticised as erroneous and slow leading to a crisis of confidence. Prime Minister Yingluck Shinawatra came under fire for her lack of leadership, knowledge, experience, decisiveness and understanding of the various mechanisms by putting wrong people on the task, solving problems on a day-to-day basis without any foresight and lacking credibility in her commands and announcements. Her public assurance with words like "under control", "safe" and "dry" were parodied to mean the exact opposite.¹⁰

A group of flood victims under the lead of "Stop Global Warming Association" filed a complaint at the Administrative Court against the government for mismanagement which they claimed caused damage to lives, mental health and property. It is perhaps the world's first example of where

flood victims took a government to court for mismanagement.¹¹

(3) Communication failure. FROC's failure to communicate effectively with the public lost the organisation its credibility. Likewise, other government agencies also failed to communicate in a way that was easy to understand. Many people turned to the internet for information and used their own common sense in assessing the situation. This communication failure was reflected in a parody that made its round on the Social Media, "The government should stay calm, the public will assist you."¹² FROC spokespersons were criticised for their lack of efficiency and unity in informing the public. The head spokesperson was later replaced by Assoc Prof. Thongthong Chandrangsu as a measure to regain public confidence.¹³

(4) Mismanagement of donations and relief packages. Amid all the problems, public volunteerism emerged around FROC's operation to help flood victims. But even then FROC was plagued with accusations of favoritism and corruption.¹⁴ In particular, Pheu Thai Party MP Karun Hosakul of Don Muang constituency, responsible for donated items, was accused of delay and unfair distribution and for putting his name on donated items from relief packages to boats, toilets and tents.¹⁵ This severely affected FROC's credibility causing many people to donate instead to private foundations, charities and media channels.

Sea of conflicts

This water mass that amassed in Thailand not only brought a lot of debris but also shored up a host of conflicts and questions.

(1) Dam mismanagement? Hydro and Agro Informatics Institute (Public Company) pointed out that the 2011 influx volume into Bhumibol Dam, Sirikit Dam and Pasak Dam was a factor causing

the floods as the 2011 volume was the highest since the construction of these dams.¹⁶

An inevitable question arises therefore as to whether the dams were mismanaged.

Dr.Chinnawat Surussavadee, at the Faculty of Technology and Environment, Prince of Songkhla University's Phuket campus, studied past data for water retention and release of Bhumibol Dam, the biggest of the three dams, and concluded that the rate of influx into Bhumibol Dam increases between March and May. This should cause the dam to increase its efflux rate. Instead, the rate was decreased and maintained at low levels for an unusually long period. Although water volume above the dam was more than an average year, water release from the beginning of the year until July 31 was much lower than in other years.¹⁷

Dr.Somsak Jeamteerasakul from Thammasat University suggested this water mismanagement water was caused by EGAT and the Royal Irrigation Department and not by the government as it occurred during the power vacuum of government change between July and August 2011. Dr.Somsak recommended an independent committee should be established to find facts and identify the causes of the floods, analyse lessons to be learnt and evaluate the country's flood crisis management as well as produce recommendations to prevent future floods.¹⁸

Later, Theera Wongsamut, Minister of Agriculture and Cooperatives, admitted in a Parliamentary session that his "agency ordered the delay of water release to allow rice farmers to harvest."¹⁹ Soon after EGAT issued a statement that the release of water from Bhumibol and Sirikit Dams did not cause the floods.²⁰ The definite answer to the questions left unanswered therefore will perhaps need to be resolved by a future independent committee.

(2) Communal conflicts. The two most significant conflicts during the floods were the forced openings, led by Pheu Thai MPs, of the water gates on Sam Wa Canal on 31st October 2011 and on Phaya Suren Canal on 27th November 2011.²¹ These conflicts were sparked between those in areas long under water and those at Bangkok's outskirts. The communal conflicts also led to political conflicts between the Pheu Thai government in control of FROC and the Democrat Party in control of the Bangkok Metropolitan Administration.

(3) Sacrifice for Bangkok?! The clash between two views came head to head when water reached Bangkok's doorstep: "Water as the enemy on the verge of taking over the capital" was one view whilst another was that "Water finding its way to the ocean". On one hand, Bangkok is an economic and administrative strategic area that should have been given priority for flood protection. On the other hand, the areas north of the sandbag lines were filled with massive amounts of water for some time. This situation stirred up questions about justice and whether the government could sacrifice livelihoods of rural people to save those of Bangkokians without any discussion on compensation. This debate added to the existing divisions between the city and the village in Thailand.

(4) Western diversion? Although Bangkok's eastern zones have been designated "floodway areas" since 1992, city planning regulations were largely ignored. In practice, there are a large number of constructions blocking the water path. More than 100,000 *rais* of previously designated floodway areas around Suvarnabhumi Airport have been rezoned. As a result, the water mass was more effectively flushed through the western part of Bangkok, despite lower capacity, with the collaboration of the Thonburi canal side communities, three senatorial commissions, Bangkok Metropolitan Administration, the Department of Drainage and Sewerage and SCG foundation who all agreed that water must be

flushed as quickly as possible to relieve the burden of upstream flooded areas.

"Thonburi side of Bangkok was abandoned to the vagaries of nature. All the government did was dispatched rescue boats. The government should provide budgets to allow civil society to use their expertise and traditional wisdom to solve the problems. Instead, the government failed to adequately utilize the capability and wisdom of local civil society"²²

Warning of things to come

As the flooding situation eased, the government set up the "Strategic Committee for Water Resources Management" (SCWRM) to review all water-related policies, programmes and action plans in Thailand, come up with policy recommendations to address the challenges, establish water-management systems, produce a water management master plan and lay down investment plans for water management. Among the twenty five committee members, Dr. Royol Chitradon, Dr. Anond Snitwong Na Ayudhya and Dr. Seri Suparathit, some of the most reknown and trusted names on water informatics, shared the following thoughts:

(1) The overall picture²³ Dr. Royol Chitradon, Director of the Hydro and Agro Informatics Institute at the Ministry of Science and Technology said that this flooding crisis had revealed Thailand's failures in information analysis. An important issue that contributed to the floods was the inflexibility of the water-draining structure. He argued that there should be a clear division between residential areas and industrial areas, thorough surveying of elevation levels of all areas, dredging of canals, identifying reservoir areas to collect excess water and specifying the height of walls around protected areas given that the more water that walled off meant more water to be flushed.²⁴ Community-level water management should be encouraged to



build capacity, he argued, and there should be a water-management master plan.

(2) The social time bomb. Dr. Anond Snidvongs Na Ayudhya, Southeast Asia Regional Director of the Global Change System for Analysis, Research and Training Network pointed out that if the existing water management tools were put to function to their full capacity, whether relating to water gates, dikes, canal systems, reservoir areas and pump stations the floods would have been eased by as much as 60 to 70%. Long term measures should take into consideration everything from the upstream to the downstream with emphasis on public participation, he suggested.

The most important concern Dr. Anond raised is the social conflicts waiting to erupt²⁵ as these floods revealed a public distrust in government capability. Communities laid sandbags around their own areas and pumped water from their own land into neighboring areas

causing widespread conflicts. The ongoing construction of roads, landfills, dams and dikes, if not properly coordinated, will only add to the future crisis.

(3) Learning to live with water²⁶ Dr. Seri Suparathit concluded that making decisions during a crisis must rely on a database, tools and strategy as well as assessing available options for coping with water and damage control. After flood water recedes, compensation should be

timely. Most importantly, Dr. Seri suggested that the government failed to communicate risk and allow the public know how the water would affect them and how to prepare themselves. In the future, he argued there would likely be an increased risk of natural disasters with temperature rises,

Table 1: Floods and Damages 2002–2011

Year	Affected population (million)	Affected families (million households)	Affected farmland (million rais)	Damage (million baht)
2002	5.13	1.37	10.43	13,385
2003	1.88	0.48	1.59	2,050
2004	2.32	0.62	3.30	850
2005	2.87	0.76	1.70	5,982
2006	6.05	1.67	6.56	9,627
2007	2.33	0.57	1.62	1,688
2008	7.92	2.03	6.59	7,602
2009	8.88	2.31	2.96	5,253
2010	13.49	3.92	10.91	16,339
2011	13.60	4.09	12.99	1,356,810*

Note: * Assessed by the Post Disaster Needs Assessment (PDNA) of the World Bank, <http://thaipublica.org/2011/12/world-bank-flood-damage/> accessed on 31 January 2012

Source: Thai Health project, IPSR, Mahidol University (calculated from situations Thailand's flood statistics 2002–2011, Disaster Mitigation Directing Center, Department of Disaster Prevention and Mitigation, Ministry of Interior and Natural Disasters summary at 31st December 2011 by Emergency Operation Center, Department of Disaster Prevention and Mitigation, Ministry of Interior).

heavier rainfalls, severe floods and droughts and disasters with an increase in intensity and frequency also. He therefore recommended that it is essential to find a place for water in the form of reservoirs.

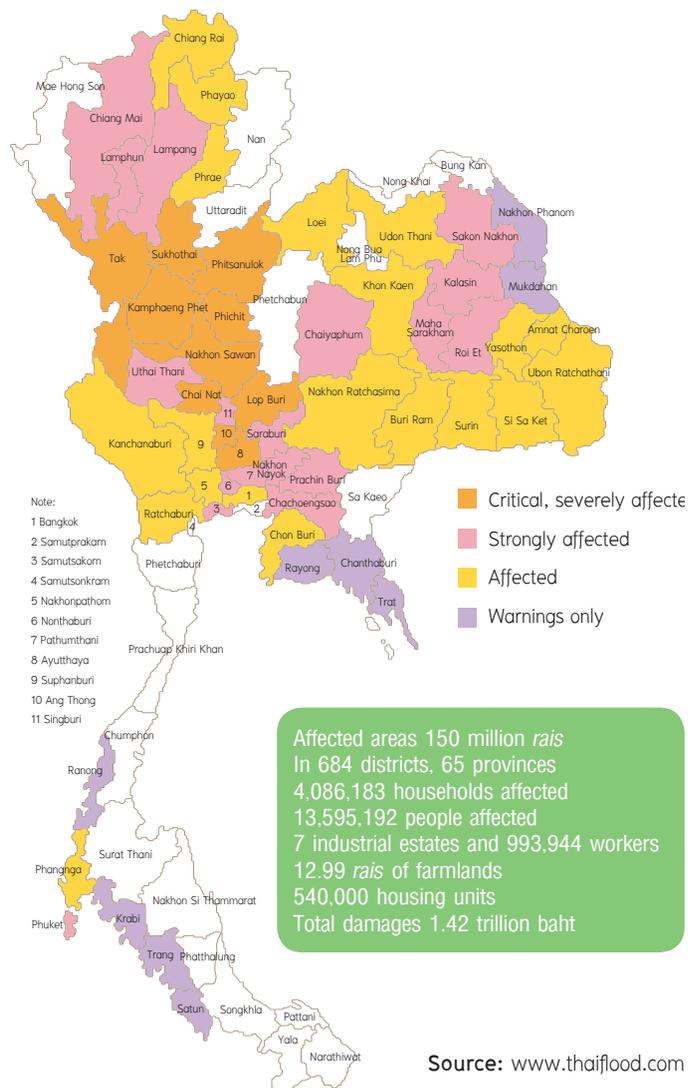
Anti-flood megaprojects

As compensation was being paid out to flood victims after the flood water receded, the government also drafted plans to prepare for possible flooding in the next few months with budgets consisting of hundreds of billions of baht. The Cabinet passed four decrees with financial recommendations proposed by “Strategic Committee for Water Resources Management (SCWRM)”²⁷ The cabinet also approved a draft to set up a permanent water-management body and a draft Office of the Prime Minister’s Regulations on National Water and Flood Management, as submitted by SCWRM on 7th February 2012. Two committees will be set up, namely, “the National Water Resources and Flood Policy Committee (NWRFPCC)” and “Water Resources and Flood Management Committee (WRFMC)”, while “the Office of the National Water Resources and Flood Policy Committee (ONWRFPCC)” will act as secretariat.

The government has also approved the national water resources management master plans with 3 areas of operation as follows: 1) to improve and rehabilitate existing anti-flood systems; 2) to gain confidence on anti-flood measures in residential, agricultural, industrial and economic zones; and 3) integrate participation by all relevant sectors to speed the water’s passage to the sea.

The areas of operation for solving flooding problems are divided up as follows: 1) 10 upstream provinces with a focus on absorption and delay of run-off to prevent flash floods; 2) 14 midstream provinces with a focus on building floodways and reservoirs; and 3) 7 downstream provinces with a focus on speeding the water’s passage to the sea. The short-term goal is to reduce damage from a possible flood in 2012 while the long-term goal is to build an integrated and sustainable flood mitigation system.

Map of Flooded Areas as of October 10, 2011



Details of the Action Plan of Water Management for the Urgency Period (22.626 billion baht) and the Action Plans of Integrated and Sustainable Flood Mitigation in Chao–Praya River Basin (350 billion baht) are as follows:

Action Plan of Water Management for the Urgent Short Term Period	Action Plan of Integrated and Sustainable Flood Mitigation in the Chao–Praya River Basin
1. Work plan for management of major water reservoirs and formulation of National Water Management Plan (responsibility of the Royal Irrigation Department)	1. Work plan for restoration and conservation of forest and ecosystem sample projects; – Soil improvement and conservation in the upper river basin by reforestation and rehabilitation of forest areas in the river basins in the Ping, Wang, Yom, Nan, Sakae Krang, Tha–Chin and Pa Sak Rivers, totaling 330,000 <i>rais</i> in 10 upstream provinces and 6 upper midstream provinces (10 billion baht)
2. Work plan for restoration and efficiency improvement of current and planned physical structures (17,126 million baht) – Renovation of dikes, dams, check dams and water drainage systems (7,062.82 million baht) – Renovation of water drainage channels, digging canals, clearing canals and water drainage channels (1,695.27 million baht) – Strengthening dikes and carrying out tasks recommended by HM King’s initiative (868.20 million baht) – Increasing capacity in water drainage and water run–off management (2,984.05 million baht)	2 Work plan for construction of 5 reservoirs (50 billion baht) in 10 upstream provinces and 14 midstream provinces 1) Mae Cham Dam on the Ping River in Chiangmai 2) Kaeng Sua Ten Dam on the Yom River in Prae 3) Nam Tat Dam on a tributary of the Nan River in Nan 4) Small or medium–sized reservoir on the Pa Sak River in Petchaboon 5) Mae Wong Dam on the Sakae Krung River in Uthaitхани
3. Work plan for information warehouse, forecasting and disaster warning system (4.5 billion baht) – Formulate data bank plan/ setup national data centre – Formulate forecasting system upgrading plan – Formulate warning system development plan including setting up CCTV system	3. Work plan for improving/adapting irrigated agricultural areas into water retention areas (Monkey cheek reservoirs) of around 2 million <i>rais</i> to catch 6–10 billion cubic meters of water (60 billion baht). Out of the one million <i>rais</i> needed for the 6 upper midstream provinces, 500,000 have already been identified and designated for 1,850 million cubic meters of water. These are in Nakhon Sawan’s Thung Nua, Chum Saeng District, Bang Moon Nak District etc. For the 8 lower midstream provinces below Nakhon Sawan, one million <i>rais</i> such as in Thung Bang Ban have already been identified and designated for 3.1 cubic meters of water.
4. Work plan for response to specific area (1 billion baht) – Formulate evacuation plan in case of flooding – Set up tool storing system – Develop flood protection systems in important areas	4. Work plan for construction of flood ways or water channels to drain no less than 1,500 cubic meters per second as well as roads and other structures to channel waters from the Pa Sak and Chao–Praya rivers to the East or East and West efficiently (120 billion baht)
5. Work plan for assigning water retention areas and recovery measures – Formulate plan for channeling water to identified monkey cheek reservoirs – Identify measures of compensation to effected people	5. Work plan for land use zoning and land utilisation including setting up area protection systems (embankment walls and drainage system) for residential, commercial and industrial zones (50 billion baht)
6. Work plan for improving water management institutions – Set up task force committee to monitor operation with ONWRFPC as secretary.	6. Work plan for improving conditions of major rivers and dikes other than those in Work plan 3 and 5 (7 billion baht)
	7. Work plan for information warehouse and forecasting and disaster warning system, establishment of the database system, forecasting system and warning system as well as setting up the institution, rules and regulations and enhancing the public participation (3 billion baht)

Source: Thai Health Project 2012. IPSR Mahidol University (summarised from the project’s news data of the flooding situation December 2011–February 2012).



In mid-2011, Thailand's "Little Switzerland" was turned into the Wang Nam Khiao "model". This is a valley where, with no compromise, state power clashed against citizens, capital against poverty and tourism against law enforcement. When the Department of National Parks, Wildlife and Plant Conservation of the Ministry of Natural Resources and Environment with the law in its hand bulldozed resorts which encroached upon the Thap Lan National Park, the public seemed to welcome the banishment of capitalists from the valley. However, questions remained about the action. Why now? Was the move politically motivated? How long could this measure last and will such action also be undertaken elsewhere?

Wang Nam Khiao "Model": Reflecting the Problems of People, Forest and Land

2



Whether the “Wang Nam Khiao Model” will be an answer to all cases of forest encroachment has become a pertinent issue. These man–forest conflicts are not just about those axing down trees in the forest and many difficult questions remain unaddressed by this model of action.

Wang Nam Khiao: A valley of change

Wang Nam Khiao is a district in Nakhon Ratchasima province. Partly sitting on the country’s second largest Thap Lan National Park, Wang Nam Khiao enjoys a cool climate all year round and boasts Level 7 clean air.¹ UNESCO has declared the area Thailand’s first Biosphere Reserve. Also in its territory is Khao Phaeng Ma, a well known reserve of gaur² and other beautiful scenery. In the past few years, Wang Nam Khiao has been promoted as Nakhon Ratchasima’s top tourist attraction. It’s estimated that in the cool season as many as 30,000 tourists visit Wang Nam Khiao every weekend spending around 30 million baht in the area.³

Like with all other tourist attractions, tourism comes with changes. Resorts, shops and other facilities mushroomed in the area to exploit economic opportunities brought by tourism. Everyone became involved in the boom from villagers and civil servants to politicians, capitalists and tycoons. As a result, land prices jumped by 20–40% every year. Now land away from the main street is sold at 1.5 million baht per *rai* and land adjacent to the street goes for 5 million baht per *rai*.⁴

This development could be treated as a success story but Wang Nam Khiao’s 241,000–*rai* area was a land that the Department of Forestry gave to the Agricultural Land Reform Office for distribution to more than 6,000 farmers and deeds have been issued for 136,000 *rais* of them.⁵ These lands are now being used contrary to their

original objectives. There has also been rampant encroachment into the flanking forest.

On 21st July 2011 Thewin Meesap, chief of Thap Lan National Park, suddenly announced that all constructions must be removed and the area returned to its original conditions by 30th October 2011.

Clashing with capitalists: Showdown or show-off?

This latter announcement was unexpected and left everyone asking “why now?” After so many years of negligence, out of Thap Lan National Park’s 1.3 million *rais* more than 60,000 *rais* had already been razed.⁶ Many wondered if the move was politically–motivated and how long it would be sustained. However, the public at large seemed to favour the Department’s measures against encroachers.

Media investigations revealed that there were 22 resorts encroaching on Phu Luang National Park, and more than 100 resorts encroaching on Thap Lan National Park. The area most encroached upon was the area around Khao Phaeng Ma with constructions on 22 pieces of land covering more than 100 *rais*.⁷ The precise number of resorts is unknown but one media outlet put the number at more than one thousands with more than 20,000 registered guest rooms and many more unregistered ones.⁸ Some of these resorts sit on a whole hill.⁹

Subsequently, officials from the Ministry and the Land Reform Office went around to these resorts to put up notices notifying them to remove all constructions in the area. In cases where the court had ordered removal, officials even conducted demolition themselves with backhoe trucks. The eviction didn’t hurt only resort owners and investors. Even more affected were the more than 7,000 villagers who had lived in the area for more than

40 years. Mostly without entitlement papers they were afraid that they would also need to leave the area.¹⁰

Not only housing security was affected as many villagers and entrepreneurs who benefited from tourism were also hurt. Pongthep Malachasing, Chairperson of the Tourism Promotion Group, said that this eviction measure was driving many hotel and resort owners into bankruptcy and they may risk closure, thereby endangering the livelihood of 4,000 to 5,000 workers.¹¹

Pongthep said there were 6–7,000 resorts in Wang Nam Khiao district, 500 homestay units and 5 to 6 large-scale projects built and operated during the past 1 to 2 years. He admitted that 70% of land ownership was illegal but it brought more than one billion baht per year to the local economy.

With such large amounts of money involved, it was no surprise that local would start mobs to block the roads and there was submission of a letter to the government demanding more lenient solutions.

A group of locals, led by Chun Sirichaikirikosol, Nakhon Ratchasima Provincial Council member and Chongkol Sacharoen, Chief Executive Officer of the Thai Samakkhee Sub-district Administrative Organisation, also gathered signatures to demand the cabinet to revise three laws, namely the National Park Act BE 2504, the National Forest Reserve Act BE 2507 and the Agricultural Land Reform Act BE 2518, in order to allow locals to legally turn Wang Nam Khiao into a tourist area.¹² However, the responses from government agencies, NGO's and the public at large were negative as the demands were viewed as being in the form of asking for a reward for breaking the law.

Moreover, the public was demanding the eviction measure, which has become widely known as the “Wang Nam Khiao Model,” to be applied to

other areas facing similar fates. As the Wang Nam Khiao case became national news, similar forest-encroachment incidents have been reported in Chiangmai, Petchaboon, and Phuket Provinces among others. These reports were also met with serious government reactions. A recent survey by the Department found 382 resorts built in national parks nationwide and another 51 in wildlife reserve areas. For those in national parks, 141 have already been prosecuted.¹³

Just the tip of an iceberg

Forest encroachment in Wang Nam Khiao is not new. In 2003, a famous case involving national-level politicians including the infamous “Madame PK”¹⁴ was already well known although the story was later buried. Since then, illegal entitlement transfers in Wang Nam Khiao became even more conspicuous with advertisements on the internet and in print media.

Part of the problem is the lax land reform laws which lack good implementation and provide loopholes allowing reform lands to be freely transferred from farmers to capitalists, as has already happened all over Thailand.

Undeniably at fault are the negligent government officials. And even more fault should be placed with Thailand's development policy since the 1960's including logging concessions, promotion of economic crops, the building of the strategic Nakhon Ratchasima–Pak Thongchai road which tore apart Khao Yai forest and Thap Lan forest and the tourism promotion which completely transformed Wang Nam Khiao.¹⁵

Careless distribution of lands to farmers without addressing structural problems also sped up the land transfer. Villagers who have long lived in the area explained that most farmers wanted to sell the land because the land was not fertile and

used to be a dilapidated forest area 40 to 50 years ago. It was these farmers who actually rehabilitated rather than encroached upon the land, as was portrayed by the media.¹⁶

The root cause of all the problems was land possession in Thailand where 10% of people hold more than 100 rai of land while the remaining 90% holds no more than 1 rai.¹⁷ Meanwhile, the right of the community to manage natural resources, especially forests, is still far from reality. All of these challenges make a complex equation of which Wang Nam Khiao is only one example.

Sustainable solution by restoring fairness

Although strictly enforcing the law in Wang Nam Khiao was backed by public support, it is also necessary to bear in mind that this law enforcement caused hardships for local entrepreneurs and villagers. Kongkrit Hirankit, chairman for policy planning of the Tourism Council of Thailand, proposed a compromise where the government enforced the law as long as it provided redress for entrepreneurs who has no intention to encroach on the forest.¹⁸

The only reasonable solution for Wang Nam Khiao seems to be strict law enforcement however; or the law would have to be suspended for all capitalistic encroachment of forests throughout Thailand. Professor Mingsan Khaosa-ard suggested that some pieces of land could be transparently auctioned with a reasonably high minimum bid to help ease the effects on the livelihood of locals.

For the longer term, Professor Mingsan suggested that the government expedite solutions on land and forest by verifying entitlements of locals with participation of the local administrative organisations and the community. Unlawful entitlements should be revoked.¹⁹

Of course, the revision of the land laws and the role of the Agricultural Land Reform Office are inevitable. Lertwirot Kowattana, the Agricultural Land Reform Office Director, admitted that for years his office has been brainstorming on how to modernise the law to improve management efficiency.²⁰ This accords with the view of Senator Anurak Niyamaveja, Chairman of the Committee on Political Development and Public Participation. However, existing law already gives authorities power to deal with unlawful possession of reform land. What has been missing is strict enforcement by government officials of the law. Public scrutiny is also important in making them accountable.²¹

A serious land reform and the realisation of the right of community to manage natural resources is paramount as this will address the root cause of the problem and enable coexistence between community and forest, which is a more sustainable solution than demolition. The best protection of the forests is not the law and law enforcement officials but social justice and the community's protectiveness of its own resources.



Right to Refuse Treatment: When Death is the Only Dignified Option

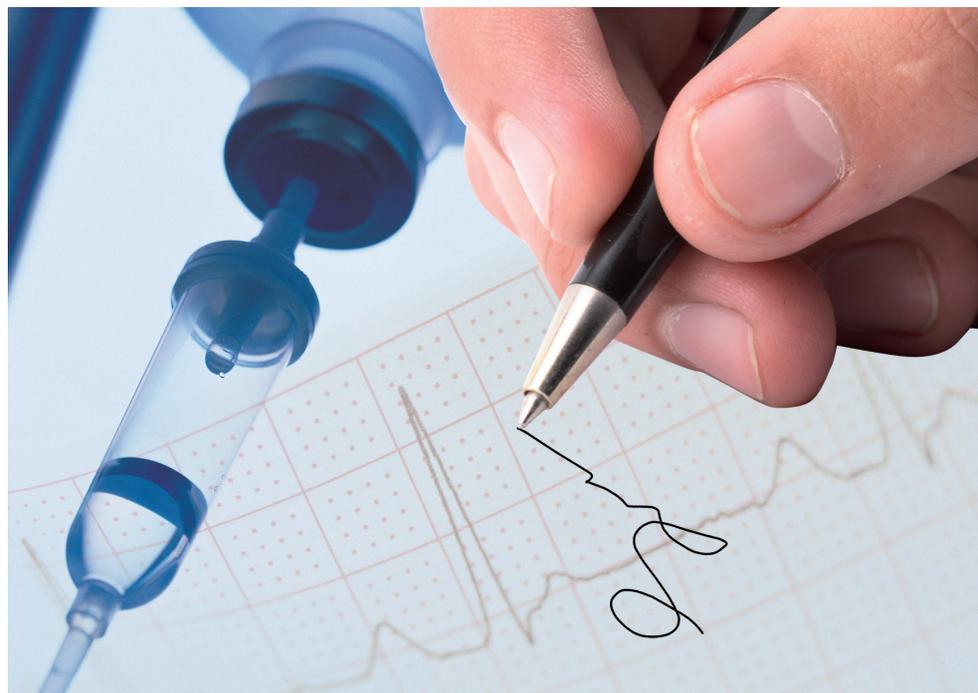
3

“A peaceful death” used to be private business untouched by the law and had not been an issue in Thai society until the promulgation of the National Health Act BE 2007. Section 12 of this law made legal the “right to die” with dignity without medical interference or to prevent being left in a vegetative state. The law, however, caused worries amongst many medical professionals who were concerned about ethics and possible prosecution. The right to die became a controversy.

Death as an option

Around the time that the National Health Act was being drafted in 2002, the section on the right to refuse treatment was extensively debated in the Parliament. Those in favour argued from the perspective of patients’ rights while those opposing cited medical ethics and argued that patients should not have the exclusive right to make such a decision with disregard to the opinions of physicians and relatives.

Dr.Surapong Suebwonglee, then Minister of Public Health, suggested that the right to die was in accordance with human rights principles but in practice it



applied only in some cases such as when the patient no longer had any physical responses while in the case of terminal illnesses physicians must determine if it was appropriate to allow patients the option to end their lives.¹

According to those in favour, such right already exists in other countries. For example, Switzerland has enacted a law to guarantee the right to die since 1987 allowing terminal patients to end their lives with assistance from organisations working on these issues.

The US State of Oregon also enacted the “Death with Dignity Act” allowing doctors to prescribe drugs to help terminal patients end their lives peacefully. This law was upheld by the US Federal Supreme Court so that doctors could facilitate patients’ deaths in such circumstances.²

The World Medical Association recommended that doctors must identify three factors in the case of euthanasia before facilitating patients to die a peaceful death. These were: 1) the patient must be in a prolonged state of excruciating pain; 2) the patient has a right to end their life; and 3) the patient should not be forced to extend their life in a helpless or unresponsive state. The doctor’s role can be either active euthanasia or passive euthanasia.³

The right to refuse medical treatment is a right of an individual to express a wish not to receive medical treatments to extend their life. Advanced technologies can often prolong life but at the cost of being shackled to medical equipments and considerable expense. Many people don’t consider this kind of suffering to be dignified and refusing the right to die is seem as a right to protect humanity.⁴

In countries with clear laws on medical treatment there is a document called DNR (Do Not Resuscitate) form which patients can fill in to indicate their wish to decline medical procedures if they are in conditions beyond medical treatments. In such a case, doctors must refrain from prolonging the patient’s life. DNR is the patient’s “living will” to indicate their wish to exercise the right to die as permitted by law and the doctor cannot violate this right without due justification.⁵

Memento Mori: Buddhism and death preparedness

What was “right” was not the key issue in the ongoing debate on euthanasia perhaps because ‘right’ is a Western concept, although such principles have gone through rigorous debates and are widely accepted as fundamental. Thailand has also adopted this concept of “right” not least among the doctors who wanted to reform public health systems with the support of patients’ network.

One important factor in this debate is perhaps the influence of Buddhism, which doesn’t see the right to die as entirely negative. While Christianity and Islam regard human lives as belonging to God and as something that cannot be violated by humans, Buddhism teaches about calm preparedness for death.

Phra Paisal Visalo, abbot of Wat Paa Sukhato forest temple in Chaiyaphoom Province, said “It is not against Buddhism that patients aware of their impending death may not want to prolong their lives. Even the venerable Buddhadasa declined treatments at the end of his 87 years’ life and wished to die naturally. In the past, a lot of people stop eating, drinking or taking medicine when death looms. They didn’t want to scramble for life when it was a lost cause. Buddhadasa used the term “stop carrying our own corpse to run away from death”. It’s not a suicide, but it’s a deliberate letting-go and dying naturally.”⁶

A 2002 survey on euthanasia and the right to die by the Referendum Center of Research and Development Institute at Ramkhamhaeng University found that 45% of respondents agreed with a law to allow the right to die with dignity, 16.7% were against it and 38% professed to now knowing about the law. Among doctors, 54.5% were in favour of the law.⁷

The main arguments, therefore, center around wordings, ethics and laws.

Do not resuscitate

After years of delay, the National Health Act was passed by the National Legislative Council on 4th January 2007. Section 12 of the Act states:

A person shall have the right to make a living will in writing to refuse the public health service which is provided merely to prolong his/her terminal stage of life or to make a living will to refuse the service as to cease the severe suffering from illness.

The living will under paragraph one shall be carried out in accordance with the rules and procedure prescribed in the Ministerial Regulation.

An act done by public health personnel in compliance with the living will under paragraph one shall not be held an offence and shall not be liable to any responsibility whatsoever.

Later, the National Health Committee Office issued a guideline for health care providers, public health professionals and health care staffs on the Ministerial Regulation on Conditions and Methods for Implementing a Living Will to Refuse Public Health Services that Prolong Dying in the Terminal Phase of Illness or to End Suffering from Illness B.E. 2553.

This guideline allows public health professionals to accord the patient's living will without having to worry about legal consequences.

The patient writing a living will has to be 18 years old and over, conscious and make the decision by themselves. If the patient is under 18 years old, the decision must be made by his or her guardians. The living will must be in hand-writing or using the form given by the Ministerial Regulation and include the patient's National ID Number, signature, name, last name, next of kin, date of the living will and witness(es) who could be next of kin, relatives

or nurses. The will can also specify the type of medical procedures refused and/or a wish to return home to die.⁸

The issue, however, is far from settled...

The Medical Council's hesitance

The issuance of the guideline was not met with enthusiasm by the Medical Council which has campaigned against this issue since 2002. Dr.Chumsak Pruksapong, the Medical Council spokesperson, said the Medical Council opposed the ability of patients to refuse treatments with only a living will. He said, "I think the bottom line is money. If no one is paying, no doctors would want to prolong the dying with medical equipments because they don't know who to bill. Even the government will only pay so much for patients with health security. The life and death of patients will become subject to double standards depending on how much they can afford."⁹

His statement seemed to support the right to die from a different angle. A study in the United States showed that healthcare expenses during the last 6 months of life exceed the expenses paid for the remaining life period.¹⁰ The right to refuse treatment, therefore, appeared to make sense for people who did not want to burden their children with medical bills.

The Medical Council also questioned whether the Ministerial Regulation went beyond what was provided by Section 12 of the Act and whether it could exempt medical professionals from all criminal and civil liabilities under the Penal Code and the Civil and Commercial Code.¹¹ Despite explanations by lawmakers that these concerns were already resolved among legal experts, the Medical Council continued to question their conclusions.

Dr. Wisut Latchasevi, Assistant Secretary-General of the Medical Council, went so far as to announce that “This law cannot be enforced, so there is no need to comply unless the National Health Committee Office will play the role in collecting these living wills.”¹²

The conflict seemed to become much more serious when the Medical Council threatened to file a complaint at the Administrative Court. With support from the Federation of Healthcare Workforce of Thailand (FHWT) and the Confederacy of Doctors in Regional Center and General Hospitals, the Council proposed four changes to the guideline.

1. The Ministerial Regulation defined the patients’ final moments too broadly. This may cause problems during implementation. The Medical Council would like to re-define the term according to the spirit of the National Health Act via consultation with all parties including Royal Medical Colleges.

2. Instead of ‘anywhere’, the living will should be signed only at the hospital where the patient is receiving treatment, the provincial public health office, the district office or the National Health Committee Office.

3. The living-will sample requests doctors to terminate medical services. No doctors would dare do comply with this as “termination” means causing the death of the patient.

4. The phrase “terminate medical services” should be removed

Dr. Samphan Komrit, the Medical Council Secretary-General, once said that if a doctor had prescribed a medical device such as a respirator to

a patient the doctor could not withhold it to speed up the dying if the patient would die regardless of the device. Removal could only be done after the patient became well or was deceased.

The Medical Council insisted that it would continue to lobby for the revision of the Ministerial Regulation and perhaps also the Act. It planned to submit recommendations to the Minister of Public Health.¹³

The right to die: In effect or ineffectual?

Even though the right of terminally ill patients to refuse treatment is now in force, the future of the provision is uncertain. Nobody can predict if or how the law will be revised due to the Medical Council’s strong opposition. At present the Medical Council tends to protect the interests of doctors. Its protection may even extend to cover the vested interests of those in healthcare businesses.

On the other hands, doctors who support Section 12 and the National Health Act are committed to finding structural solutions to the population’s health problems. They align themselves with the “People’s Network for the Right to Health” which questions whether opposing doctors have vested interests. They demand that the opposition rethinks maturely and insist that they will continue to monitor and support the use of Section 12 by raising awareness amongst the population.

Although the conflict is far from resolved, the lesson learned is that nothing can take away human dignity, whether medical technologies or death.





Some parts of Thai society regard the 2006 coup d'état as the beginning of the ongoing conflicts. But that's only partial truth. Instead of being the poisonous tree, the coup d'état may itself be just fruit of a bigger poisonous tree which has expanded its branches to cover every part of Thai society. And because its roots have been sunken deep, it's hidden from sight. This poisonous tree is known as "structural injustice"

Thailand Reform: Unfinished Uprooting of the Poisonous Tree



Disparity of the Twisted Tree

"Structural problems" have become another familiar term for Thais as an explanation of the root cause of the ongoing political conflicts.

People who have been affected by the Pak Moon-Rasisalai Dam camping in protest in front of the Government House; illnesses caused by Mae Mo Power Plant and Map Ta Phut Industrial Estate; domination by ten percent of companies which



in 2007 earned more than 89% of total corporate income of registered companies;¹ the toll way accident in which the public questioned the justice system.

These are only a few recent examples which show defects in Thailand's political, economic, social, power dynamics, legal and justice structures. These structures tend to privilege a small number of people and undermine the social fabric with disparity.

Disparity can be found to exist in four dimensions: rights, opportunities, power and dignity.² Most people in Thailand have long been deprived of these rights until changes arrived in the form of the 1997 Constitution and ex-PM Thaksin Shinawatra's "Edible Democracy" which made them more aware of their rights and power.

Whether Thaksinomics was good or bad, it allowed the vast majority of the population to realise the power of their votes, have their voices heard and gain access to services and facilities as never before.

That was until the 2006 coup ended this situation and started the political conflicts ...

Birth of the Reform Committee

After the bloody May 2010 riot, Thai society scrambled for a solution out of the trauma. With the root cause of the problem identified as structural problems and disparity, the then Prime Minister Abhisit Vejjajiva initiated the idea of Thailand Reform by issuing the Office of the Prime Minister Ministerial Regulations on National Reform BE 2553 followed by establishing the National Reform Committee (NRC) chaired by Anand Panyarachun and the National Reform Assembly (NRA) chaired by Dr.Prawet Wasee. These committees were aimed at addressing structural problems and disparity³ in income, rights, opportunities, power and dignity⁴ as well as the promotion of justice in

socio-economics, land and natural resources, opportunity, rights and negotiating power.⁵

Although the Red Shirts refused to have anything to do with the two bodies, it is undeniable that they were able to attract to the idea of national reforms a wide public interest including from the business sector, government agencies, NGO's, civil society, the media and groups advocating different issues such as women's issues, the disabled, community forests, consumers and artists. There were debates, idea exchanges, analysis and solution formulations.

Anand's Committee acted like a think tank bringing together many of the country's top thinkers and academics such as Seksan Prasertkul, Nidhi Eawsriwong and MRW Akin Rabibadhana. The National Reform Assembly, on the other hand, organised a public participation process to gather information and opinions from the public.

The first National Reform Assembly in March 2011 agreed on a mission to reduce disparity and promote justice. Working independently from the government, NRC and NRA were tasked with making policy recommendations and conducting reform assemblies at all levels in eight areas:⁶

- (1) Fair and sustainable allocation of land resources
- (2) Marine and coastal resource management
- (3) Restoration of justice in relation to land and resources
- (4) Reform of the Social Security System
- (5) Ensuring livelihood security and wellbeing society for the elderly
- (6) Ensuring a peaceful harmonious Thai society
- (7) Decentralisation
- (8) Art, culture, creativity and social healing

Land reform, Government restructuring: Calls remain unanswered

Six months after its formulation, the NRC on 7th February 2011 held a press conference on “Agricultural Land Reform”. This was the NRC’s first set of recommendations to the government because it recognised that Laissez-faire economic structure was changing the status of land from a foundation of life to unutilised assets to be speculated on for profit.

According to the Land Institute Foundation, 90% of Thais hold less than one *rai* of land while another 10% hold more than 100 *rais* each. Seventy percent of land held was speculative assets left unutilised.⁷ NRC proposed 5 measures as follows:

- (1) Land holdings for agriculture to 50 *rais* per household to reduce land holding concentration;
- (2) Creating a national-level public database system for agricultural land holdings to ensure fair and effective land management;
- (3) Establishing a Land Bank to procure hoarded or unutilised land for redistribution to landless citizens;
- (4) Using progressive land tax to reduce incentives for land speculation; and
- (5) Establishing agricultural zones where all land holders must be farmers.⁸

It was no surprise that these NRC recommendations were not met with enthusiasm among major land holders. The announcement in effect was to stimulate more discussions and build up social pressure for change.

“These recommendations are intended for public communication to raise awareness and stimulate discussions, before turning them into a

national agenda and effective change. We will soon send letters to civil society organizations, the media, and the government. We will also request political parties to integrate these recommendations into their election policies.”⁹

On 18th April 2011 NRC announced another set of recommendations aimed at government restructuring and decentralisation as follows:¹⁰

- (1) Abolish regional administrative bodies and transfer the administrative power over resources, economy and political management to local administrative organisations (LAO)
- (2) Establish a political process enabling local citizens to concretely participate in local administration with LAO
- (3) The central government is in charge of national-level affairs but has no legal authority to appoint or remove LAO executives and staff members.
- (4) Reform LAO’s financial system and personnel management to ensure sufficient resources for effective operation

Again, it was no surprise that these recommendations were opposed and ignored by the government.

As Prime Minister Abhisit dissolved the parliament on 9th May 2011, Anand along with all NRC members resigned. Anand emphasised the importance of these two sets of recommendations that

“Power structure is the root cause at the heart of all of Thailand’s problems leading to disparity. A government with no justice in its exercise of power allows little opportunities and freedom for the population. This leads to all kinds of problems where power, wealth, industry, transportation and opportunities concentrate only in the capital. Most importantly, the power to manage

the life of the grassroots people, whether benevolent or not, always cause a sense of powerlessness, despair and resentment. This is a problem that must be urgently addressed. NRC urgently needs to address these two issues of agricultural land reform and power restructure.”¹¹

As NRC submitted its last report to the public and political parties, Anand said it was up to the will of society whether to mobilize and carry on the national reform. On the other hand, Dr.Pravet’s NRA will continue to gather information on social issues and recommendations to its full three-year term as required by the Ministerial Regulation.

Continued silence after election

During the collaboration of the NRC and NRA, there has been support for the NRC recommendations from many social sectors. Some also came up with additional recommendations. The Network of Community-based Organisations for National Reform proposed an establishment of reform committees throughout the country from village-level to provincial-level. The civil society network proposed “Urgent Agenda” such as termination of community-affecting government development schemes and large-scale private investment projects and solutions for farmers’ debts and informal-sector debts amongst other issues.

Dr.Pitch Pongsawat of Political Science Faculty at Chulalongkorn University suggested that “The issue is how the Anand and Pravet bodies are accountable to the people, especially the Red Shirts who are against the Abhisit government. This ‘relationship’ issue is therefore more pertinent than the issue of independence because it addresses whether or how these bodies represent the many people who were on the opposite side and subjected to abuses by the government.”¹²

Many agreed that the NRC recommendations were “strong medicine” which may be intended only to stimulate social debates. These recommendations also set a high standard in order to hold against political compromise. However, it was considered unlikely that they will be adopted. An ABAC poll between in June 2010 showed that 66% of respondents were not positive that the national reform would be seriously and sustainably carried out.¹³

This was presumably because of the political uncertainty. While NRC was functioning, the Institute for Just Society Foundation proposed a Constitutional amendment in Section 16 to ensure the continuity of the NRC regardless of government change. The proposal again went unheeded by the Parliament.

In the July 2011 elections, no political parties integrated NRC recommendations into their campaign policies. All parties focused on populist policies in the hope of winning seats. When Pheu Thai Party formed a government, Thailand Reform became a thing of the past.

In the final analysis, the fate of Thailand Reform cannot be put in the hands of politicians or specific individuals or bodies. As Anand repeatedly said, national reform relies on the will of society to mobilise and carry it out. It depends whether the society itself can come to an agreement that the real poisonous tree must be uprooted from our society or not.



Hurdles towards the ASEAN Community

5

In three years, all ten ASEAN countries will become the ASEAN Community, similar in form to the European Union. Each country is now carrying out necessary measures to prepare for the integration according to the slogan “One Vision, One Identity, One Community”. All sectors in Thailand which consider themselves a regional power are similarly undertaking changes.

Why ASEAN Community?

Formed in 1967, ASEAN has developed collaboration mechanisms in social, economic and diplomatic relations over the past 40 years. ASEAN summits are hosted on rotational basis among member countries.



The idea of integration emerged with the declaration of the ASEAN Vision 2020 in Malaysia in December 1997. In 2003, the Bali Concord II was signed as an agreement to establish the ASEAN Community by 2020. The 2007 summit in the Philippines adopted an agreement to shorten the integration process by 5 years.

Although ASEAN focused only on economic collaborations in the past, rapid global changes in political, economic and social spheres pose new challenges and risks of a more transnational nature for ASEAN. These are for example epidemics, transnational crime, natural disasters and environmental problems. To respond to these changes, the ASEAN Community became a

goal of collaboration within this region with more than 590 million people.

The Three Pillars¹

ASEAN Political-Security Community (APSC)

The goal of the establishment of the APSC² is to create political stability and security for member countries for peaceful coexistence guided by the principles of democracy, human rights, peaceful conflict resolutions, rule of law and good governance. In addition, the APSC aims to increase collaboration to counter new forms of threats such as transnational crime, terrorism, drugs, human trafficking and natural disasters. APSC finally aims to increase ASEAN's role at the regional, Asian and global level as well as within international organisations.

ASEAN Economic Community (AEC)

The goal of the establishment of AEC³ is to promote ASEAN as a common market and production base with free movements of raw materials, investment, labour, goods and services without trade barriers such as tariffs or quotas. This EC establishment should increase ASEAN's economic competitiveness through measures such as competitive policies, consumer protection, intellectual property rights, e-commerce, taxation and development of financial, logistics, informatics, and energy infrastructure. In addition, the AEC emphasises equitable economic development to reduce the developmental gaps among member countries and the integration ASEAN economy into the global economy.

The ASEAN Framework Agreement for the Integration of Priority Sectors addresses the liberalisation of trade, services, investment, trade and investment facilitation and other collaborations. Each member state must prepare roadmaps for different sectors: Thailand for tourism and air transport; Myanmar for agricultural and fishery

products, Indonesia for automobile and wood products; Malaysia for rubber products and textile; the Philippines for electronics; and Singapore for IT and healthcare services.

ASEAN Socio-Cultural Community (ASCC)

The action plan for ASCC⁴ specifies the following approaches: creating compassionate societies through improving quality of life; combating poverty, ensuring equality and developing human resources; promoting access to education; improving public health systems; creating networks of institutional collaborations to address social impacts from economic integration; ensuring sustainable management of the environment as well as collective prevention and management of environmental disasters such as pollution, smokes, coastal ecology and biodiversity; and promoting the sustainability of soil, water, forests and minerals. In addition, the ASCC aims to create an ASEAN Identity through education, cultural exchange and citizen interactions to raise awareness on shared history and culture of all member countries.

From blueprint to implementation

Based on the abovementioned visions and goals, various collaborations and activities were organised to prepare for ASEAN integration. The business sector is undertaking changes to prepare for the arrival of the common market which is both a great opportunity and challenge due to the free movement not only of raw materials, production technology, labour and capital but also of competition.

The ASEAN governments have been gearing up their preparedness through the master plan on ASEAN interconnectivity which consists of connectivity of communication technology and energy; law and agreements; and citizen-citizen connectivity, in order to increase understanding, unity and movement within ASEAN in terms of social, cultural, sports and education issues.⁵

These changes envisioned by the master plan have long been known, especially in the business sector which has already adapted itself by extending its investments to other countries to exploit tax benefits and standardising tariffs, human resources development and labour standards in preparation for the ASEAN common market and production base.

The business sector has obviously benefited from the integration. The total intra-ASEAN trade value jumped from 46.2 trillion baht in 2009 to 62.7 trillion baht in 2010.⁶ Foreign direct investments also increased from 1.13 trillion baht to 2.25 trillion baht over the same one-year period. At a local level, Thailand's border trade also expanded and will further expand after full integration.

However, although the AEC is closest to realisation than the other two pillars, the competition for position within the common market can be both opportunity and challenge. The free movement of trade, services, investment, capital, and eight categories of skilled labour can lead to a "brain drain" in certain professions, especially physicians who are more costly to produce and more likely to move into the private sector or another country.

Although there are Mutual Recognition Arrangements on the qualifications of personnel in seven professions with regulatory bodies in the source and destination countries, immigration and work conditions still are dictated by each country's laws and regulations. The regulations also require a minimum length of service in the source country. For example, engineers must have at least seven years of experience and two years of outstanding performance. Architects must have at least 10 years of experience, 5 years of continuous work and 2 years of outstanding performance. Healthcare professionals such as doctors, dentists and nurses must have at least 3 to 5 years of work experience.

The changes following the start of the AEC will also include new financial and fiscal measures such as financial liberalisation, a common currency, double taxation conventions, profit siphoning counter measures, standardisation of labour skills, conflict-resolution mechanisms which do not affect the economy and relationships between member states, tax structures and privileges, corporate tax cuts and reduction of investment promotion measures. These developments will force Thailand to rely more on consumption taxes such as VAT, excise taxes and land and property taxes.⁷

Education: foundation for the ASEAN Community

Preparing ASEAN people for integration has been an important area of focus for those in the education sector through four different areas of collaborations:

- 1) Raising awareness on ASEAN among the population, especially young people, through dissemination of information and knowledge;
- 2) Promoting ASEAN identity through education;
- 3) Producing human resources in education;
- 4) Building a network of ASEAN universities (established in 1995), now with 22 member universities⁸ including Chulalongkorn University, Mahidol University, Chiangmai University and Burapha University.

Unhesitantly, Thailand's educational sector has also put in place preparatory measures such as capacity building for students and citizens with necessary skills such as English, other ASEAN languages and Information Technology; upgrading education standards with the Thailand Qualification Framework and Thailand Vocational Framework⁹; conducting V-NET (Vocational National Education

Test) to measure academic accomplishments and improve vocational education for ASEAN-wide competitiveness.

There is also a debate on the timing of academic years at university levels. The Council of University Presidents of Thailand favoured synchronising Thai university semesters with international academic years, that is, a first semester (September–December) and second semester (January–May) from the 2013 academic year onward for international curriculums and from the 2014 academic year for all other curriculums in 27 universities.¹⁰

However, there are contrary opinions that academic years should fit Thailand's geography, climate, lifestyles and culture and that the beginning and end of semesters are not the essence of the preparedness of graduates or personnel and they should align with other education levels.¹¹ Moreover only Malaysia, Indonesia and Vietnam begin their school years in September while Singapore and Brunei begin theirs in August and Cambodia in October.¹²

On the issue of official languages in addition to English, ASEAN people who speak Malay accounts for about half of the total or 300 million people.¹³ A TDR survey of educational projects for labour capacity building found that the educational level of Thai labour ranked at No.6 (after Singapore, Malaysia, Brunei, Indonesia and Vietnam) while for English skills Thai people ranked at No.43 in Asia, lower than Singapore (6), the Philippines (16), Malaysia (23) and Indonesia (42).¹⁴

To prepare for the use of English as the ASEAN official language, the Ministry of Education has a plan to designate 2012 as the Year for English Speaking, requiring all educational institutions to use English one day per week.¹⁵

Challenges and hurdles on the path to ASEAN integration

1. ASEAN integration aims, first and foremost, to benefit the people through combating poverty, reducing social disparity and shrinking economic gaps within the region. How will this be accomplished?

2. ASEAN also plays a role in conflict resolution among member states. In the case of the EU, every member country must partially relinquish its sovereignty to the policy-making central organisation. On the other hand, ASEAN operates on the principle of non-interference and several members have disregarded for democracy and human rights. As a result, ASEAN's role to peacefully resolve conflicts within the region has been rather limited.

3. Although the AEC is the most important pillar and has made the most significant progress, criticism remains suggesting that economic integration is rushed and only focuses on common market and production base without studying the lessons learned from the European Union's problems. Despite its lofty visions, the challenge for ASEAN is to have the foresight to recognise potential problems such as those caused by the omitting of the step to establish a Customs Union as tax agreements with non-ASEAN countries may negatively affect ASEAN as a whole.

4. Liberalisation will also likely increase transnational crime. Although six kinds of regional threats are listed, including drugs, human trafficking, women and child labour problems, white-collar crime, technology crime and terrorism¹⁶, with collaborations to increase preparedness among law enforcement agencies in the region, questions remain on the readiness of such organisations in tackling transnational crime with its increasing complexity and evasiveness.

Progresses leading to ASEAN Community

Year	Place	Progress
Dec 1997	Kuala Lumpur, Malaysia	ASEAN Vision 2020
Oct 2003	Bali, Indonesia	Declaration of ASEAN Concord II or Bali Concord II to establish ASEAN Community by 2020
Nov 2004	Vientiane, Laos	Vientiane Action Program to support the drafting of ASEAN Charter
Dec 2005	Bali, Indonesia	Announcement of key principles for the ASEAN Charter. Eminent Persons Group from member countries drafted the preliminary recommendations for ASEAN Charter
Jan 2007	Cebu, the Philippines	Agreement to speed up ASEAN Community to 2015
Nov 2007	Singapore	ASEAN Charter adopted
Dec 15, 2008	Jakarta, Indonesia	ASEAN Charter officially came into force
Feb 2009	Cha-am/Hua Hin, Thailand	Cha-am/Hua Hin Declaration on the Roadmap for the ASEAN Community to establish the three pillars.

5. ASEAN Community integration also faces sensitive issues in the social, cultural and political spheres such as nationalistic jingoism which is still being inculcated into the people through education and socialisation.

Although the ASEAN Community appears a beautiful idealism, what has always been clear is the practical need to find new markets and economic growth to increase the quality of life and wealth of the population as local markets are becoming more and more saturated.

The clamoring for the ASEAN Community in the next three years will become louder and louder, drowning out the demands for preparedness or the review of this new development direction and philosophy which will affect the lives of countless people in the region and across the world.



The Thai-Cambodian border skirmishes in early 2011 led to the deaths of many soldiers and civilians. These disputes were the most violent clashes in 50 years for both countries after the International Court of Justice (ICJ) ruled on the Preah Vihear Temple case in 1962. Cambodia took the flaring conflict to the UN Security Council and ASEAN and requested the ICJ to interpret whether the 1962 verdict also included the disputed area around Preah Vihear Temple.

Thai-Cambodian Border Conflict: Tension Continues after Ceasefire

6



The Preah Vihear Temple conflict between Thailand and Cambodia, which flared up in 2008, led to a violent clash in the disputed area near Preah Vihear Temple and Phu Makhua hill between 4th to 7th February 2011 and another near Prasat Ta Meuan along the Surin border between 22nd April to 1st May 2011.

These two skirmishes in the period of three months killed nine Thai soldiers and 2 civilians. Tens of thousands of people in Sisaket province's Kantharalak District and Surin province's Panom Dongrak District were evacuated from the areas of fighting.¹ Cambodian Prime Minister Hun Sen said that his country had lost 24 soldier and civilian lives since 2008.² Even though the casualty numbers claimed by both sides are different, the loss of lives was significant .

Conflict born out of Thai politics

These skirmishes are directly caused by Thailand's own political turmoil as the People's Alliance for Democracy (PAD) and the Democrat Party have used Cambodia's application for Preah Vihear Temple's World Heritage status in 2008 as a weapon to attack the Samak government which they believed to be under the control of their enemy, ex-Prime Minister Thaksin Shinawatra.

The PAD and the Democrat Party accused the Samak government of supporting Cambodia's move that risked losing the country's territory around the temple as well as the land on which the temple is located. The accusation was potent enough to topple Noppadon Pattama from his post as Minister of Foreign Affairs but it also catapulted the Thai-Cambodian border dispute into an out-of-control open conflict.

The ICJ ruled in 1962 that "the Preah Vihear Temple is located within the territorial sovereignty of Cambodia".³ The Thai government in 1962 complied with the ruling by fencing a quarter square

kilometers area around the temple for Cambodia while retaining the remaining area as Thai territory.⁴ Cambodia continued to dispute Thailand's interpretation of the verdict and the Thai-Cambodian Joint Border Committee (JBC) was set up to negotiate border demarcation.

This stalemate lasted for half a century until the PAD and Democrat Party began to argue that the ICJ only ruled in favour of Cambodia on the physical construction of the temple and not on border demarcation. These groups claimed that any action on Cambodia's part to utilise the area outside the temple was an invasion of Thailand's territorial integrity.

When the Democrat government succeeded the Somchai government after the dissolution of the People's Power Party, it was forced to follow the pledge it took with the PAD to block Cambodia's attempt to register the temple as a World Heritage site despite knowing full well that the registration had already been completed on 7th July 2008.⁵

The Abhisit government claimed that Cambodia could not complete the management plan for Preah Vihear Temple without a border demarcation agreement with Thailand on the 4.6 square kilometers disputed area around the temple. The government sent Suwit Khunkitti, Minister of Natural Resources and Environment to attend the World Heritage Committee meeting for two consecutive years in order to block Cambodia's management plan for the temple. In the June 2011 Paris meeting, Mr. Suwit announced that Thailand would withdraw from the World Heritage Convention in protest because the committee refused to defer the consideration of Cambodia's Preah Vihear Management Plan.

Not only did the Preah Vihear Temple conflict have no chance of resolution under the Democrat government but the situation got worse when the issues around ex-Prime Minister Thaksin were

added to the mix. The relationship between the two countries was tense and the JBC operation was stalled.

Final straw

Before the last straws broke and then led to the clashes in February 2011, there was a dispute around the sign that Cambodia put in front of Wat Keo Sikha Kiri Svava in the disputed area. The sign asserted “Here! Is the place where Thai troops invaded Cambodian territory on 15th July 2008.”

Thai authorities wanted the sign removed because they claimed that “neither Thailand nor Cambodia can produce anything to claim possession of the land.”⁶ Cambodia complied but replaced it with a sign indicating “Here! Is Cambodia.”⁷ Thai authorities again asked the second sign be removed and Cambodia complied.⁸ Thailand also demanded that Cambodia remove its national flag from the vicinity of Wat Keo Sikha Kiri Svava as well as the pagoda itself. But Cambodia did not comply with these additional demands.⁹

Tension mounted and the final straw came when Thai authorities constructed a road from in front of Wat Keo Sikha Kiri Svava to Phu Makhua hill. Cambodia demanded a halt to the construction but was ignored. Gunfire then ensued.¹⁰ Thai authorities claimed that the Cambodian army opened fire on Thai soldiers after Thailand refused to stop the road construction.¹¹

After the skirmish, Cambodia took the issue to the United Nations Security Council on 14th February 2011. The Council made a resolution requesting for a permanent ceasefire and requested Indonesia as ASEAN chair to enforce the ceasefire and find bilateral mechanism to solve the problem. One week later, ASEAN held a special high-level meeting among member states attended by each country’s Minister of Foreign

Affairs and proposed to send Indonesian observers into the disputed area.

However, Thailand declined the presence of observers until it could reach a bilateral agreement with Cambodia in the General Border Committee (GBC), chaired by the Minister of Defense of each country. Cambodia, however, refused to call a GBC meeting insisting that the Preah Vihear Temple dispute could no longer be resolved with any bilateral mechanism due to Thailand’s continued obstruction of the process.

Although the JBC was responsible for border demarcation, the Thai government had been stalling the process by putting JBC meeting minutes up for the approval of the parliament without scheduling them in the parliamentary session agenda. Even towards the end of 2010 when the matter was finally on the agenda, it was again stalled by the PAD protest in front of the parliament demanding the parliament not to approve the minutes.

To break the deadlock, the Abhisit government set up a committee to resolve the issue within 30 days but the term was extended. Finally, a Democrat Party member requested the Constitution Court to rule whether the JBC meeting minutes needed approval of the Parliament according to Section 190 (2) of the Constitution or not. The Constitution Court however rejected the request.¹² The government interpreted this ruling to mean that Parliament approval was unnecessary and then sent Thai representatives to the Joint Border Committee meeting in Bogor, Indonesia in April 2011.

The meeting, however, did not lead to any progress as it was only a procedural formality to keep the possibility of outside observers on the table.

As the diplomatic tug-of-war went on, another clash occurred near Prasat Ta Meuan which lasted longer than other clashes and caused a higher number of casualties.

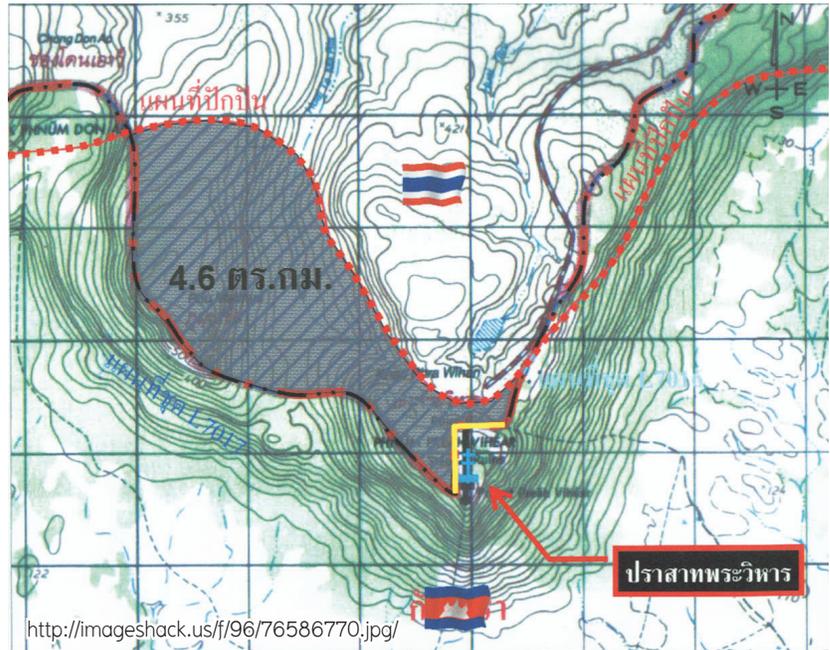
ICJ once more

As bilateral resolution seemed impossible, Cambodia requested the ICJ to interpret the 1962 ruling and issue an injunction for Thailand to pull out all troops, stop all military activities in the disputed areas and refrain from all actions which may violate Cambodia's sovereignty over the area.¹³

The ICJ on 18th July 2011 ordered both countries to pull out all troops from the 17 square kilometers court-defined demilitarised zone around the Temple, prohibited Thailand from any action which may disrupt Cambodia's non-military activities in the area and ordered the two countries to facilitate the presence of ASEAN observers in the area and refrain from any actions which may deepen the conflict.¹⁴

The court order came when Thailand was undergoing another political transition from the conservative Democrat-led government to the Pheu Thai-led government, headed by Yingluck Shinawatra who was believed to have better ties with Phnom Penh. The cross-border tension seemed to immediately ease once the Cambodian leader knew that Pheu Thai Party, under the support of ex-Prime Minister Thaksin, had won the July 2011 general elections.

The easing atmosphere also helped two Thai prisoners sentenced for espionage, Weera



Somkwamkit and Ratre Pipatpaiboon, to receive better treatment. However, these two Thais who were arrested while inspecting the disputed area in Sa Kaew province's Nong Chan village in December 2010 have yet to receive a pardon or sentence reduction.¹⁵

Future approach for the unresolved conflict

The Thai-Cambodian border conflict did not end with the Democrat Party's election defeat. The new government still has the international obligation to comply with ICJ order to pull out all troops from the designated demilitarised zone, invite Indonesian observers and end all actions which may obstruct Cambodia's management of Preah Vihear Temple.

The ICJ has yet to rule on Cambodia's request to interpret the 1962 verdict but the court is now in the process of receiving documents and arguments from both sides. The Thai government has few

options apart from presenting its argument based on the evidence and legal approach laid down since 1962. It's expected that the ICJ will make a ruling towards the end of 2012 which Thailand will be obliged to comply with. This ruling will help end the border dispute or at least lay down a clearer approach for a permanent resolution to the conflict.

Public law expert Professor Bowonsak Uwanoo has offered lessons to be learned from this issue since 2008.¹⁶ He suggested that:

(1) Whatever is spoken or done by those who officially represent the Thai State will inevitably affect the country's obligations. Such individuals should therefore think about consequences of their words before speaking. When there is a dispute, the ICJ will take all of these statements and behaviors into consideration as a reflection of the intention of each party.

(2) The government should use the Parliament to shore up its legitimacy and leverage.

(3) The Ministry of Foreign Affairs, especially its Department of Treaties and Legal Affairs, must "do more homework." It should produce a strong team of researchers who are ready to dispense more knowledge rather than just opinions.

(4) Those who adjudicate on disputes, whether the Constitution Court or the Administrative Court, must rule based on proper ruling procedures and not according to the public sentiment. Otherwise, justice and the country's international reputation will be affected.

Border conflicts such as the Thai–Cambodian dispute over the Preah Vihear Temple are results of the establishment of the nation–states which require clear definition of peoples and border demarcation while ignoring the cross–border social and cultural affinities between peoples that have been forged long before the countries were born.

The Thai border, more than 4,800 kilometers in length, has often turned Thai people into self–obsessed individuals and confrontation between 'us' and 'them.' This situation is not unlike what happens in many countries around the world such as the dispute on Splatly Islands between China and Japan, the land and water dispute between Cameroon and Nigeria and the dispute on continental shelf between Greece and Turkey.

If the heart of the Thai–Cambodian dispute is the registration of Preah Vihear Temple as a World Heritage, Thailand should deal with this issue by freeing itself from internal fights and using positive visions, perhaps in the form of a trans–boundary World Heritage site like in the case of Iguazu falls between Argentina and Brazil, so as to prevent any injury to national pride. The line which used to separate people into opposite sides in a war–waiting–to happen can then be turned into a peaceful union of the people on both sides who have to co–exist for a long time to come.



Statistics shows that Thailand ranked the world's number 5 in terms of the use of chemicals in agriculture. But when measured against the total land area, Thailand imported more chemicals than any other country in the world. The demand of the Network for the Surveillance of Chemical Overuse in Agriculture, therefore, to revoke the licenses of four highly toxic pesticides is only the tip of the iceberg. Dangerous chemical use in agriculture is now at crisis level, enmeshed within the significant and complex problems which have endangered the lives of farmers, consumers and the environment for more than 50 years in Thailand.

Revoking Licenses for Four Toxic Chemicals

Thailand's self-imposed ban on vegetable exports

In January 2011, the Ministry of Agriculture and Cooperatives announced a temporary moratorium on exports of 16 vegetables to European markets. This was a self-imposed ban to pre-empt an import ban by the European Union due to a higher-than-standard amount of prohibited pesticides. In Early July 2011, several kinds of vegetable imports from Thailand were indefinitely banned after detection of 15 prohibited chemicals. Six of these are chemicals prohibited in the United States, the European Union and many countries around the world.

Among these chemicals, four are still widely sold and used in Thailand: carbofuran, methomyl, dichrotophos and EPN. These chemicals have a combined import quantity of almost 7 million kilograms and

import values of approximately 550 million baht in 2010.

These events from the EU relating to Thai vegetable imports rattled relevant government agencies and vegetable exporters while the Network for the Surveillance of Chemical Overuse in Agriculture wondered out loud why government agencies were just waking up to the level of toxic residues in export vegetables when vegetables in domestic markets were many times more contaminated.



Table 1: Use and Toxicity of Four Dangerous Pesticides

	Carbofuran	Methomyl	Dichrotophos	EPN
Import quantity (kg) in 2010	5,301,161	1,550,200	356,908	144,001
Trade names in Thai market	Furadan, Curatare, Coccodi 3G, Lemon 3G	Lannate, Nudrin, Methomex, Sadist, Thontho	Krachao 330, Microwave 24, Bidrin, Carbicron	EPN, Coumaphos
Use	In the production of rice, watermelons, corns, coconuts, soy beans, string beans, cucumbers, coffee and oranges to eliminate a broad spectrum of insects including stem borers, maggots, mealy bugs and brown plant hoppers,	To eliminate many kinds of chewing insects, sucking insects, aphises and caterpillars in the production of tangerines, grapes, longans, strawberries, cabbages, onions and tomatoes	To eliminate sucking insects, boring insects, chewing insects in the production of rice, coffee, string beans, radishes, sugar canes, kales, oranges, soy beans and peanuts	As concentrate to mix with other chemicals in the production of rice, corns, gourds, fruits, flowers and ornamental plants to eliminate cotton bollworms, rice stem borers and rice hispas
Toxicity	Vomiting, loss of balance, blurry vision, severely carcinogenic, abnormal division of liver cells, oncogenic, mutation, sperm deaths, destroys enzymes of the meninges	Nausea, vomiting, diarrhea, seizure, cardiotoxicity, decreased male hormones, destroys epididymis and vas deferens, degrades DNA, abnormal chromosomes, spleen toxicity	Gene toxicity, mutation, oncogenic, carcinogenic, renal toxicity, chronic toxicity to nervous system, destroys central nervous system, needle-pricking pains, peripheral fatigues	Diarrhea, chest congestion, blurry vision, loss of balance, coughing, pneumonia, apnea, destroys nervous system, abnormal bone marrow, decreased brain mass
Banning countries	EU, USA	UK, Turkey, Germany, Finland, Singapore, Malaysia, India (some formulas)	India, Pakistan, Singapore, EU, Canada, Australia, Malaysia	USA, EU, Australia, Canada, Malaysia, Singapore, Myanmar, New Zealand, Vietnam, India

Source: Information Section of BioThai Foundation, www.biothai.net/node/9890 [accessed on 4th Feb, 2012].

The Department of Agriculture is aware of these four hazardous pesticides as they are among the 11 chemicals in the Watch List as Category 1A (extreme hazard) and Category 1B (serious hazard) in the WHO classification. However, these chemicals are still being sold, used and imported in the country and farmers can buy them in the markets under various trade names.

Shameful statistics

Every past government has aimed to make Thailand “the world’s kitchen” but the policy and practice on chemical use in agriculture appears to tell a completely different story.

– According to the World Bank’s 2011 data, Thailand’s heavy use of chemicals in agriculture at 0.86 kilograms per hectare ranked as the world’s 5th highest.¹

– An FAO report stated that Thailand was the world’s number 48 by farming areas but imported more chemicals than any country at 117 million kilograms or 18 billion baht in 2010.²

– Out of the vegetable imports from 70 countries which the European Union randomly tested for chemical contamination in July 2011, vegetables from Thailand were the most contaminated with more positive tests than any other country, followed by Turkey and India.^{3,4}

– Thailand also licenses an astonishing number of chemicals for agriculture. 27,126 items may very well rank amongst the highest number in the world compared to China’s 20,000, Indonesia’s 1,158 and Vietnam’s 3,423.⁵ The bewildering array of trade names is one trick which allows companies to repeatedly sell the same chemical formulas to farmers under different names.

Thai farmers’ substance abuse

From the first National Economic and Social Development Plan (1961–1966), there have been systematic and extensive efforts by the government to turn agricultural practices from production for household consumption to production for the market and promote the use of all kinds of chemicals such as inorganic fertilisers, insecticides and herbicides to prevent and treat diseases. Thailand’s farmlands quickly became evidence of a full-blown “chemo-culture.”

Past statistics clearly show that Thai farmers have increasing risks from chemical use, especially pesticides. The Ministry of Public Health stated that 6 million farmers are now at unsafe risk levels. The Health Systems Research Institute estimated that

every year 200,000 to 400,000 patients fell ill from chemical poisoning which leads to chronic diseases such as cancer, diabetes, endocrinal and other diseases. This estimate is in line with the study by the Food and Drug Administration and Department of Medical Sciences which found contamination levels in organic and fresh vegetables to be 63.8% and 67.4% respectively.⁶

There are more than 100 large companies trading inorganic fertilisers, pesticides and seeds, more than 500 wholesalers and more than 4,500 retailers. Most belong to the network of six transnational corporations with over 70% share of the global farm chemical market. These include Bayer (Germany) Syngenta (Switzerland), BASF (Germany), Dow Agrosience (US), Monsanto (US) and Dupont (US).⁷

These transnational corporations, with combined global sales of 3 to 6 billion dollars per year, do not pay tax in Thailand because the government has a policy to allow farmers cheap access to fertilisers and pesticides. There are also signs that farmers use this issue as a tax evasion measure by declaring higher expenses than actual costs.⁸

Witoon Lianchamroon, director of BioThai Foundation, urged Thai society to demand taxation on these transnationals not only in terms of income tax but also with import tax in the same ways that industrial chemicals are taxed. He also advised the Ministry of Commerce to control prices at reasonable levels.

Similarly, Dr.Pattapong Kessomboon from Khon Kaen University, an expert on chemical hazards in agriculture, recommended import taxes as in Denmark which employed annually increasing tax rates to discourage chemical use. Similar to those on tobacco and alcohol, this ‘sin tax’ could contribute to a fund for the treatment of those who suffer from toxic chemical use in agriculture.⁹

New regulations: another paper tiger?

Twenty years after the Hazardous Substance Act BE 2535 came into force dangerous chemicals are still flooding Thailand, combined with poor and excessive use. The government has been criticised as lax and negligent in enforcing the law as a result of possible conflict of interests. This Act was recently amended in 2008 with new standards.¹⁰

(1) From 22nd August 2011 onwards, the licenses for more than 20,000 farm chemicals will be revoked to pave the way for a new and more efficient licensing system. Vendors can continue to sell chemicals in stock but no new imports are allowed;

(2) For quality control importers, manufacturers and sellers of farm chemicals must have the Good Laboratory Practices (GLP) certifications from the 30 or so world-class laboratories and not from any laboratory as before;

(3) Each chemical can apply for only three trade names and not an unlimited number as before (n.b. certain chemicals have 500 trade names to confuse farmers).

(4) Approval for new licenses will be more stringent according to the 9 surveillance criteria as follows: 1) toxicity report in laboratory animals which may harm humans such as carcinogenicity, mutagenicity, and teratogenicity; 2) toxic residue in the environment and food chain; 3) biodegradability; 4) high levels of acute toxicity; 5) toxic residue in agricultural products; 6) toxic contamination in production and preservation; 7) high toxicity to beneficial plants or animals such as honey bees and silk worms; 8) chemicals prohibited in other countries; and 9) Effects in pest increase.

Although these regulations and criteria are rigorous and efficient, they may be just a paper

tiger in effect. Networks of farmers and allied organisations noticed that during the first three months of 2011, these four dangerous chemicals continued to be imported in large quantities. It may be that importers got “inside information” that the Department of Agriculture would allow a two-year’s grace period or would soon re-license these four chemicals.¹¹

Confrontation

Around the 22nd August 2011 deadline became a testy time of confrontation between those who supported and those who opposed the new measures. Both sides tried to gain the upper hand with information, demands and even threats through the media.

Those who opposed re-licensing included network of farmers, civil society, academics, NGOs, consumers’ groups and green groups who met with the director-general of the Department of Agriculture, held a seminar on “The Great Danger of Toxic Chemicals” to raise public awareness and disseminate information, submitted an open letter to the Prime Minister and Minister of Agriculture and Cooperatives and held a protest in front of the Ministry of Agriculture and Cooperatives on 29th August. The demands of the farmers’ networks and allied organisations were:

(1) An immediate import ban and revoking of the licenses of at least four kinds of pesticides, namely carbofuran, methomyl, dichrotophos and EPN;

(2) To ensure transparency and public participation, the Department of Agriculture should publicly disclose the information on license applications, laboratory data on effectiveness, toxicity in short-term, long-term and residues and the name lists of members in relevant committees, sub-committees and working groups as well as their decisions;

(3) Regulation of advertising and marketing of farm chemicals should be undertaken by a committee represented by farmers' networks, the Academic Network for the Surveillance of Chemical Overuse in Agriculture and consumers' groups.

On the other hand, the opposing arguments demanded a two-year grace period and was led by the Thai Crop Protection Association¹² whose members are big-name importers with import values between 100 to 6,000 million baht and the "Association of Thais in Agribusiness". They contested the new measures on two fronts:¹³

a) *Time constraint*—it was impossible to apply for a new license before the deadline because of the short notice given, ambiguity around criteria and licensing procedures and the Department of Agriculture's unpreparedness;

b) *Expenses*—toxicological data from GLP laboratories would take between 6 months to 2 years to obtain and cost no less than 1 to 1.5 million baht per item which was a burden on entrepreneurs

Claims immediately rebutted

These demands and 'threats' were immediately rebutted by opponents who published material stating that, as the law came into force on 25th February 2008 the deadline allowed 3.5 years for re-licensing which was more than sufficient. The expense claim was greatly overblown, it was argued, as the same tests are also required in Vietnam and costs only around 3,000 to 5,000 US dollars (100,000 to 150,000 baht) per item.

Finally, the claim that the ban would cause shortages, affect the control of brown plant hoppers and cut production by half was also refuted. Instead, indiscriminate use of these chemicals was claimed to have killed off beneficial insects while the brown plant hoppers had become resistant. Conclusions from an international conference held in Singapore that the insect "plagues" in Asia were caused by chemical overuse were also cited at this time.

Poisoning of the land

According to 10th September 2011 data, the Department of Agriculture was preparing a recommendation to ban these four toxic chemicals by the end of 2011 to the Committee on Hazardous Substances. The Department was in the process of collecting data on impact, toxic residue in agricultural products, the environment and food chain as well as hazards to human health. Another seven chemicals were also put on the watch list. If found to have similar hazards, their import ban would be recommended also.¹⁴

After more than 50 years of turning Thailand's "fields of gold" into a "chemo culture", problems have mounted involving production methods, local lives, national economy, transnational interests and domestic capitalists with their web of connection with political power at local and national levels. The question of whether Thai farmers should continue to depend on chemical-intensive farming is a matter of life and death on a national scale.

BioThai Foundation researcher Rapichan Phurisamban said "If we choose to remain in the export-oriented agro-business model, monoculture and use of chemicals like herbicides, insecticides and fertilisers are inevitable because it's a fragile system which has to keep up with export cycles and it's prone to pests. Organic farming, on the other hand, doesn't need chemicals. It depends on natural enemies to control pests and maintain balance. Organic farming is therefore an option which is sustainable and healthy to human. It's not impossible"¹⁵

The choice, however, may not be determined by the people. The battle for resources as a result of intensifying natural disasters may, in the end, do the choosing for people instead.



For 99 years, Thai traditional doctors have been forbidden from treating patients given there was a legal provision to punish those who resisted. In 2012, the first Thai traditional hospital will open in Sakon Nakhon Province, to be followed by nine other pilot hospitals in nine provinces with the aim to set national standards in providing treatments, research and training. This is a dream project to revive traditional wisdom to serve as an alternative option for the people and the survival for the country.

Time for the First Thai Traditional Medicine Hospitals

8

From death to revival

Thai traditional medicine has long been a part of Thailand's healing culture. It has gone through an age of blossoming in earlier times¹ as well as an age of withering when Westerners brought their goods, medicine, values, culture and cannon-mounted caravels to Siam just about a hundred years ago. In particular, the 1913 law "to abolish Thai traditional medicine and prohibit traditional doctors from treating patients"², followed by other punitive laws, made Thai traditional medicine almost extinct. Traditional medicine textbooks were lost, burned in fire or stole to be sold to other countries.



In 1977 the WHO meeting in Russia recommended the use of herbal remedy and folk wisdom. This became the beginning of primary healthcare in Thailand. In 1982, Professor Dr. Uai Ketsing founded a foundation to revive Thai traditional medicine named Ayurveda College (Chiwaka Komarapaj) to produce applied traditional doctors with a 3-year curriculum. For this reason, he is known as the “Father of Applied Traditional Thai Medicine.”

From then on, Thai traditional medicine slowly regained its life. The 7th and 8th National Economic and Social Development Plans required health promotion and revival of traditional medicine, herbs and massage to accompany modern medicine. Thai traditional pharmacology and medicine were given support with no less than 2% of national health budgets³ and have seen considerable progresses and structuralisation in the past decade. The “Center for Thai Traditional Medicine and Pharmacology” in 1989 has evolved into “Institute of Thai Traditional Medicine” in 1993 and the “Department of Thai Traditional Medicine and Alternative Medicine” in 2002.

Plethora of support measures

In order to integrate Thai traditional medicine into the national health system, it has received support as follow:

(1) The number of Thai herbs which can be dispensed in general hospitals in the 2010 National List of Essential Medicines increased to 71. Civil servants and the general population have these costs covered with their health security entitlements.⁴

(2) “Herb protection plan in reserved areas 2012–2014” has been issued to protect the source locations of important herbs in 7 national parks.⁵

(3) More than 50,000 folk doctors with experience and community confidence received certification (not a medical license) to ensure continuity of their knowledge and prevent knowledge theft and exploitation by other countries.⁶

(4) Thai traditional medicine and alternative medicine have been promoted in 10, 851 hospitals throughout the Ministry of Public Health system especially for health promotion, disease prevention, basic rehabilitation and treatment of chronic patients, the elderly and the disabled and the use of 71 herbs in National List of Essential Medicines to replace and reduce the use of Western medicine saving the country more than 5 billion baht per year.⁷

(5) The latest recommendation in 2011 is to set up the “The Institute of Thai Traditional Medicine” run by a committee with representation from the government and private sectors, and the “Herb Production Central Plant” to raise the standard of small-scale herb producers to compete with China and India, the world’s top two herb producers.⁸

These support measures are steps in the right direction to revive Thai traditional medicine which has long been shunned and removed from daily life. Another step which may be considered a ‘new dawn’ to further enhance status of traditional medicine for wide public recognition is the establishment of the Traditional Thai Medicine Hospitals.

A New dawn

During the past decade, Thai traditional medicine has gained increased attention with the paradigm shift towards more self-reliance after the

economic crisis. As Thailand's national health expenses increased significantly, especially for drugs, imported drugs that account for two third of the expenses at more than 130 billion baht during 2009–2011⁹ began to be questioned for their quality, side effects, high prices due to patents¹⁰ and marketing tricks to exploit consumers¹¹. The increased health consciousness of the population also helped push developments.

But Thai traditional medicine still makes up an insignificant part of an average hospital's operation. Herbal use accounts for only 1.8% of all drugs.¹²

As a result, an initiative emerged to set up hospitals to provide a full range of Thai traditional medicines. These places will also allow an exchange of knowledge among traditional doctors, students and academics on how to improve effectiveness and a research center to concretely promote and conserve Thai traditional remedies and herbs. A prototype is the 30-bed Thai traditional hospital in Sakon Nakhon Province's Waritchaphoom District. In addition to the patients' ward, there are also areas for growing herbs. The ground-breaking ceremony to begin construction took place on 27th March 2010 and the construction is expected to be complete in 2012.

This hospital is run by the Committee on Local Wisdom for Health appointed by the National Health Committee. Article 60 of the Constitution of National Health System BE 2552, under the National Health Act BE 2550, envisions a prototype Thai Traditional Medicine Hospital with standard in services, research and training in each region.¹³ This Sakon Nakhon hospital is the prototype for the Northeastern Region.

This hospital is interesting because it was not born out of government policy, operation or budget but from the traditional "community and temple and school" collaboration. Sakon Nakhon

has all the aspiration and potentials, with 1,368 folk doctors, 43 academics in the field, 108 licensed practitioners, and natural endowment of herb diversity in the HRH Princess Sirindhorn-initiated Plant Genetic Conservation project as well as in Phu Pan mountain.¹⁴

Out of the 98 million baht construction costs, 23 million came from the donation of venerable Luang Pu Fab Subhatto, abbot of Dong Wai Forest Temple. Built on an 58-rai area of Raja Mangala Institute of Technology, Sakon Nakhon Campus, it will be used to train students in Thai traditional medicine Studies and later registered as a foundation.

Nine other pilot hospitals

With the advance made by Sakon Nakhon's civil society, the Ministry of Public Health upped its game by selecting nine other hospitals to become full-scale Thai traditional medicine hospitals. These hospitals will be tasked with providing treatments for all patients regardless of health security entitlements with a blend of Thai traditional medicine and modern medicine depending on the patient's choice using 209 single-herb as well as multiple-herb regimens in and outside the National List of Essential Medicines.

These nine hospitals are Chantaburi's Phrapokklao Hospital, Suphanburi's U-Thong Hospital, Sa Kaew's Wang Nam Yen Hospital and Wattana Nakhon Hospital, Sisaket's Khun Harn Hospital, Phrae's Somdet Yupparat Hospital, Chiang Rai's Thoeng Hospital, Suratthani's Tha Rong Chang Hospital and Bangkok's Institute for Thai Traditional Medicine. Each has a development budget of 1 million baht and 18 additional staff members who are Thai traditional doctors, applied traditional doctors, pharmacologists and professional nurses.

These projects are to be evaluated periodically so as to ensure improvement and if well-responded to by the public they will be developed into exclusively Thai traditional medicine centers of excellence to be replicated throughout the country.¹⁵

Thai traditional medicine seems to be enjoying increasing popularity as the value of herbs used in Ministry of Public Health facilities increased to 391 million baht in 2009. Sixteen tertiary-level educational institutions¹⁶ offer courses on Thai traditional medicine and applied Thai traditional medicine whilst several public and private hospitals also offer Thai traditional medicine as an option.

Not a rosy path

Although these developments appear positive, there are concerns about problems and challenges which may undermine further growth. Several of these concerns are considerable challenges to be overcome.

(1) *Theft of knowledge and materials.*

Herbs and local wisdom are important resources to be protected against theft by other countries, especially those with technical superiorities which can use intellectual property rights to claim these for themselves. However, there's little recognition of the importance of these resources and the Thai authorities have no protection mechanisms for these national assets. There are already lessons from the cases of jasmine rice, *Croton sublyratus* Kurz, *Pueraria* species, mangosteen, and most recently, Thai yoga.¹⁷

Kanchana Deeviset, director of the Office for the Protection of Thai Traditional Medicine Wisdom and Herbs at the Department for Development of Thai Traditional and Alternative Medicine in the Ministry of Public Health stated that Thai traditional knowledge faces a risk of being patented by other countries so there was a need for vigilance

on thirteen herbs such as mangosteen, *Croton sublyratus* Kurz, *Curcuma Longa* and two branches of Thai traditional knowledge, namely Thai traditional massage and Thai yoga. Despite the Protection and Promotion of Traditional Thai Medicine Wisdom Act B.E. 2542 there are no relevant laws or ministerial regulations to register intellectual properties and protect herbs and Thai traditional knowledge¹⁸ and the Department of Intellectual Property only demands that relevant agencies compile lists of Thailand's local knowledge and make a database to facilitate their protection.¹⁹

(2) *Popular beliefs* Thai traditional medicine needs to gain wider public trust as a legitimate alternative to modern medicine especially when the latter fails to deal sufficiently with newly emerged cross-border diseases such as SARS, avian influenza, and 2009 flu. Enhancing treatment effectiveness of herbs and gaining public trust are important steps.

(3) *Doctors' biases* All Thai doctors have been educated in modern medicine with completely different notions for diagnosis, etiology and treatment from those of Thai traditional medicine. These doctors are therefore, likely to espouse the biases of modern medicine in the belief that it can be scientifically proven, is better and more genuine and accurate. The doctors are likely to see alternative medicine as just 'folk beliefs' or only as 'augmentative treatments.'

Modern Thai doctors also have little herbal knowledge and don't believe that traditional medicine can effectively cure diseases. As most doctors don't have the expertise, it's no surprise that they are unlikely to prescribe such cures," explained Dr.Somsak Lolekha, President of the Medical Council.²⁰

Dr.Somma Thongprasert, a doctor and herb expert, said that "Even if the public is more open to Thai traditional medicine, there's still rejection



and resistance of Thai traditional medicine and other alternative medicines among doctors in hospitals.”

“When you request herbal treatments at the hospital, the doctor may scold you. Some of my breast cancer patients go to the hospital and the doctor refused to give them an ultrasound because they had been treated by Thai traditional doctors. There’s a considerable resistance. There’s a period when the Ministry of Public Health ordered every hospital to grow herbs. Now they are all gone. It’s meaningless anyway, as the doctors don’t prescribe them,” added Dr.Sommai.²¹

Alternative for survival

Establishing official Thai traditional medicine hospitals is an important step to create more treatment options for the Thai population. The country’s survival may be promoted through reducing dependency on Multinational Pharmacy Firms and preventing possible Western medicine shortages in the future. During the Second World War, modern medicine had to be made from local herbs due to shortages.

Most importantly, the establishment of Thai traditional medicine hospitals and enhancement of Thai traditional medicine will help eliminate biases and open minds for alternative medicines which were once part of human civilisations.



When the National Identity Card Act BE 2011 (Second amendment) came into force on 10th July 2011 another task was added to the life of Thai parents or guardians. They now must take their children aged 7 to 14 (approximately 8 million children) to the municipality or district offices to make National ID cards. There have been both positive and negative feedbacks from adults while the children seem to be excited and happy.

Child ID Cards and Unanswered Questions

9

The origin of the child ID cards traces back to the Thaksin Government's information Technology project called "Citizen E-Service 2003" proposed by the Committee on the Integration and Reform of the National Registration System and approved by the Cabinet on 14th January 2003. The cabinet laid down an implementation framework that:

Every card issuing government agency must use the 13-digit number assigned to each citizen as Ministry of Interior Identification Number. All future National ID cards will be magnetic cards. Each person may have several cards or these can be combined into one Smart Card. The implementation can be done in stages or among target groups with consideration on technological cost-effectiveness and expense burden.¹



First idea: smart card from birth

Five months later, a Cabinet meeting decided on the Smart Card idea because of costs. It was considered that if each agency issues its own cards, they will be redundant and wasteful on the national budget. In addition, it was considered

inconvenient for people carrying the cards who will each have a national ID card, a Universal Healthcare Card and perhaps also a driving license.

The Cabinet approved the smart card project on 3rd June 2003 laying down the implementation framework that the Ministry of Interior would first issue the National ID cards as the “main card” and update Civil Registration population data. Afterwards, other government agencies such as the Ministry of Public Health, Ministry of Labour, and the Ministry of Agriculture and Cooperatives could link up with the system and input more information onto the National ID cards.

The National ID cards are required to have a durability of more than 6 years to cut costs on re-issuing. The Ministry of Interior amended relevant laws and regulations to require all citizens to have National ID cards from birth while waiting for the Ministry of Science and Technology to supply microchip cards. In the meantime, government agencies could issue other cards as necessary in the same manner as before as temporary cards.

Simple arithmetic’s

While the National Identity Card Act (Second amendment) was being considered in the Parliament, the age at which to issue ID cards was a frequent matter of debate. The idea of a Smart Card from Birth went through another revision when the Samak government submitted the draft National Identity Card Act to the Legislative Assembly requiring children to have National ID cards at one year of age instead.

Venus Srisuk, from Bureau of Registration Administration, Department of Provincial Administration at the Ministry of Interior explained that baby faces change constantly and it was

difficult to take their photographs and scan their fingerprints so the age at which National ID cards were required was changed to “one year from birth or within 60 days after obtaining Thai nationality.”²

This rationale was scrutinised again in the Legislative Assembly with counter arguments that the photographs can be taken of the baby with or held by a parent. In the end, however, the conclusion was determined by two factors:

- *First*, the draft law has also increased the required durability of the cards from 6 to 8 years following the requirement on budgetary cost-effectiveness.

- *Second*, the 1983 National Identity Card Act and first amendment in 1999 requires all Thais to change their titles to “Mr.” and “Miss”³ and have National ID cards at 15 years old.

Therefore, in order to conform with the transitional age from childhood to adulthood as well as the required durability of the card from 6 to 8 years (Section 6b of the National Identity Card Act Third amendment in 2011)⁴, the age at which all Thais are required to have National ID cards was changed to 15 years minus 8 years, or at 7 years old (Section 5 of the National Identity Card Act Third amendment in 2011)⁵

Diverse opinions

Pros

Registration officials at the Ministry of Interior’s Department of Provincial Administration considered the children ID cards as useful for children’s self-identification, prevention of identity theft by non-Thais and facilitation of children’s access to public services and other benefits.

Nirun Kalayanamit, the Deputy Director-general of the Ministry of Interior's Department of Provincial Administration said "The advantages of having National ID cards is the ease in self-identification without having to carry house registration or birth certificate, facilitating access to government services and prevention of identity theft by non-Thais. Their parents now no longer need to show other documents. The downside is that children may lose the cards and parents may need to take them to make new ones multiple times."⁶

Meanwhile, children of the required age across the country were excited with their National ID cards. Seven-year-old Ekasit Songsri-in, a Grade 2 student of Bangkok's Phongsuwan-wittaya School⁷, said "I have a student card but I also want National ID cards like adults. When I have it, I will ask my mother to keep it because I don't want to lose it." His mother also saw the advantages of the card. She said "It's convenient when accessing public services. The birth certificate is no longer needed. We can use his national ID card when travelling by plane. In case he gets lost, people can also deliver him home easily with the names and addresses on the card."

Ethnic children in the Northern area were also enthusiastic about the cards. In Bua District's Pa Klang sub-district, the card-issuing authority was busy with many children of Hmong, Mian and Lua ethnicities who came to make their National ID cards. Many were dressed in their ethnic costume for their photographs.⁸

Associate Professor Dr.Pantip Kanchanachitra Saisoonthorn, an expert on personal legal status and Thammasat University law lecturer said that National ID cards assert the human rights of the children showing that they are in Civil Registration systems and make population data more accurate.

Especially now that there is more government welfare, children can more easily self-identify as a Thai national and going to the hospital should become easier. Another advantage of the cards is that it makes identity theft more difficult.⁹

Cons

Child development organisations are largely opposed to the children National ID cards. For example, Montri Sintawichai or "Khru Yoon", Secretary General of the Child Protection Foundation said, "This is an abuse of power without careful considerations of the impacts on certain groups of children such as those with disabilities, orphans or homeless children. The government in theory must also take care of these children. Existing laws are already appropriate to require those at 15 years old to get a National ID cards because they have reached a level of maturity."¹⁰

Similarly, Wallop Tangkananurak, Director of the Children's Foundation, said the cards are unnecessary because "...When small children die, criminals will use their identities for other non-Thai children. Is it worth it? What benefits are there? The old requirement was already good enough. Who will be carrying these new cards, if not the parents? Is the information on the cards accessible online? We already have the online system. The 13-digit ID numbers are already on the birth certificate for accessing hospital services. There doesn't seem to be additional benefits, just a waste of resources. I think it's not worth the expenses."¹¹

Associate Professor Dr.Kovit Phuang-ngam from Thammasat University's Faculty of Social Administration similarly said "It's not necessary for seven-year-olds because in the end it's the parents and guardians who conduct official transactions.

The children cannot do it by themselves or even take care of the cards. I think the existing law is sufficient. I don't know if the government has other motives. The bidding for electronic cards for almost 10 million kids age 7–14 is worth millions of baht.”¹²

Importantly is the worry about identity theft. Governors of border provinces are concerned that foreign children will be able to pose as Thai nationals with the help of the ID cards as has been evidenced in the past when Rohingya refugees presented themselves as foreign-born Thais.¹³

Unanswered questions

In addition, there have been suggestions that child ID cards may also pose risks to privacy as personal information contained in the cards can be easily accessed and abused.

The original idea for the child ID cards was part of the Thaksin's government's initiative to reduce government expenses and allow everyone the ability to self-identify and access public services with one Smart card rather than multiple cards.

The existing gap was between related to ID cards at birth and up until fifteen years old. At a baby's birth, the hospital will issue a birth record

(Tor.Ror.1/1) for the parents to take to the Civil Registration authority for the issuance of birth certificate. The documents used for child identification are the birth certificate and/or House Registration (or in some cases only the birth record.)

However, as all these three documents do not have photographs they are vulnerable to identity theft and difficult for self-identification usage. Often witnesses are required. In addition, many children do not have birth certificates because their parents never reported their births. The proposal for ID cards from birth with pictures of parents holding children is an option to facilitate child identification.

This “ID at age 7” idea not only attracted many criticisms and questions about appropriateness, advantages and disadvantages but by no means did the proposal address the original intention to reduce government expenses and it also failed to address the identification gap from birth to 7 years old.

All that was accomplished was a fleeting excitement among children across the country.



BOI and Investment Promotion Policy to Strengthen Healthcare System

10

The policy to promote Thailand as Asia's medical hub has been criticised as detrimental to the country's healthcare system because resources have been drained to serve foreigners. In 2011, the Board of Investment of Thailand (BOI) with collaboration of the National Health Committee revised its investment promotion policy on healthcare to build capacity and ensure justice in Thailand's healthcare system.

Medical hub policy part deux

During the past decade, the promotion of Thailand as a medical hub to attract foreigners to Thailand's healthcare services has been a policy pursued by all governments.

After the success of the first five-year strategic plan to develop Thailand into Asia's medical hub (2004–2008) which brought 227,616.43 million baht into the country, the Ministry of Public Health laid down a policy to draft the 2nd plan (2010–2014) to turn Thailand into a world-class medical hub.



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This second strategic plan aimed to bring in 402,906 million baht in the five year's period. The main income would come from medical treatments (281,945 million baht) followed by health promotion/spa (78,225 million), health products and Thai herbs (78,471 million) and Thai traditional medicine and alternative medicine (2,822 million).¹

The Department of Health Service Support is in charge of implementing the Medical Hub policy with the focus on 4 specific areas as follows: 1) A Center of excellence for specialised medicine with high-quality services and efficiency; 2) Promotion of healthcare businesses such as spas and health massage; 3) Promotion of Thai traditional medicine and alternative medicine as Thailand's unique culture and traditional knowledge; and 4) Supports for Thai herbs and related products.²

At the same time, BOI also responded to the Ministry of Public Health policy by hiring the Economics and Finance Economy³ in August 2010 to study investments in health-related enterprises as a guideline for its investment promotion policies. It was expected to complete the definition of businesses types and investment benefits by the end of 2010.⁴

On 24th November 2010, Atchaka Sibunruang, BOI Secretary General, said that BOI would revise its investment promotion policies in the healthcare industry to align with the national strategy to concretely promote the healthcare industry. These measures included the expansion from investment promotion in "hospital enterprises" to "medical care-related enterprises" for more comprehensiveness and lowering the number of required minimum in-patient beds from 50 to 30 in accordance with the Ministry of Public Health's criteria.

In addition, rehabilitative medicine enterprises, specialised medical centers, medical technological service centers and healthcare logistics were promoted with tax exemptions from five to eight years depending on location as well as tax-free investment and exemption of import taxes for machinery throughout the project's duration.

Interestingly, BOI also laid down new investment promotion measures to improve efficiency of existing hospitals by elevating their technological standards through the import of modern machineries. This measure applied to all existing hospitals regardless of their BOI status.⁵

Opposition to the medical hub policy and BOI measures

There were voices of oppositions against the Medical Hub policy, criticising the money-oriented BOI perspective for turning healthcare services into an industry, creating brain drain problems which pulls expert doctors from public hospitals to private ones, causing an intensified shortage of doctors in general and negative effects on those with least access to healthcare, namely, the poor and rural people.

Professor Ammar Siamwalla, TDRI's Professor Emeritus, stated that the Medical Hub policy was the worst that the government came up with because it drained the country's healthcare resources to serve foreigners despite the fact that Thai people, especially those on the margins, were facing a shortage of those resources. Foreigners also constantly increase the remunerations for doctors and the Ministry of Public Health must constantly keep up with this trend resulting in irreparable damages to the country's overall health system.

“I want to ask how much time Thai patients get from doctors in public hospitals. How long do you have to wait and how many minutes of a doctor’s time do you get? Even if the government gives enough budgets to produce enough doctors, I still think it’s a bad policy. Not only that Thai patients will be treated only by newly-graduated doctors but the expert doctors will also be leaving the system,” said Professor Ammar.⁶

Kannikar Kijtiwatchakul, board member of the Foundation for Consumers, stated in a 24th November 2010 seminar entitled “Medical Hub and Healthcare Gap” that 1.5 million foreign patients were treated in Thai hospitals in 2009 but there was no evidence of a trickling-down of benefits through income distribution. All that was found was the problem of expert doctors leaving their teaching positions at medical schools. Between 2002 and 2004, 350 expert doctors/lecturers resigned from 5 medical schools and between 2005 and 2009 another 181 resigned, mostly for positions at private hospitals. Some medical schools lost as many as 40 lecturers creating deficits in the Universal Health Security system, the Social Security System and the Civil Servants Welfare System.⁷

Dr.Ampol Chindawattana, Secretary General of the National Health Committee, said BOI’s policy to promote investment in the healthcare industry was against Article 51 of the 2009 Constitution on the national healthcare system under the 2000 National Health Act which stated that the government should not support or give special tax and investment benefits to profit-oriented health services.

“The rationale for Article 51 was that medical and public health services were humanitarian services and should not be for profit. Especially services provided to foreigners will necessarily drain the national resources, affecting Thai people mostly in rural areas,” said Dr.Ampol.⁸

In a 24th December 2010 National Health Committee meeting, and after an extensive discussion on BOI’s investment promotion policy in healthcare industry, Prime Minister Abhisit Vejjajiva as chair of BOI board ordered that BOI review its promotion investment in healthcare industry due to conflicts with the Health Constitution.

“I think BOI isn’t aware about the content of the Constitution on National Health System. Their policy hasn’t been announced, so I ordered it to be withheld,” said the Prime Minister.

Dr.Wichai Chokewiwat, a National Health Committee member, said “Healthcare services are not a commodity to be traded for maximum profits because a healthcare system is a fundamental right for the population. It must promote human values and dignity, and be a part of the country’s security. Investment promotion in the healthcare industry must be backed up by study of positive and negative impacts on the public health services for Thai people, especially given a situation where there’s still unfairness in the access of public services and shortage of resources and personnel. Over the past decade, private hospitals grew on their own. There’s no need for government support.”⁹

BOI revised policy to promote primary-level hospitals

After the Prime Minister’s order, on 31st January 2011 Dr.Somchai Pinyopornpanich, Director General of the Department of Health Service Support, in charge of the Medical Hub policy, disclosed that the Department would hold the first public hearing on the strategic plan to develop Thailand into world-class medical hub (2010–2557). The public hearing would discuss details including the development of medical services, spas, Thai traditional massage and Thai herbs but the most important topic discussed

world be the development of medical services. Relevant organisations would be invited to the consultation to deliberate on the possibility and extent of the brain drain and other problems.

On 2nd February 2011 a seminar entitled “BOI and the National Health Committee’s Revision of Healthcare Industry Policy” was held at the Ministry of Public Health. Participants consisted of Dr.Ampol Chinda-wattana, Secretary General of the National Health Committee, Hirunya Suchinai, BOI Senior Executive Investment Advisor and Yuthasak Kanasawat, Director of BOI’s Investment Strategy and Policy Office. The seminar concluded to set up a working group with representatives from the National Health Committee and BOI to find solutions on the future direction of investment promotion in the healthcare industry.

On 7th February 2011 the working group met to resolve how to reconcile the healthcare industry promotion problem within the 2009 Healthcare System Constitution with participants such as BOI Secretary General Atchaka Sibunruang, Hirunya Suchinai, BOI Senior Executive Investment Advisor and Yuthasak Kanasawat, Director of BOI’s Investment Strategy and Policy Office. The seminar concluded that academics from both sides of the debate would together draft the principles and frameworks on what enterprises to promote in accordance with the 2009 Constitution and put the conclusions and results to a public hearing to receive further opinions from relevant sectors.



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After 4 months, the working group reported its outcome on the principles of investment promotion in healthcare industry with 4 main points as follows:¹⁰

(1) Such a policy must aim to serve the health status of the country’s overall population. It must be in health services and products in the areas where the Universal Healthcare Scheme/ Social Security and government’s support or investments are insufficient

(2) It must build capacity or increase efficiently. It must increase justice and reduce disparity

(3) It must not violate the Constitution, the National Economic and Social Development Plan and the Health Constitution.

(4) It must have a monitoring and evaluation system for impacts.

The four types of health services and products to be promoted were decided on as: investment in private facilities providing primary healthcare, investment in pharmaceutical industry, investment and development of medical equipments in Thailand, and investment of homes and welfare centers for the elderly.

“This framework is different from the previous investment promotion policy that aimed to support the medical hub policy. It aims to strengthen Thailand’s own health system,” said Dr.Ampol Chindawattana.

The promotion of private health facilities focused on capacity building and increasing medical facilities with up to 30 in-patient beds to provide services for patients from the Universal Health Security Scheme or the Social Security System, especially in areas where there were insufficient services. Those applying for investment benefits must enter the Universal Health Security Scheme and the Social Security System within three years of application and must remain within these systems throughout the period of income tax exemptions.

This policy aims to attract private investments into primary healthcare facilities which provide key services to the population. Each year the number of those who receive services at primary health care facilities, including health stations, sub-district health promotion hospitals and community hospitals, account for 80% of all out patients.

The investment promotion for pharmaceutical industry focuses on capacity building of domestic entrepreneurs in research and developments to increase the country’s self sufficiency.

The promotion for investment in and development of medical equipments focuses on capacity building in the production of necessary medical equipment for the Thai population including equipment parts, efficiency tests and calibration equipments as well as research and development.

The investment promotion in homes and welfare centers for the elderly aims to create options to increase the quality of life of senior citizens.¹¹

As the next step, BOI will take this draft to a public hearing process inviting all relevant sectors to discuss and express opinions, including from private hospitals, civil society and all stakeholders.

What is now important is to see whether and how the new Yingluck government will continue this new direction of investment promotion policy to strengthen the country’s overall health system.



4 Notable Thai Contributions

Thai traditional medicine won a gold medal as a food supplement product at the International Exhibition of Inventions in Geneva, Switzerland.

Food supplement with “Lecithin” from egg yolks and bale fruit extracts is the work of two Traditional Thai doctors, Dr.Boonyaporn Yeemee and Vareewan Rattarasarn. This was an extension of the knowledge on the extraction of lecithin, chlorine and Omega-3 from egg yolks with toxicity screening by the Office of the National Research Council (ONRC). Lecithin is then mixed with bale fruit extract with pharmaceutical effective ingredients. These two components act in synergy and no chemicals are used throughout the process. Instead, Thai herbs with therapeutic qualities are used. Scientific innovation, technology and western medicine come together with Thai traditional knowledge and help raise it to international standard. The lecithin extract can also reduce import and save the country 100 million baht per year.

The strong point of this award-winning invention is the use of bale fruit extract which encourages the production of insulin to fight virus and bacteria, maintains coronary arteries, balances blood pressure, works in synergy with egg yolks nutrition and helps the body’s self-healing at genetic or DNA level. It has been used with chronic patients in the Thai traditional medicine clinic in Ranong province. In addition, no animals or humans were used for experiments during the 5 year development process.

ONRC Secretary-general Dr.Sutthiporn Jitmitarapap has supported and promoted the product and is ready to commercialise it with intellectual property protection.

National Health Security Office (NHSO) provided 170 million baht to promote health of senior citizens.

As Thailand is turning into an “ageing society”, the increased number of senior citizens will likely face more health problems in the future. Any illness will also likely have more severe consequences for the person and the public. Health promotion and disease prevention are the most sustainable ways to prevent and solve these health problems. NHSO and the Ministry of Public Health, alongside Subdistrict Administrative Organisations and municipalities country-wide have conducted 4,665 projects under the Senior Citizens Health Promotion programme to prevent diseases and rehabilitate health among senior citizens through 7,300 Subdistrict health funds with a combined worth of over 170 million baht. Using their Universal Health Security benefits, those over 60 years old can receive free physical checkups, history taking, blood pressure, lipid and sugar, as well as cataract treatment, evaluation for depression and dementia, blood cholesterol, behavioral change activities, exercise, stress management, mental healthcare, and anti-flu vaccination amongst other services. These people can also receive these services through the community medical center, registered hospitals or in the localities with local health security funds or community health funds which are collaboration of Subdistrict Administrative Organisations (or municipalities) and NHSO and public health facilities.

NHSO and the Ministry of Public Health has a commitment to provide free health security as well as proactive activities to promote health and prevent diseases among senior citizens to ensure their continuing healthy life.

to the Health of Thais

Chambers of Commerce set up Anti-Corruption Network (CAN)

Transparency International revealed its corruption index of 183 governments around the world. With a score of 3.5 out of 10, Thailand's world ranking dropped from 78 to 80 and the country ranked number 10 amongst 26 Asian countries. This result coincides with the November 2011 public opinion poll on corruption by the University of the Thai Chamber of Commerce which found 72.4% of Thais thought that there's a lot of corruption in Thailand and 63.1% thought that corruption would increase in the following year.

Corruption has caused extensive damage to the country. 50% of private companies have paid bribes to officials in order to be awarded contracts or other benefits. This is an increase from 20–30 years ago. Each year, corruption is estimated at 300 billion baht and is expected to top half a trillion baht in five years.

The Anti-Corruption Network (CAN), making up 38 groups led by Dusit Nontanakorn and networks of Provincial Chambers of Commerce, announced a moratorium on paying bribes to politicians and civil servants from 1st June 2011. At present, Pramon Sutivong, chairman of Toyota Motor, succeeded to this position.

The coalition has three important roles, namely surveillance, promotion for change and coordination with the Government. The network began its mission with a scrutiny on the 800-billion-baht post-flood rehabilitation projects and the suspicious robbery case at the former Ministry of Transport's permanent secretary's house. The coalition has volunteers to monitor and send out alerts on possible corruption in Government projects. The coalition believes the situation will improve in the future as many agencies are committed to the prevention and suppression of corruption. But to eliminate corruption from Thai society, collaboration from all sections is vital.

Promoting virtues in the Deep South

The Southern Border Provinces Administration Centre (SBPAC) supported the promotion of virtues in the Southern border provinces by sending Thai Muslims to the Hajj in 2011 for the third consecutive year. Through the selection by the province and district with the given criteria, poor Muslim Thais, religious leaders, NGO workers, Tadika teachers and health volunteers who have made social contributions in the five Southern border provinces were chosen to the Hajj. At an average of 1 person per 12 mosques, there were 40 participants from Yala, 56 from Pattani, 54 from Narathiwat, 30 from Songkhla and 20 from Satun—a total of 200 people. Before departure, the SBPAC gave orientation, issued passports and gave vaccinations to the participants.

Attending the Hajj is one of the five Islamic commandments adhered by Muslims. All Muslims dream of going to the Hajj once in their lives. More than 9,000 people from Thailand join the Hajj every year. A family in which members have been to the Hajj is considered residents of heaven. It is considered a 'virtuous' family' in which all members have good behaviours, refrain from drugs and show good examples to other families in the community. The SBPAC is ready to support the Hajj of Muslims in the area and hope that this project will be the model for those who are virtuous and become moral leader of their own communities in the future.







Food Security

The Illusion of Money
vs The Reality of Food



Contradictions in Thailand's Food Systems

Thailand used to be well known for its abundance of food, as symbolized through the Thai popular saying “Fish in every water; rice in every field.” Nobody starved to death in Thailand, one of the world’s most fertile countries.

Thailand is one of the world’s top food exporters, especially for rice, poultry, prawns, canned tuna and canned pineapple for which Thailand continues to be the world’s No.1 exporter. In 2008, Thailand earned more than 778,056 million baht from food exports, or about 13% of total export values. Thailand’s food accounts for more than 2% of global food exports.

It is not an overstatement to say that Thailand is one of the major bread baskets of the world.

However, the other side of this proud reality shows a myriad of problems facing millions of Thai farmers including: lack of access to means of production, particularly land; deterioration of agricultural resource bases; mounting debts; monopolisation of agricultural and food systems by capitalists and middlemen or brokers; rising costs; excessive use of health-threatening chemicals; environmental degradation; an energy crisis; global warming; intense competition in the international market; and trade liberalisation. All of these factors have direct and indirect impacts on Thailand’s food security.

As a result, many concerned people are starting to question how these problems may affect the country's food security and whether Thailand will be able to maintain its food sovereignty amid an onslaught of changes from within and outside of the country.

Some people have concluded that Thailand's food system has reached a cross-roads whereby the country must have a clear strategy and make a clear decision between a system oriented to production growth and national income where most farmers are deprived of their fair shares, on the one hand, and a system focusing on food security

where households and local communities are sustainably self-reliant, on the other. In other words, should Thai society put more importance on profit-oriented agro-business or sufficiency agriculture for the sustainability and safety of both farmers and consumers?

This section of the report aims to evaluate Thailand's food production security with an emphasis on agriculture, which is the foundation of food production and also one of the four dimensions of food security. In addition, agriculture is the basis not only for nourishment but also for economic, social and cultural life of the country.

Food Security

The National Committee on the Food Act BE 2551 (2008) defines *food security* as “access for consumption by the population to available and adequate food with safety and age-appropriate nutritional values for wellbeing, as well as to ensure a secure food production system which supports and maintains ecological balance and the country's natural food resource base in normal times as well as during natural disasters or in case of terrorism threats against food supplies.”

The 1996 FAO World Food Summit stated that food security “exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life.”

Four Dimensions of Food Security

Food availability: the availability of sufficient quantities of food of appropriate quality through domestic production or importation.

Food access: access by individuals to adequate resources (entitlement) for acquiring appropriate foods for a nutritious diet. Entitlements are defined as the set of all commodity bundles over which a person can establish command given the legal, political, economic and social arrangements of the community in which they live (including traditional rights such as access to common resources).

Utilisation: Utilisation of food through adequate diet, clean water, sanitation and health care to reach a state of nutritional well-being.

Stability: To be food secure, a population, household and individual must have access to adequate food at all times without risking shortage or famine whether during normal times or crises.

Source: 1. National Committee on Food Act 2. FAO Policy Brief, June 2006, Issue 2

Unstable Security

The picture is rosy when one looks quantitatively at Thailand's agricultural production. The country produces excesses of principal food supplies which are then exported, thereby earning the country hundreds of billions of baht per year. Despite year to year fluctuations due to climate, the overall food picture is one of increase. Yet, behind this rosy image, many fundamental problems lurk. Some are becoming critical and need to be urgently and holistically addressed.

1. Crisis of Agricultural Resource Base

Land, water and forests are the most important agricultural resource base. In the past decades "development" has exploited these resources, affecting both their quantity and quality. The impacts are now being felt in food production.

Land ownership and utilisation problems

Shrinking of agricultural areas

In 2009, there were 131.7 million *rais* of agricultural areas in holding, accounting for 41% of the country's total area of 320.7 million *rais* (1 *rai* = 0.4 acre). Forests covered approximately 107 million *rais* or 33% of all land. The remaining land was non-agricultural land, particularly residential and industrial areas.

Most agricultural areas were rice paddies, followed by areas of seasonal crops and orchards. The rest were areas growing flowers and decorative plants, grazing pastures and others. It is worth noting that while rice-growing areas decreased from approximately 55% of total farmlands in 1989 to about 52% in 2009, the total production output continued to rise due to increased dry-season farming. Over the same period, areas growing seasonal crops also decreased from 26% to 21% while areas growing fruits and perennial trees (including rubber plants) increased from approximately 14% to 21% (Table 1).



Table 1: Agricultural areas by utilisation 1989–2009

	1989	1994	1999	2004	2009
Rice	54.6	53.2	51.4	51	51.7
Other seasonal crops	25.8	25.0	22.5	21.9	21.4
Perennial trees	14.5	16.9	20.4	21.2	21.4
Vegetables and decorative plants	0.06	0.7	0.8	1.0	0.9
Grazing pastures	0.6	0.6	0.6	0.8	0.8
Others	4.0	3.6	4.2	4.2	3.8
Total	100	100	100	100	100

Source: Adapted from data of the Office of Agricultural Economics, Ministry of Agriculture and Cooperatives

The average size of land holdings also shrank from approximately 26 *rais* per household in 1986 to 22 *rais* in 2009—around a 15% decrease. When closely examined, the proportion of farming households with small land holdings (less than 10 *rais*) grew from approximately 33% in 1998 to 38% and 39% in 2003 and 2008 respectively. Meanwhile, the proportion of farming households with medium-size land holdings (10–39 *rais*) shrank from approximately 58% in 1998 to 52% in 2008. Households with large land holdings (more than 40 *rais*) accounted for approximately 10% of the total households and appeared to be on the increase. (Table 2)

Statistics from the 2003 Agricultural Census show that approximately 77% of farmlands were owned by farmers themselves while 23.1% were rented or in other arrangements.

A large number of landless farmers

In 2003, approximately 650,000 farming households were landless. The Central

Region had the highest proportion of landless farmers while the Northeastern Region had the lowest. Another statistical report showing the large number of landless farmers is the 2004 registration of people living in poverty—those who have no or insufficient land for livelihood and those living illegally on government land. The number of those who self-registered under this category at 4.9 million persons shows that land holding problems remain a chronic crisis which continues to worsen.

What are the causes of landlessness among farmers? Essentially, landlessness is caused by structural injustice in the country's land distribution and economic system.

Most pertinent issues are:

1. The free capitalist economy has changed the status of land from a foundation of life and social capital within community into market commodities, allowing the rich and the powerful to amass lands through weak laws and legal loopholes
2. Economic development policies only focus on industrial growth where big money holds sway while the economic, social and traditional life of small-scale farmers is largely neglected.

Table 2: Land-holdings of farming households, by size

Size	1998	2003	2008
Less than 10 <i>rais</i>	33.1	37.6	38.6
10–39 <i>rais</i>	57.5	51.1	51.6
40 <i>rais</i> and more	9.4	11.3	9.7
Total	100	100	100

Source: National Committee on Food 2011 (Based on 2008 National Statistical Office data)

“Most urgent is land reform which must be made a national agenda. Only with government policy-making commitment and political will combined with strong civil society support can we solve this problem.”

3. The individualistic land ownership system which is subject to market mechanisms and taxation conducive to the concentration of land ownership in the hands of the small number of the rich.

4. The government’s centralised forest management in the name of “conservation” which not only deprives communities of their role in land distribution and resource management but also uproots communities from the areas where they have long lived and benefited from their land.

Concentrated land ownership

For these reasons, land ownership tends to be concentrated in the hands of the rich few. A study on land policy found that in many provinces a small number of land holders own a very high proportion of land. For example, the 50 biggest land owners hold about 12% of the total area in Pathumthani province, 14% in Phuket, 12% in Samut Prakarn, 10% in Bangkok, 5% in Nakhon Nayok and 5% in Ang Thong.

A review of data from 399 land offices across the country found that most Thais own less than 4 *rais* of land (with deeds) on average while those in the minority who own larger pieces of land have a larger combined holding. The number of individuals who own more than 100 *rais* of land was 4,613. Among these, 121 owned 500–999 *rais* each and another 113 owned more than 1,000 *rais*. Among juristic persons, 2,205 owned more than 100 *rais*. Among these, 100 owned 500–999 *rais* and 42 owned more than 1,000 *rais*.

A large proportion of land is left by owners (mostly wealthy speculative individuals and juristic persons) with no or little utilisation. A study by the Land Institute Foundation in 2001 revealed that the total area of land being left with no or little

utilisation accounted for approximately 30% of all land holdings, resulting in approximately 127,384 million baht in economic losses and opportunity losses per year. Naturally, some of these lands are arable lands.

The perversion in Thailand’s land distribution means that while a large proportion of the population are landless or are driven from their ancestral areas, much land is left with no or little utilisation. This symptom shows that our flawed land distribution policy and system must be urgently reformed.

Landlessness is a time bomb that will one day explode as open social conflict and cause food insecurity for hundreds of thousands of farming households in Thailand. The committee on agricultural land reform, emphasising the importance of landlessness or loss of farming lands, stated in 2011 that landlessness “not only destroys livelihoods and causes suffering but also robs farmers of their traditional life and these farmers constitute an important cultural foundation of Thai society.” Landlessness problems among farmers are, therefore, a major problem which may become impossible to solve and which can lead to other social problems. Most urgent in addressing these challenges is land reform, which should be made a national agenda. Only with government policy-making commitment and political will combined with strong civil society support can we solve this problem.



“The point, therefore, is not just providing adequate water but an efficient water management.”

Water for Agriculture: Access Gaps and Poor Management

Inadequate irrigation

Thai agriculture largely depends on rainfall. According to the 2009 agricultural statistics, only 25.5% of agricultural areas are irrigated. The Central Region, at 17 million *rais*, has more irrigated lands than other areas compared to 9 million *rais* in the Northern Region, 6 million *rais* in the Northeastern Region and 4 million *rais* in the Southern Region. Looking at the low proportion of total irrigated land, Thailand still needs more irrigation. However, developing irrigation will take a long time due to heavy costs as well as other social and environmental concerns associated with the construction of dams and irrigation systems.

Another important problem for Thailand is droughts and floods which occur every year—repeatedly in some areas. In addition, farmers still cannot manage their crop choices in accordance with water volume each year. Most farmers in irrigated areas grow rice—a water-intensive crop—and suffer heavy losses when dams have insufficient water. Outside irrigated areas, droughts and floods recur, sometimes even within the same farming cycle. The issue for Thailand is not just providing adequate water but creating an efficient water management system.

“Sharp decline in daily amount of catches obtained by small-scale fishermen increasingly affects food security of fishing communities and households along coastal areas.”

Marine depletion

Thai seas, once a fertile food source, have become severely depleted. The most important reason for this depletion is large-scale fisheries industries with modern equipment and indiscriminate fishing regardless of fish species or size. The shrinking of mangrove forests due to industry and tourism has also resulted in the rise of pollution and disappearance of marine animals. This is evident in the sharp decline in daily amount of catches obtained by small-scale fishermen and affects food security of fishing communities and households along coastal areas.

The Thai seas themselves, once a source of food security, are increasingly in crisis. Only a management system with commitment to sustainable food production for the coastal communities can mitigate these challenges.

Degradation of natural resources

The decrease of food sources such as tropical forests and wetlands, including mangrove forests and bog forests in the past several decades has caused immeasurable damages to agricultural production in Thailand. In addition to cycles of floods and droughts in many areas, there has also been significant degradation in soil quality and climate change which are all interconnected links in the general environment.

Shrinking forests

In 1961, Thailand had 171 million *rais* of forest coverage, or more than half of the country's total area. In 1999, this figure has shrunk to 80 million *rais*. In just 38 years, no less than 90 million *rais* or approximately 53% of Thailand's forest coverage has disappeared. However, the area of forest has significantly increased to 106 million *rais* in 2000 and stabilised until present. This rise was attributed to the change from land-base survey to satellite image readings (at 1: 50,000) in 2000. But this satellite data have not been verified by land-based surveys.

From actual observation, it is likely that deforestation still continues through illegal logging (all logging concessions have been terminated since 1989) and agricultural encroachment. A comparison of 2004 satellite images to those of 2000 found a deficit of approximately 3.8 million *rais*—a deforestation rate of around 700,000 *rais* per year. And the ecological conditions of the remaining forest areas are also challenged. A forestry expert estimated that Thailand has only 18% forest coverage in good condition.

The shrinking of forests directly impacts water volume from natural sources. As the forests in high-altitude areas disappear, many communities in the downstream basins face a higher risk of flash floods early in the rainy season and droughts near the end of this season. This 'double jeopardy' situation already happens in the lower Yom River basin and several other areas, affecting food production in those places.

Threatened wetlands

Wetlands are very fertile areas which benefit the lives of humans, plants and animals. The total area of mangrove forests, bog forests, marshlands, ponds, lakes and rivers is approximately 21.4 million *rais*. However, mangrove forests and bog forests have worryingly shrunk due to agricultural encroachment, settlements and tourism. In a 1961 survey, there were more than 2.3 million *rais* of mangrove forests but only 1.3 million *rais* 25 years later (1986)—a 43.5% decrease—and only 1.1 million *rais* another decade later (1996)—a further decrease of 15.4%. At present, the total area of mangrove forests is estimated at only 940,000 *rais*.

As forests and wetlands are fertile food sources for the common use of rural communities, their continuing decline negatively affects food security of rural communities and households as well as the ecology of the area, with inevitable impacts on the lives of humans, plants and animals.

Deteriorating soil quality

Deforestation and the rise in monoculture leaves soil with no time for recovery. Combined with lack of care, soil becomes depleted of

minerals essential to plants. Some areas have alkaline soil problems while others face acid soil problems. In 2004, Thailand had about 4.5 million *rais* of land with alkaline soil problems and 5.5 million *rais* of land with acid soil problems. Worsening soil quality and a rise in pests and diseases have compelled some farmers to use more inorganic fertilisers and pesticides to maintain production output. However, soil quality continues to worsen and pests become resistant, leading to even higher use of chemicals. Although this endless cycle may not depress output, its impact on the environment and health is particularly worrying.

Climate change

Climate change as a result of global warming is now clearly showing devastating effects on people across the world. For a tropical country like Thailand, the direct effects on agriculture are irregular rainfalls. Rainfall is too little in some areas, too much in others and unseasonal in many areas. This situation causes severe floods, plant diseases and insect plagues. All of these situations affect agricultural production and its reliability. In addition, rising temperature also results in stronger storms and ocean waves that damage coastal ecology and impact food production both directly and indirectly.



2. Rising Costs

Today's agriculture requires a large amount of investment, not only for breeding stocks or seeds but also inorganic fertilisers, pesticides, feeds and labour.

Breeding stocks and seeds

Most Thai farmers today use newly developed stocks and seeds which account for a significant proportion of costs.

Most of the rice being grown in Thailand today is from the modern rice strains. The most popular strains number only around ten. Hundreds of traditional strains which were adapted to local environment and ecology, and some of which also have high nutritional values, have mostly disappeared from the paddy fields. Likewise, most of the corns being grown today in Thailand are newly developed hybrid strains whose output is unsuitable as growing seeds because of inherent developmental defects and unreliable productivity. Regardless of profitability, the use of such seeds leaves farmers very market-dependent and results in rising costs.

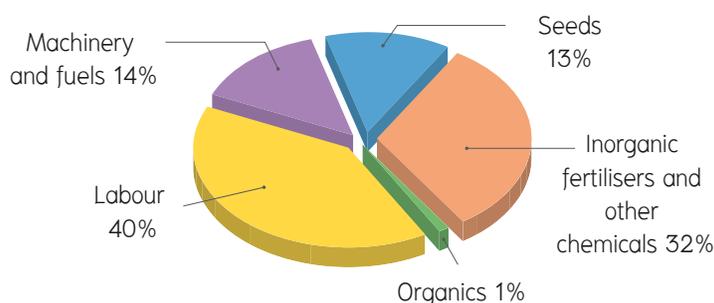
Unlike in the past, most farmers today are averse to selecting seeds for replanting. Farmers now sell all their outputs immediately after harvest and buy seeds when the next growing season arrives. A study conducted with farmers in Suphanburi's Ban Loom Bua village found that seeds accounted for 13% of total costs (Figure 1).

For poultry farms and fish farms, farmers also pay high costs for breeding stocks. A study on traditional chicken farms found the average price of a chick at 6 baht compared to 5 baht if the farmers raise hens to breed their own chicks. The largest expense in animal farming results from expensive feed.

Feeds

Although Thailand can produce almost every kind of animal feed, domestic supply has yet to catch up with demand. Feed imports cost the country tens of billions of baht per year. In 2009, Thailand imported one billion baht worth of maize, twenty billion baht worth of soybean, thirty billion baht worth of soybean meal and 63 million baht worth of fish meal (Table 3). When calculated at retail prices, the amount that individual farmers pay for feed accounts for a very high proportion of their costs, which also include vaccines, pens, labour and other more general expenses.

Figure 1: Average expenses of a typical farmer in Suphanburi's Ban Loom Bua village, 2002–2003



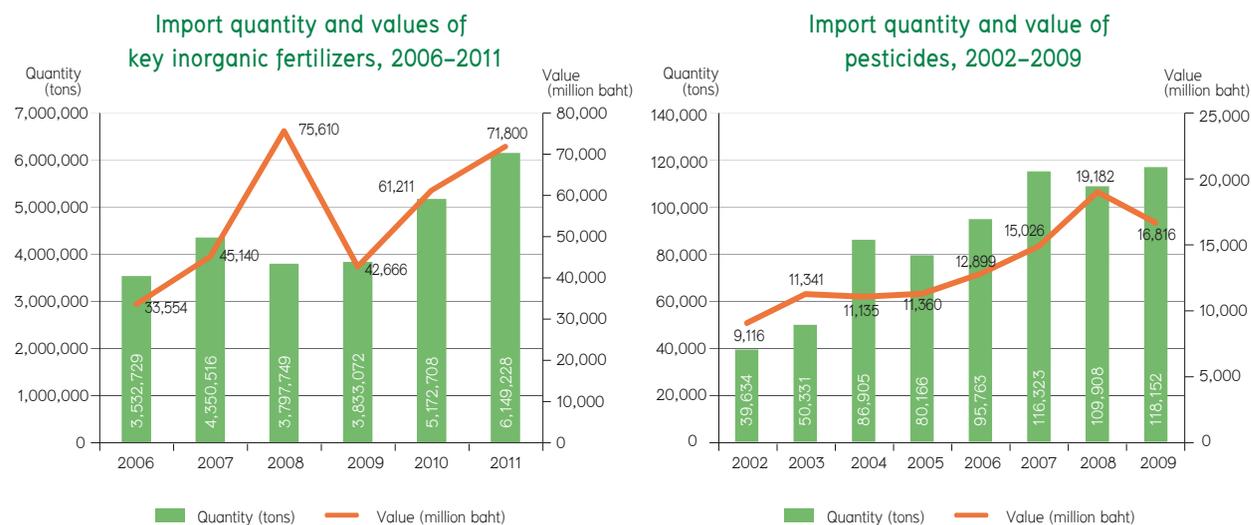
Source: Witton Lianchamroon et al, 2008

Table 3: Domestic consumption, domestic production, import quantity and estimated import values of feeds in 2009 (tons)

	Maize	Soybean	Soybean meal	Fish meal
Domestic consumption	4,787,562	18,630,000	2,902,692	556,021
Domestic production	4,430,039	190,480	190,480	500,000
Import quantity	291,863	1,534,551	2,076,634	1,839
Import values (million baht)	1,000	20,000	30,000	63

Source: National Committee on Food, 2011

Figure 2: Import quantity and value of inorganic fertilizers and pesticides



Note: In 2008, the import value of fertilisers increased significantly, despite quantity decrease, as a result of price hikes, especially in Chinese products. The import value in 2009 decreased, despite quantity increase, likely because of a drop in chemical prices in foreign markets.

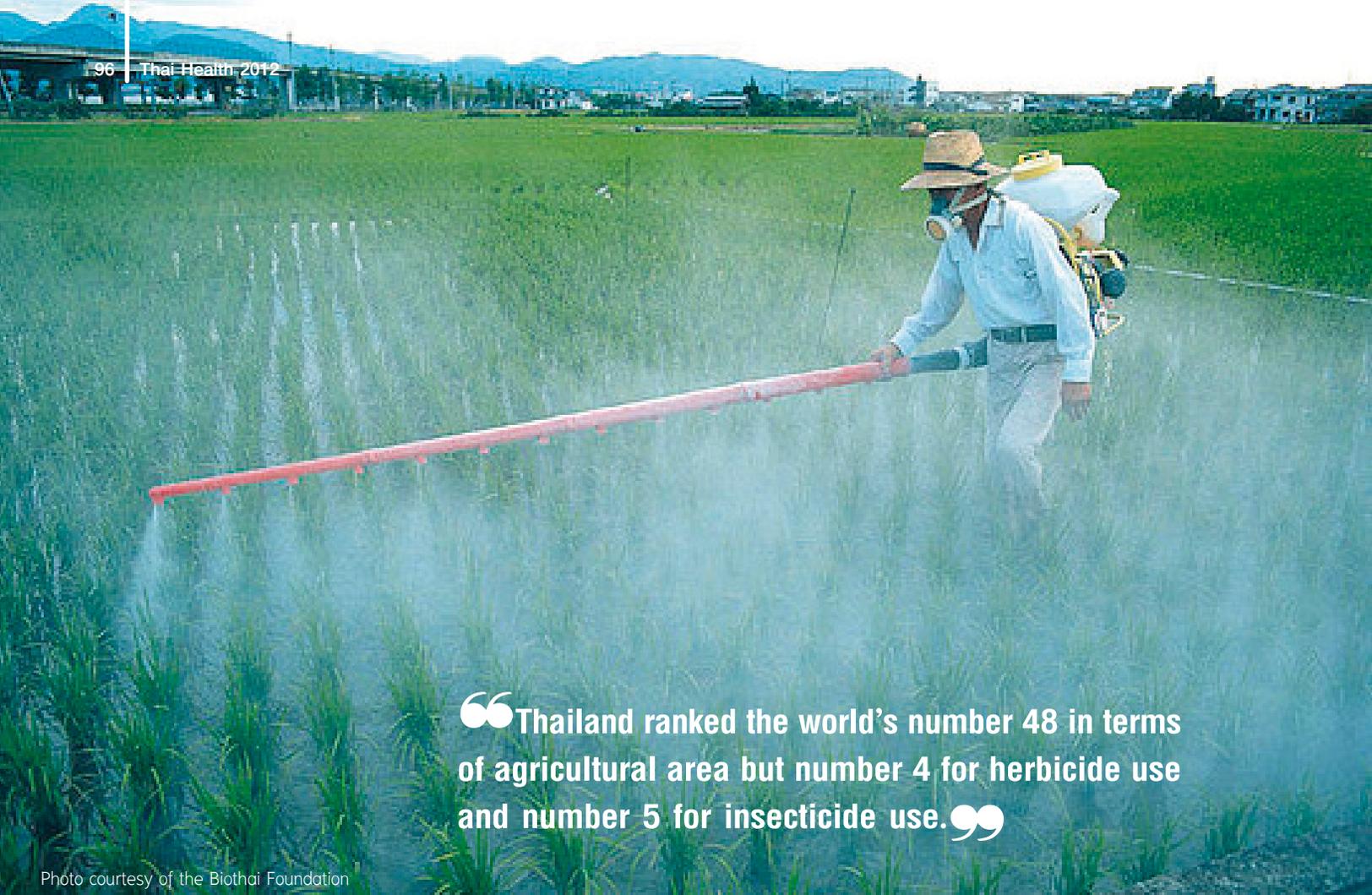
Source : Toxic Substances Division, Agricultural Regulatory Office, Department of Agriculture

Inorganic fertilisers and other chemicals

In today’s agricultural systems, whether it’s for rice or other crops, inadequate amounts of inorganic fertiliser and chemicals most likely lead to a drop in output. The use of inorganic fertilisers and other chemicals has become indispensable because of worsening soil quality and increased pests and diseases (caused by repeated monoculture without spacing). In addition, most farmers fall prey to advertisements from agribusinesses touting inorganic fertilisers and other chemicals, resulting in a group mentality that advertised products must be good because everybody is using them.

Farmers tend to dread the prospect of low outputs if they do not use inorganic fertilisers and chemicals, even though there may not be any need for them.

Inorganic fertilisers and other chemicals have become indispensable in today’s mainstream agricultural systems. However, virtually all inorganic fertilisers and chemicals are expensive imports, costing the country tens of billions of baht per year (Figure 2). These financial burdens are shouldered by farmers. The study among rice farmers in Suphanburi (Figure 1) showed that the expenses for inorganic fertilisers and chemicals accounted for about a third of total expenses—second only to labour.



“Thailand ranked the world’s number 48 in terms of agricultural area but number 4 for herbicide use and number 5 for insecticide use.”

Photo courtesy of the Biothai Foundation

3. “Chemo-culture” Crisis

Chemical flood

It may not be an overstatement to call Thailand’s mainstream farming practice a “Chemo-culture” given Thai farmers use a very high quantity of chemicals. An FAO report in 2000 stated that Thailand ranked the world’s 48th country in terms of agricultural area but number 4 in terms of herbicide use and number 5 for insecticide use. Considering that Thailand has continued to import increasing amounts of these chemicals in the past 10 years since that report, the country’s world ranking may be even higher now.

Chemicals used by Thai farmers are mainly insecticides, herbicides and other anti-disease chemicals. Over the past 10 years, import quantity of chemicals has unabatedly increased. Since 2007, import quantity exceeded 100,000 tons per year. In only 8 years (2002–2009), import quantity of chemicals has almost

Table 4: Number of trade licenses given for pesticides in Thailand, compared with other countries in the region

Country	Number of active ingredients	Number of trade licenses
Thailand	439	27,126
China	600	20,000
Vietnam	886	3,423
Malaysia	240	3,104
Sri Lanka	269	1,383
Indonesia	*	1,158
Myanmar	*	818
Laos	46	100
India	194	*

* No data

Source: Rapichan Poorisamban, 2011

“Since 2007, import quantity exceeded 100,000 tons per year. In only 8 years (2002-2009), import quantity of chemicals has almost tripled. Import value has also exceeded ten billion baht per year since 2003.”

tripled. Import value has also exceeded ten billion baht per year since 2003. (Figure 2)

Thailand has commercially registered more than 27, 000 chemical items. This may or may not be the world’s highest but it is certainly the highest in the region (Table 4). Many of these chemicals have been clearly shown to be hazardous to human and animal health as well as the environment. Some are carcinogenic, causing diseases such as cancer which one among the top causes of death among Thai people. Although these toxic chemicals have been banned in many countries, they continue to be imported and licensed for widespread sales in Thailand without effective regulatory measures.

Academics, NGOs and farmers’ groups have for many years been unsuccessfully demanding a ban on four chemicals, namely, carbofuran, methomyl, dichrotophos and EPN. All these chemicals are considered to pose a serious threat to human health and the environment (see page 64). Despite attempts to regulate the use of chemicals in agriculture in Thailand, effective regulation is far from becoming a reality. The Hazardous Substance Act 2008 requires all existing chemicals available on the market to be re-registered by 22nd August 2011 or withdrawn from the market. However, enforcement of the legislation has been stalled by demands for an extension to allow those chemicals already on the market to be on sale for another two years. It’s unknown whether the deadline for registration will be extended again at the end of these two years.

Silent threat to farmers and consumers

The devastating health impacts of chemical use on farmers are unknown to the wider public as their illnesses and deaths never make news headlines. The awareness of the risks of chemicals is limited only amongst academics and genuinely interested parties. The impact of chemical use continues to silently loom over farmers’ lives, however.

The following data presents a clearer picture.

- *In 2007, the Ministry of Public Health’s Bureau of Occupational and Environmental Diseases conducted blood tests for pesticide exposure levels among 89,376 farmers and found 34,428 or 38.5% of them to be at an unsafe level.*
- *In 2011, the same agency conducted a risk-evaluation survey with questionnaires on chemical usage behaviors and symptoms. Preliminary data showed that from a sample of 4,572 farmers, 47% were at low risk while 53% had moderate to high risks. But among 2,742 farmers from the same group who consented to a blood test, those who were at significant risk with unsafe levels of chemical usage accounted for 54% (Figure 3).*
- *An epidemiological study of countrywide in-patients reported to the Ministry of Public Health’s surveillance systems showed that incidents*

Figure 3: Proportion of farmers by risk level (as assessed by interviews and blood tests), 2011

Source: Dr.Pibool Issarapan, 2011

of chemical hazards (both from agriculture and suicide attempts) were high at 14.067 per 100,000 people in 2006, 18.256 in 2007, 17.115 in 2008 and 17.692 in 2009. The highest mortality rate among chemical poisoning in agriculture was caused by herbicides and fungicides (mortality rate of 14.9%) followed by insecticides in the organophosphate and carbamate family (6.2%), other herbicides (2.9%), rat poisons (2.7%), other insecticides (1.4%) and finally halogenate insecticides (0.6%). All these chemicals are widely used by Thai farmers, especially those in the Central Regions

of the country with its intensive farming practices. Almost all of the top ten provinces in Thailand with highest morbidity rates caused by pesticides are in this region.

Not only health of farmers is at risk from chemicals but also the health of consumers. Random tests have found traces of toxic residues in vegetables and fruits in the markets. Sometimes these traces were found in highly unsafe levels, thereby exposing consumers to serious health risks.



“If most families in the community practice monoculture, the community’s food security level will decline because of increased dependence on other food types from outside.”

4. Consumption-based Agriculture Marginalised by Trade-oriented Agriculture

Decline of consumption-based agriculture

Today’s mainstream agricultural practices are no longer geared towards household use but for trade. Farming households that produce what they consume and consume what they produce are now a minority. Office of Agricultural Economics data

showed around 30% of all farming households falling into this category ten years ago (Table 5). It is believed that the proportion is even smaller today.

Market-oriented monoculture farming aims to produce only one kind of crop while household consumption requires different food types. Farmers need to buy most of their food to meet consumption

needs. As such, farming households are less self-reliant in terms of food. If most families in a community practice monoculture, the community's food security level will decline because of an increase need to depend on other food types from outside. In addition, price fluctuations (which often happen) can easily lead to losses and debts for market-dependent farmers.

In capitalism, Big Money and agro-businesses play a large role in agriculture by monopolising production inputs and outputs. These agro-businesses, both local and transnational, have strong influences throughout the system from production upstream to processing midstream and marketing downstream. At present, there are no fewer than 40 stockmarket registered companies with businesses in agricultural and the food industry (around 7% of all registered companies) with a combined capital of 33.378 billion baht (2012 data). These figures do not include companies outside the stockmarket which likely number many more.

In a way, the direct involvement of Big Money and agro-businesses in production can be seen as benefiting production both in terms of quantity and quality because such companies are

Table 5: Proportion of households using own produce mostly for household consumption, by region, 2001–2002 season.

Region	Percent
Northeast	37.2
North	23.2
Central	39.8
South	6.4
All regions	29.7

Source: Office of Agricultural Economics, 2003

better equipped with capital, resources and technology than small-scale farmers. Indeed several of Thailand's top food exports such as poultry, prawns, baby corns and canned pineapple became successful only with strong involvement of agro-businesses. Such successes benefit the country as a whole as well as consumers.

However, this direct involvement by large companies also affects small-scale farmers who constitute the biggest proportions of Thailand's agricultural producers. The monopolisation of the important production resource, land, increasingly marginalises small-scale farmers, driving them to the edge of food production systems.

Contract farming: Mutual benefit or exploitation?

Big Money and agro-businesses are relatively cunning in not getting themselves involved in physical production processes. Such actors instead outsource production while providing some support to small-scale farmers to fulfill their requirements both in terms of quantity and quality. This process is known as "contract farming". Companies that are provided seeds/stocks, fertilisers, pesticides, capital, know-how, technology and other equipments are in fact burdened with disguised debts that farmers must repay with their production outputs. In contract farming, farmers become debtor right from the beginning of the production process.

At present, there are no reliable statistics on the number of contract farmers. Estimates range from 160,000 whilst an independent academic has put the number at around 300,000 and increasing.

The advantage of contract farming is that the company or agents/brokers can be sure that they will obtain products according to market

demand in quantity, prices and with an appropriate time scale. Farmers also can be sure that they will be able to sell their products and often at agreed prices. Contract farming often looks like a win-win situation. The reality of this situation, however, is much more complicated.

Whether the contract with farmers is actually done in writing (mostly for poultry farms, husbandry and aquaculture) or not (mostly for crops), virtually all the terms of contracts are determined by the large company or its agents/brokers. This puts farmers in a weak position right from the beginning. Even in cases where farmers can negotiate some aspects of their contracts, negotiation is based on an unequal relationship. In practice, farmers shoulder more risks due to lack of experience and knowledge or disasters (drought, flood, storms, epidemics, and plagues). Farmers may not be able to sell their

products at all or have to sell them at lower prices if the products do not meet specified terms. If the company buys products late, farmers also have to shoulder the costs of delay which means smaller profits or even losses.

Although some contract farmers become successful, many more fail. Some families have decided to cease agricultural work altogether while others are propped up by encouragement to persevere in the hope to recoup their past losses. Some farmers have even become bankrupt and lost all their family assets. Contract farming, therefore, is not dissimilar to an agreement to exploit and turns farmers into hired workers on their own land.

Contract farming may help increase Thailand's production but such increase also paradoxically doesn't increase the food security of the farming households themselves.

5. Labour Crisis

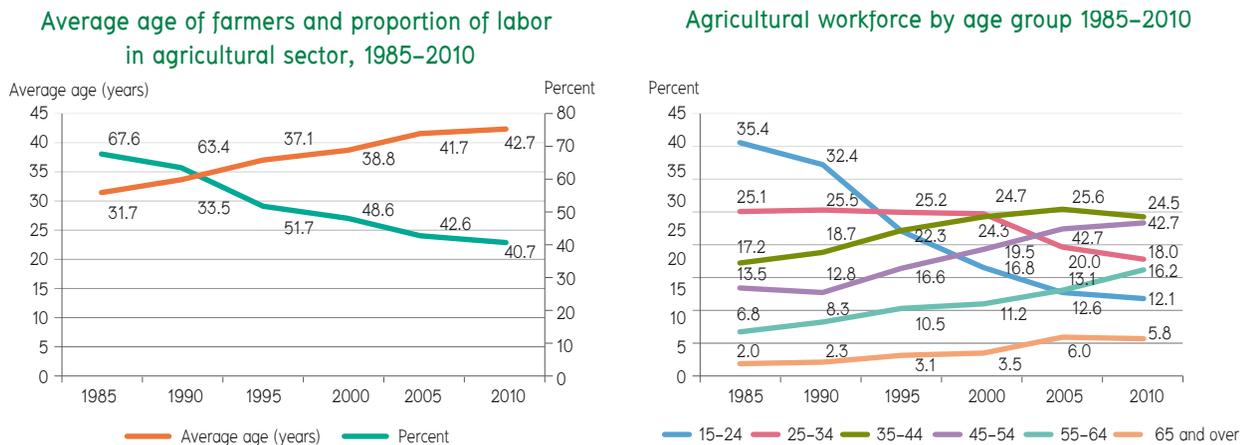
Changing labour demographics

Although Thailand's total number of workers has risen, workers working in the agricultural sector have decreased. A National Statistical Office's Labour Force Survey (third trimester) showed that in the 25 years between 1985–2010 the proportion of workers in the agricultural sector dropped from 68% to 41%, while the average age of workers increased from 32 to 42 years. Another set of data from a BioThai Foundation study, supported by the Thailand Research Fund in 2008–9 showed the average age of workers in agriculture to be 45 and 51 years respectively. This ageing of the agricultural workforce is partly due to the overall ageing of Thai society. However, another reason is that fewer young Thais chose to become farmers these days (Figure 4).

On one hand, an older workforce may be of advantage in terms of experience and endurance for agricultural work. But, on the other hand, from the perspective of continuation especially



Photo courtesy of the BioThai Foundation

Figure 4: Average age of Thai farmers and agricultural workforce by age group, 1985–2010

Source: Labour Force Survey, third trimester. (Data processing courtesy of the Economic and Social Statistics Division, National Statistical Office)

at household and community levels, this ageing of agricultural workers may also affect food security unless there is a timely response to this situation.

Poverty and debt: Major problems for farmers

Farming = Poverty?

Although Thailand has been successful in reducing the proportion of its population living in poverty in the past several decades, the proportion of those living in poverty in the agricultural sector has not significantly decreased. In 2002, almost 20% of those in the agricultural sector were living in poverty. Five years later in 2006 the proportion significantly decreased to 12% and then remained static. Even in 2009, slightly over 10% of agricultural households were in poverty. However, outside the agricultural sector, the proportion of those living in poverty in Thailand remains lower than 5%.

As agricultural workers have lower educational level, the value of their production outputs are low. About two thirds of those living in poverty are working in agriculture. It is estimated

that there are about 660,000 poor landless farmers who must rent land for farming or become labour hands.

According to National Statistical Office data, most farmers are in debt and around 60% of those debts are incurred from farming. The total amount of debts for farming purposes is more than 360 billion baht. Around 63% of these debts are borrowed from the Bank for Agriculture and Agricultural Co-operatives, 7% are loans in the informal sector, 10% are from Village Funds and the remainder are loans from other sources.

Poverty and debt experienced by the agricultural workforce reflects income gaps linked to several different dimensions of structural disparity. This condition may greatly threaten Thailand's food security unless there is an appropriate adjustment in the agricultural sector in the near future.

New breed of farmers?

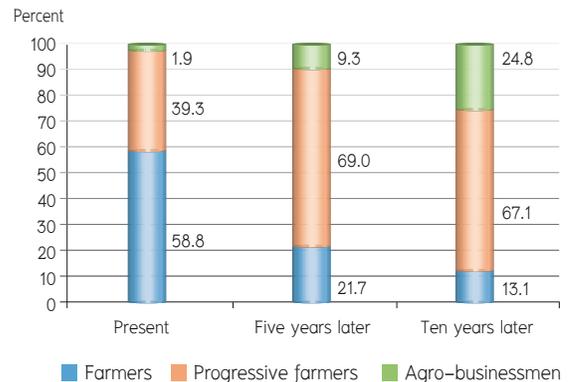
A study by the Office of the National Economics and Social Development Board, "Changing way of life among farmers in the Central Region under globalisation (2010)" suggests that the way of life of rice-growing farmers is changing.

Traditional farmers are increasingly evolving into “progressive farmers” or “high-tech farmers” and eventually “businessmen farmers.”

This last type of farmer can be better regarded as an “agro-businessman”—a “new breed” of farmers who “farm” without getting their hands and feet dirty. Instead, such individuals or companies use business administration models and hire “consultants” to help at every stage of the agricultural process from soil preparation to harvesting and sale. Such actors give orders through modern communication tools like mobile phones.

This new breed of farmer has already emerged in the lower Chao-Praya basin. Such “agro-businessmen” already constitute 2% of all farmers, according to the research. When asked to imagine their future, most farmers reported that they saw themselves as becoming “progressive

Figure 5: How farmers in the Central Region view themselves



Source: Suriyon Thanyakijjanukij et al, 2010

farmers” and “agro-businessmen” (Figure 5). To some extent this response shows the direction of future changes in the agricultural sector in Thailand.

It is as yet difficult to predict how such evolution will affect Thailand’s food security.



Photo courtesy of the BioThai Foundation

6. Impacts of the Energy Crisis

Thailand depends on imports for almost all its energy needs, costing the country an enormous amount of money. In 2008, 1 trillion baht or approximately 11% of GDP was spent on energy imports. Past energy crises have always impacted on the costs of agricultural production as most farmers use machinery for farming. In addition, higher energy prices also increase prices of inorganic fertilisers that contain components of petroleum derivatives.

As a result of fuel price hikes and worries around fossil fuel depletion, many countries, including Thailand, have turned to alternative energy to replace fossil fuels. Food crops such as sugar cane, tapioca and oil palm have been used to produce ethanol to mix with fossil fuels or to be converted into biodiesel. The Thai government aims to increase its production of ethanol-mixed fuel to 9 million liters per day in 2022 from about 1 million litres at present and to boost biodiesel production

to no less than 4.5 million liters per day from 1.4 million liters at present. This increase does not only result in expropriated food crops to be made into fuel but it also competes with food crops for arable land use.

Thailand's 2009 agricultural statistics showed that between 2000 and 2009 oil palm-growing areas have more than doubled from around 1.7 million *rais* to 3.9 million *rais*, sugar cane from 5.5 million *rais* to 6.0 million *rais* and tapioca from 6.9 million *rais* to 8.6 million *rais*. The demand for fuel crops will increase in the future and will compete with food crops for use of land.

In the long-term, an energy crisis will impact food security. In order to soften the blow of this crisis, the government should implement appropriate measures to strike a balance between demands for food crops and energy crops. Farming communities also should adapt themselves by reducing energy-intensive farming.



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7. Free Trade Liberalisation: Trick or Treat?

Impacts of competition and subsidies

Thailand is a WTO member. In the past 10 years, the country has also entered free trade agreements (FTAs) with other ASEAN countries under the ASEAN Free Trade Agreement (AFTA) and the Ayeyawady–Chao–Praya–Mekong Economic Cooperation Strategy (ACMECS). In 2015, Thailand and other ASEAN members will become the ASEAN Economic Community (AEC) in much the same way that European countries now form the European Community. Outside of the region, Thailand has also made free trade agreement with China, India, Australia, New Zealand and Japan. In addition, free trade agreements are being negotiated with other countries including the United States. Free trade allows a freer flow of capital, production resources, goods and labour between countries.

On the one hand, free trade will decrease prices of many goods and consumer products. Thai products will also become more competitive due to tax exemptions and lower tariffs. This situation benefits both local manufacturers and consumers.

On the other hand, free trade may threaten some of Thailand's agricultural products, especially when there's competition from countries which offer cheaper labour or better quality goods. Such negative impacts are unavoidable under free trade agreements.

China's cheap garlic is one clear example of this situation. This garlic started to flood the Thai market after the Thai–Chinese Free Trade Agreement came into force in 2003. As a result, many Thai garlic farmers in the Northern Region of the country suffered heavy losses and withdrew

from the industry. In addition, other Chinese temperate fruits with better quality and similar prices also hurt nascent local farmers. The free trade agreement with Australia also had similar effects on local dairy farmers. The superior quality of Australian dairy products started to be imported when the Thai–Australian FTA came into force in 2005 and this forced Thailand's cattle and dairy industry to adapt itself for survival.

Subsidies are a problem linked to international trade competition which affects Thai farmers significantly. The clearest example is agricultural subsidies of developed countries. For example, the United States is one of Thailand's major competitors in the rice market. The US government has a budget and measures to subsidise its agricultural products in order to boost their competitiveness. Without such subsidies, American agricultural products could not compete on international markets due to high labour costs. An expert on rice export said that if the United States did not subsidise its rice farmers Thailand would be able to sell much more rice in the global and US markets and at much higher prices.

It is an issue of concern that Thailand has no clear food security policy to deal with these FTA issues and no effective measures to protect farmers. In addition, the country has no health measures to guarantee that local consumers will not be affected by globalised trade.

Risk of plant genetic loss

Academics and many farmers in Thailand are concerned that FTAs with more biotechnologically advanced countries like the United States and Japan, if not implemented carefully, may lead to the loss of the country's unique plant genetics

as such countries may employ loopholes in global trade agreements such as intellectual property rights and other regulations to patent local genetic materials with little regard to the biological origin of those plants.

This is not idle speculation as such situation has already arisen. In 2001 a group of American researchers tried to patent a strain of rice developed from Thailand's jasmine rice. Only following Thailand's strong protests did the researchers back down.

Local experts, however, believe that the United States is unlikely to give up its pressure. Many consider that during the new round of Thai-US free trade negotiations, the US will try to pressure Thailand on two specific points: Firstly, that Thailand must enact a trademark law to replace the Geographical Indications Act for the protection of plant and animal genetics; and secondly, that Thailand must become party to the International Union for the Protection of New Varieties of Plants (UPOV).

Both the trademark law and UPOV will allow patents to be granted for new plant or animal genes regardless of geographical origin, unlike the Geographical Indications Act. The United States has successfully negotiated FTAs with other countries on similar terms and is believed to be trying the same approach with Thailand. The Thai-US free trade negotiations began in 2004 but were disrupted by the 2006 coup and there has been no further progress since that time.



Photo courtesy of the BioThai Foundation

If the United States successfully ensures Thailand agree to the two latter conditions the patenting of new strains of US-developed jasmine rice will become a reality. This will threaten the status of the 200,000 tons of Thailand's jasmine rice exported to the US market per year. Even today, Thailand is already facing challenges from the use of "jasmine rice" label by US-grown long-grain rice. (See opposite page)

Food sovereignty under threat

Past food crises, whether caused by natural disasters, political instability or economic meltdowns sent food prices skyrocketing. Faced the energy crisis and global warming, wealthy countries from Europe, America, Asia and the Middle East are now identifying ways to ensure food security for their citizens in the future.

Strategies used by large businesses from these wealthy countries include the use of developing countries with rich agricultural resources as food production bases to feed populations back in their country's of registration. Thailand is one of important targets for these companies.

The Future of Thai Jasmine Rice

Jasmine Rice is the best and most well known rice in the world. But its future is worryingly in doubt given Thailand's free trade negotiations with a bio-technologically advanced country like the United States.

Jasmine Rice, or officially “Khao Khao Dok Mali 105”, is grown in about a quarter of Thailand's rice-growing areas, mostly in the Northeastern Region and parts of the Northern Region. This rice is suited to sandy soil with low organic materials. The arid *Thung Kula Ronghai* area is a haven for jasmine rice. Not only fetching high prices in domestic market, jasmine rice is also very popular abroad with a high export quantity and value. In 2004, export quantity of jasmine rice consisted of 2,279,621 tons which earned the country 35,572 million baht.

Because of its unrivalled quality, jasmine rice is coveted by other countries, especially the United States. In 2009, the United States government allowed its local rice industry to use the label “Jasmine Rice” for any long-grain rice produced in the country, claiming that an American company had registered the “Jasmati” as a trademark for jasmine rice grown in Texas. Despite protests from the Thai government and Thai people, the label continues to be used for US-produced rice.

An American company then tried to genetically engineer Thai jasmine rice to allow it to be grown in the United States. Although the company claimed to use genetic materials from the International Rice Research Institute in the Philippines, there was no evidence to support the claim. This attempt evidenced the United State's intent to patent and claim ownership over Jasmine Rice, which was considered to be an unacceptable practice. Thai farmers and other Thais protested in front of the United States Embassy in Bangkok to voice their anger. The United States government then agreed not to patent rice strains developed from Thai Jasmine Rice.

But local experts believe that in the next round of the Thai-US free trade negotiation the United States will try to pressure the Thai government to match intellectual property protection to American levels by protecting patents on all kinds of life forms including plants, animals and microorganisms, as the government has done in free trade negotiations with several other countries. Thailand's law however forbids patenting plants and animals and has instead enacted laws to protect them. In addition, the United States will likely pressure Thailand to become party to the International Union for the Protection of New Varieties of Plants (UPOV) and demand that Thailand enacts a trademark law to replace the Geographical Indications Act. If successful, the patenting of jasmine rice by American researchers will become easier.

If the United States successfully patents new strains of rice developed from jasmine rice, Thai jasmine rice in the US market, which amounts to about 200,000 tons per year, will face a challenge as rice exporters will need to pay patent fees according to US laws. Even today, Thai rice is already facing problems from the use of the “jasmine rice” label by US-grown long-grain rice. The future of Thai jasmine rice continues to be a serious concern.

Foreign attempts to use Thailand as a food production base have occurred in two ways. First, joint ventures have been used by large corporations or nominees in Thailand to produce food by contract farming methods. This situation has been going on for many years. Foreign groups do not need to own production resources like land or perform production themselves. Such companies instead hire local farmers through a nominee. Japan's corporations use this method of acting in Thailand, Vietnam and perhaps other ASEAN countries too.

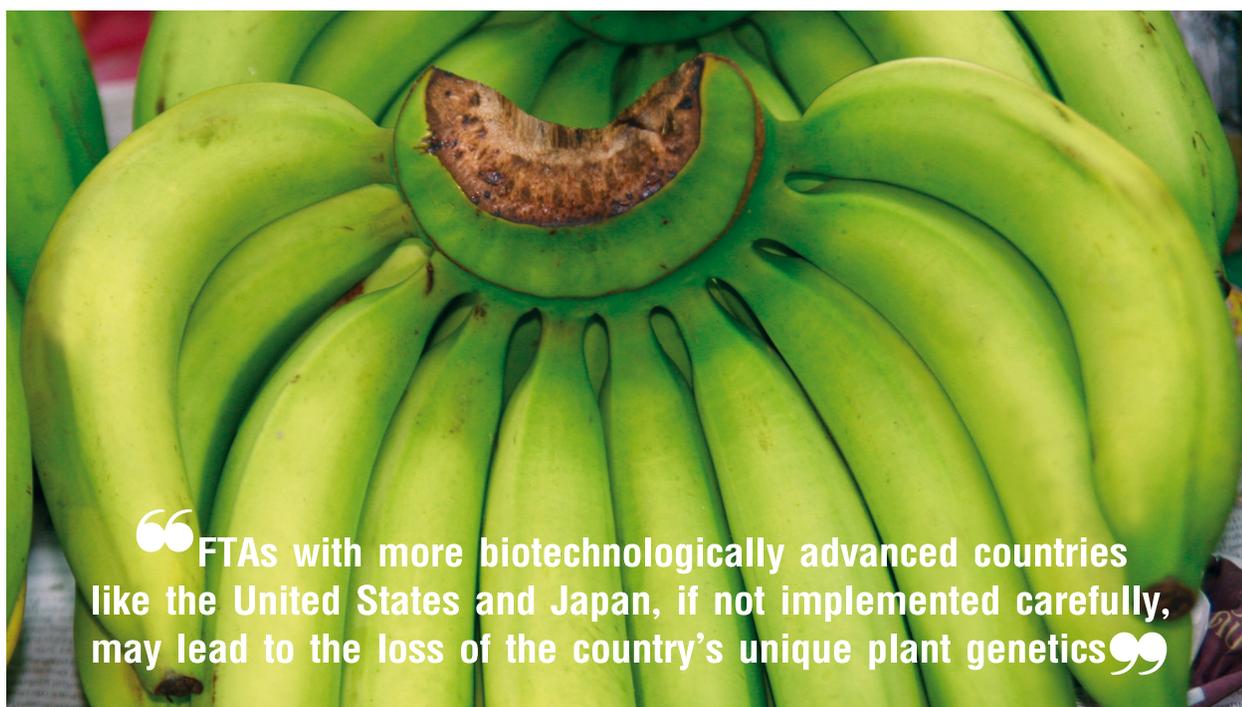
Another way corporations act is to buy or rent land with long-term contracts (through nominees who may be an individual or a juristic person) and invest in food production for exporting food back to their own countries or to the international market.

It's no surprise that foreign capital will choose fertile areas with good agricultural infrastructure such as the Chao Praya basin to achieve their goals. This way, the land will for a long time or forever remain under the control of foreign persons.

Large corporations from Taiwan and some Middle Eastern countries have apparently been trying to find land for agriculture in Thailand through nominees. China has also proposed to rent land in *Thung Kula Ronghai* area to grow jasmine rice to sell back to its own population.

There is yet no clear data on how much land is already in possession of foreign groups but it appears that such organisations have already infiltrated Thailand in subtle ways and may eventually push Thai farmers out of food production.

As a direct result of this process, not only can other countries cheaply utilise Thailand's agricultural areas with little benefits for the Thai people but they can also compete for infrastructure such as irrigation, transportation and communication which were created with Thai taxpayers' money and without their contribution. The losses caused by such developments outweigh the benefits and the country's food sovereignty also comes under threat.



“FTAs with more biotechnologically advanced countries like the United States and Japan, if not implemented carefully, may lead to the loss of the country's unique plant genetics”

Toward Food Security

“The best thing for Thailand’s present situation is an agricultural reform.”

All the aforementioned situations show that Thailand’s agricultural system is facing significant challenges and opportunities. The question that arises is what to do next.

As an important food security goal is food production which meets the consumption needs of the population in all situations with safe, eco-friendly production systems that allow farmers to have a secure life and society. Given this, the best thing for Thailand’s present situation is an agricultural reform.

The following topics should be part of such a reform and it is hoped that by raising these specific topics, more public discussion will be undertaken and solutions can hopefully be found.

1. Land reform

Several hundred thousand households in Thailand do not have any or sufficient land for their livelihoods. It’s likely that this number will increase in the future. Land-redistribution undertaken with appropriate related measures is an urgent priority. Important measures that the Reform Committee and the National Food Committee recommended already include tax measures and intervention in the land market through the National Committee on Land for Agriculture Policy and Land Bank. In addition, there should be a modern land database and a ceiling for land holdings to prevent monopolies. Land possession reform should be made a national agenda

2. Agricultural resources management

It is necessary, in terms of agricultural resources management, to: replenish soil, water and forests and return them to the quality levels which are necessary for food production; locate sufficient water sources; encourage farmers to use soil and water efficiently; ensure community participation in the conservation of water head forests, mangrove forests and community forests; improve and maintain soil and water quality in good conditions; support eco-friendly food production systems; and widely promote organic farming and other forms of alternative agriculture.

3. Improve food production efficiency

In order to improve food production efficiency, it is necessary to: encourage farmers to innovate and use technology and locally-available resources in production; support groupings of farmers to strengthen production and increase negotiating power in the market; and define agricultural zoning in accordance with resource conditions, social needs and the community’s way of life.

4. Ensure safety in food production systems

So as to ensure safety in food production systems, it is necessary to: reduce chemical use in agriculture; ban hazardous chemicals; implement measures to regulate chemical-use in agriculture; implement strict and consistent measures to test toxic residues in vegetables and fruits; reduce the

import of chemicals and fertilizers; and promote production and use of organic fertilisers.

5. Strike a balance

Thailand should strike a balance between agriculture for food security of households and communities with a focus on product diversity on the one hand and trade-oriented agriculture which focuses on market demand on the other hand. The country should strike a balance between food crops and energy crops given that the latter will likely demand more growing areas in the future.

6. Ensure security in farm work

Farmers should be able to make a living. In addition, as food producers, farmers across the country should be guaranteed a good quality of life and dignity at levels no lower than those in other professions in order to encourage young people to enter agriculture. In addition, concrete sustainable measures should be implemented by the Thai Government to reduce costs and increase incomes for farmers whilst strengthening and diversifying local food industry to add value to products and reduce export dependency.

7. Support agriculture conducive to food security

Thailand should aim to make households and communities self-reliant food production units based on the sufficiency economy philosophy, promote agriculture which is conducive to biodiversity both in terms of food type and plant/animal genetics and conserve and develop new strains of food which are unique to the community with nutritional and herbal values.

Although incomes from the agricultural sector account for less than 10% of GDP, the sector is more important than money or property as the real value of the agricultural sector is not monetary but food production that nourishes human life. Agriculture is, thus the foundation of life, supporting well-being and linking all the multiple dimensions of well-being together, whether economic, social or cultural.

As today's world is often rocked by food crises, a society with food security is a rich and powerful society. But if agriculture which is the foundation of food production is not secure, human life and society are also not secure. Even money or other properties cannot assist because they are but illusory. Only food and health are real tangible things in life.

8. Improve the efficiency of food distribution systems

Efficient food distribution facilitates convenient access to food. Improvements can be made in two major areas: firstly, by improving infrastructure to increase convenience, safety, speed and affordability, such as rail systems; and secondly, by improving market mechanisms to allow consumers access to reasonably-priced food without market monopolisation and manipulation.

9. Support R&D and innovation throughout the food chain

Research and development on soil and water quality and efficient and economical use of agricultural resources to maximum benefits should be promoted. In addition, knowledge and good practices should be widely disseminated. There should also be research and development in agricultural innovation, technology, and plant and animal genetics as well as increased funding for agricultural research both in the public and private sectors.

10. Make national food policies and plans with public participation

Thailand should develop legal measures to create national frameworks for agricultural development and for food safety, formulate measures to cope with food crises in times of disasters, epidemics or global crises and formulate measures to protect the interests of farmers in the context of international trade and trade liberalisation.

References

11 Thai Population and Health Indicators

1. Changing Demographics

- Institute for Population and Social Research, Mahidol University. (2011). Calculated by the authors.
- National statistical office. (1960). *Population and housing census 1960*. Bangkok: National statistical office.
- National statistical office. (1970). *Population and housing census 1970*. Bangkok: National statistical office.
- National statistical office. (1980). *Population and housing census 1980*. Bangkok: National statistical office. National statistical office. (1990). *Population and housing census 1990*. Bangkok: National statistical office.
- National statistical office. (2000). *Population and housing census 2000*. Bangkok: National statistical office. National statistical office. (2010). *Population and housing census 2010*. Advanced report.

2. Birth

- Bureau of Registration Administration, Department of Provincial Administration, Ministry of Interior. *Birth registration*. Retrieved from Bureau of Registration Administration: <http://www.bora.dopa.go.th/board.htm>
- Kamnuansilpa, P. and Chamratrithong, A. (1985). *Contraceptive use and fertility in Thailand: Results from the 1984 contraceptive prevalence survey*. Bangkok: National Institute of Development Administration.
- Knodel, J., Chamratrithong, A. National Research Council (U.S.). Committee on Population and Demography. Panel on Fertility Determinants (1982). *Fertility in Thailand; Trends, Differentials and Proximate Determinants*. Report No. 13, Committee on Population and Demography, Washington D.C.: National Academy Press, p. 18.
- National statistical office. (1960). *Population and housing census 1960*. Bangkok: National statistical office.
- National statistical office. (1970). *Population and housing census 1970*. Bangkok: National statistical office.
- National statistical office. (1980). *Population and housing census 1980*. Bangkok: National statistical office. National statistical office. (1990). *Population and housing census 1990*. Bangkok: National statistical office.
- National statistical office. (1993). *Report the social attitude of population survey 1993*. Bangkok: National statistical office.
- National statistical office. (2000). *Population and housing census 2000*. Bangkok: National statistical office.
- National statistical office. (2010). *Population and housing census 2010*. Advanced report.
- National statistical office. (2010). *Reproductive health survey 2009*. Bangkok: National statistical office.
- Prasartkul, P., Vapattanawong, P., Thongthai, V. (2011). "Fertility Transition and Its Impact" in Jones. G. and Im-em, W. (editors). *Impact of Demographic Change in Thailand*. Bangkok: UNFPA Thailand.

3. Morbidity and Mortality

- Bureau of Registration Administration, Department of Provincial Administration, Ministry of Interior. *Death registration*. Retrieved from Bureau of Registration Administration: <http://www.bora.dopa.go.th/board.htm>
- Global Health Observatory (GHO). World Health Organization. (2011). Retrieved November 30, 2011, from World Health Organization: <http://www.who.int/gho/countries/en/>.
- Porapakham, Y. and Boonyarattapan, P. (2006). Editor. *The report of Thailand population health examination survey III 2003-2004*. Nonthaburi: Health Systems Research Institute.

4. Internal Migration

- Institute for Population and Social Research, Mahidol University. (2010). *Data from Population and Migration Project*.
- Institute for Population and Social Research, Mahidol University. (2010). *Data from the CHAMPSEA Project*.
- National statistical office. (2003). *Report of the migration survey 2002*. Bangkok: National statistical office.

- National statistical office. (2005). *Report of the migration survey 2004*. Bangkok: National statistical office.
- National statistical office. (2006). *Report of the migration survey 2005*. Bangkok: National statistical office.
- National statistical office. (2007). *Report of the migration survey 2006*. Bangkok: National statistical office.
- National statistical office. (2008). *Report of the migration survey 2007*. Bangkok: National statistical office.
- National statistical office. (2009). *Report of the migration survey 2008*. Bangkok: National statistical office.
- National statistical office. (2010). *Report of the migration survey 2009*. Bangkok: National statistical office.
- Wibulpolprasert, S., (2011). Editor. *Thailand Health Profile 2008-2010*. Nonthaburi (Thailand): Ministry of Public Health.

5. International Migration

- Boonchaluxi, W., Chamchan, C., Holumyong, C., Apipornchaisakul, K., and Muensakda, P. (2012). *the national survey on Knowledge, attitude, and behaviors related to TB among Thai and foreign workers 2011*. Bangkok: Nathakorn Press.
- Bureau of Epidemiology, Department of Disease Control, Ministry of Public Health. (2011). *Annual epidemiological surveillance report 2010*. Bangkok: Printing Press, Express Transportation Organization.
- Huguet, J.W. and Chamratrithong, A. (2011). *Thailand Migration Report 2011*. Bangkok: International Organization Migration.
- Na Ranong, A., Na Ranong, V., and Jindaluk, S. (2009). *A Development Guideline for Thailand's Medical Hub*. N.D.
- NaRanong, A. and NaRanong, V. (2011). "The effects of medical tourism: Thailand's experience". *Bulletin of World Health Organization*. vol. 89: pp. 336-344
- National statistical office. (2010). *Population and housing census 2010*. Advanced report.
- Pachanee, C. and Wibulpolprasert, S. (2006). *Incoherent policies on universal coverage of health insurance and promotion of international trade in health services in Thailand: Health Policy and Planning*. Published by Oxford University Press in association with The London School of Hygiene and Tropical Medicine. Retrieve <http://heapol.oxfordjournals.org/cgi/reprint/czi017v1>
- Registration and information technology section. Office of Foreign Worker Administration. Ministry of Labor. (2012). *Annual report*. Retrieved on January 2012, from <http://www.wp.doc.go.th/annual-statistic>.

6. Quality of Life and Human Development

- International Living. (2011). *Quality of Life Index*. Retrieved from http://www1.international-living.com/qofl2011/show_country.php?country=Thailand
- Khonthai foundation. (2011). *10 Voices of "Thai people"*. Retrieved on 29 August from <http://www.khonthaifoundation.org>.
- Social Data-based and Indicator Development Office, Office of the National Economics and Social Development Board. (2011). *Social Indicators*. Retrieve http://social.nesdb.go.th/SocialStat/StatDefault_Final.aspx

7. Workforce and Economy

- National statistical office. (2001). *The labor force survey (whole kingdom) round 1 2001*. Bangkok: National statistical office.
- National statistical office. (2006). *The labor force survey (whole kingdom) round 1 2006*. Bangkok: National statistical office.
- National statistical office. (2007). *The labor force survey (whole kingdom) round 1 2007*. Bangkok: National statistical office.
- National statistical office. (2009). *The labor force survey (whole kingdom) round 1 2009*. Bangkok: National statistical office.
- National statistical office. (2011). *The informal labor force survey (whole kingdom) round 3 2010*. Bangkok: National statistical office.
- National statistical office. (2011). *The labor force survey (whole kingdom) round 1 2011*. Bangkok: National statistical office.
- Office of the National Economic and Social Development Board. (2007). *POPULATION PROJECTIONS FOR THAILAND. 2000-2025*. Bangkok: The National Economic and Social Development Board.
- Office of the National Economic and Social Development Board. (2011). *Poverty and inequality situation in Thailand 2010*. Bangkok: The National Economic and Social Development Board.
- Office of the National Economic and Social Development Board. (n.d.). *National income of Thailand 2009*. Bangkok: The National Economic and Social Development Board.

8. Family and Social Support

- Department of Health. *Interview for data on community participation for older adults*. January, 2012.
- Foundation of Thai Gerontology Research and Development Institute(TGRI). (2012). Interview for data collection of community participation for older adults
- Ministry of Public Health, Ministry of Social Development and Human Security, and Japan International Cooperation Agency. (n.d.). *Project on Community Based Integrated Services of Health Care and Social Welfare for Thai Older Persons-CTOP*. (n.p.).
- National statistical office, and International Health Policy Program. (2011). *Gender dimension*. Bangkok: Jarunsnitwong Press.
- National statistical office. (1960). *Population and housing census 1960*. Bangkok: National statistical office.
- National statistical office. (1970). *Population and housing census 1970*. Bangkok: National statistical office.
- National statistical office. (1980). *Population and housing census 1980*. Bangkok: National statistical office.
- National statistical office. (1990). *Population and housing census 1990*. Bangkok: National statistical office.
- National statistical office. (1990). *Population and housing census 1990*. Bangkok: National statistical office.
- National statistical office. (2010). *Population and housing census 2010*. Advanced report.
- National statistical office. (2011). *Survey of knowledge and attitude toward senior citizens 2011*. Bangkok: National statistical office.
- Office of the National Economics and Social Development Board.(2011). *Social and quality of life database*. Retrieve from Office of the National Economics and Social Development Board in November, 30. <http://social.nesdb.go.th/social/>
- Office of the National Economics and Social Development Board. (n.d.). *Monitoring and evaluation results of the 10th National Economic and Social Development Plan*. Bangkok: Office of the National Economics and Social Development Board.
- Senior Citizens' Council of Thailand. Interview for data collection of community participation for older adults in January, 2012.

9. Eco-Friendliness

- National Economic and Social Development Board (NESDB) (2009). *Survey of opinions and social attitude on "Global warming and Thai society"*. n.p.
- National statistical office. (2010). *Population and housing census 2010*. Advanced report.
- Pollution Control Department. Ministry of Natural Resources and Environment. (2011). *Report on Thailand's pollution situation (draft)*. n.p.
- The Green Manual, Department of Environment, Bangkok Metropolitan Administration, and JICA. (n.d.). *Guideline to decreasing heat for the (dear) world*. n.p.
- The World Bank. (2011). *World Development Indicators*. Retrieve November 30, 2011 from Carbon Dioxide Information Analysis Center. The United States. <http://data.worldbank.org/indicator>.
- The World Bank. (2011). *World Development Indicators*. Retrieve November 30, 2011 from International Energy Agency. The United States. <http://data.worldbank.org/indicator>.

10. Health Service System

- International Health Policy Program (2010). *National health accounts in Thailand 2002-2008 (Revision edition)*. Nonthaburi: International Health Policy Program.
- Limwattananon, C., Limwattananon, S., Sakulpanit, T., Greetong, T., Mills, A., and Tangcharoensathien, V. (2010). *Different provider payment methods: variation in clinical practice, lessons from Thailand*. n.p.
- The Thai Working Group on Burden of Disease and Injuries. (2004). *Burden of Disease and Injuries in Thailand*. Nonthaburi: International Health Policy Program
- The United Nations Population Fund (UNFPA), and National Economic and Social Development Board (NESDB). (2011). *Impacts of demographic changes in Thailand*. Bangkok: The United Nations Population Fund.

10 Outstanding Health Situations

1. Flood of the Century: Warning of Things to Come

- 1 "มหาอุทกภัย เสียหายยับ 1 ล้านล้าน". *Bangkokbiznews*. 21 November 2011.
- 2 "ภัยพิบัติปี 2554 ทำโลกเจ๊งสุด". *Post Today*. 17 December 2011.
- 3 "อุทกภัยในประเทศไทย 2554". Retrieved 20 January 2012, from <http://www.th.wikipedia.org>. A report from 24/7 Emergency Operation Center for Flood, Storms and Landslide.

- 4 "นายกฯ แลงแผนแม่บทการบริหารจัดการน้ำของรัฐบาล". *Public Policy Information Center, Isranews Agency*. 20 January 2012. Retrieved 31 January 2012, from <http://www.thaireform.in.th/multi-dimensional-reform/2011-12-08-05-21-57/item/6988-2012-01-20-07-50-31.html>
- 5 "มหาอุทกภัย เสียหายยับ 1 ล้านล้าน".
- 6 Climatological Center, Meteorological Development Bureau. "ภัยพิบัติทางธรรมชาติ ปี 2554". Retrieved from <http://www.weather.go.th>.
- 7 "เสรี สุภราทิตย์ : บทเรียนน้ำท่วม ประชาชนต้องลงมือลดอัตรา". *Thai Post*. 4 December 2011.
- 8 "มหาอุทกภัย 2554". *National Geographic*. December 2011.
- 9 "ทวิดา นักวิชาการด้านการจัดการภัยพิบัติ วิชาภัย ศปภ.ฯ". Retrieved 25 October 2011, from <http://www.tcithai.com/investigative-story/944>
- 10 Pradit Ruangdit. "วิกฤติที่เกิดจากความล้มเหลวของผู้นำ". Retrieved 4 November 2011, from <http://www.prasong.com>
- 11 "ครั้งแรกของโลก เขื่อนน้ำท่วมพองรัฐ". *Thai Post*. 18 December 2011.
- 12 "ยกเครื่องการสื่อสารภาครัฐ วิกฤติศรัทธา ฝ่าอุทกภัย". Retrieved 8 November 2011, from <http://www.bangkokbiznews.com>
- 13 "รถทอง โหมยกแก๊งวิกฤติศปภ.". Retrieved 30 October 2011, from <http://www.matchon.co.th>
- 14 "ลือว่อนเน็ต! ศปภ.พาดหัวคืบงบตั้งซีพี 20-50%". *ASTV Manager*. 5 November 2011.
- 15 "ปชช.มั่นใจองคมนตรี เล็งถอดถอน 2 สส". *Thai Post*. 14 November 2011.
- 16 Hydro and Agro Informatics Institute. *บันทึกเหตุการณ์มหาอุทกภัยปี 2554*. Retrieved from <http://www.thaiwater.net/current/flood54.html>
- 17 "เทียบข้อมูลฝนจากดาวเทียม หาสเหตุวิกฤติน้ำท่วม 2554". *Matchon*. 1 November 2011.
- 18 Somsak Jiemthirasakul. "ข้อเสนอตั้งกก.อิสระสืบหา-สรุปข้อเท็จจริงเหตุน้ำท่วม และปฏิกริยาต่อบทความ "ดร.ชินวัตร สุรัสวดี". *Matchon Online*. Retrieved 3 November 2011, from http://www.matchon.co.th/news_detail.php?newsid=1320241807&grid=no&catid=02
- 19 "ธีระสารภาพปิดเขื่อนรอยเขี้ยว". *Thai Post*. 11 November 2011.
- 20 "กฟผ.ซี 5 ปมข้อสงสัย ข้อเท็จจริงเรื่องการระบายน้ำ". *Bangkokbiznews*. 3 November 2011.
- 21 "กทผ.ทวันเปิดประตูคลองพระยาสุเรนทร์ทำน้ำท่วมสายใหม่". *Post Today*. 1 December 2011.
- 22 Natthanant Ithiyaporn. "ภูมิปัญญาชาวม้งธนฯ ใช้คลองราชมนตรึดน้ำออกทะเล ไม่ต้องผ่านเจ้าพระยา". *Public Policy Information Center, Isranews Agency*. Retrieved 31 October 2011, from http://www.thaireform.in.th/index.php?option=com_flexicontent&view=items&id=6621:2011-10-31-15-31-53
- 23 "รอยล จิตรดอน แน่แบ่งปลือกรับน้ำ เลิกคิดแบบเดิม". *Post Today*. 17 December 2011.
- 24 "ดร.รอยล จิตรดอน ถอดบทเรียนน้ำท่วมประเทศไทย". *Matchon*. 24 November 2011.
- 25 "2012 : ความขัดแย้งสังคมน่ากลัวกว่าภัยพิบัติ". *Thai Post*. 11 December 2011.
- 26 "เสรี สุภราทิตย์ : บทเรียนน้ำท่วม ประชาชนต้องลงมือลดอัตรา". *Thai Post*. 4 December 2011.
- 27 These are (1) the Royal Decree authorizing the Ministry of Finance to have a loan for the establishment of water management system and the foundation of the country's future BE 2555. A sum of 350 billion baths is required for the implementation of the water management master plan and flood prevention; (2) the Royal Decree to improve the management of debts incurred by the Ministry of Finance to support the Fund for the rehabilitation and development of financial institutions BE 2555, which is aimed to balance the payment of government and public debts to facilitate additional loans; (3) the Royal Decree to establish the Disaster Insurance Support Fund BE 2555, to establish a fund of 50 billion baht to shore up the confidence of foreign underwriters; and (4) the Royal decree to provide financial assistance to flood victims BE 2555, which sets up a fund of 300 billion baht as low-interest loans to medium-and small-scaled businesses and individual citizens.
- 28 "นายกฯ แลงแผนแม่บทการบริหารจัดการน้ำของรัฐบาล". *Public Policy Information Center, Isranews Agency*. 20 January 2012. Retrieved 31 January 2012, from <http://www.thaireform.in.th/multi-dimensional-reform/2011-12-08-05-21-57/item/6988-2012-01-20-07-50-31.html>

2. Wang Nam Khiao "Model": Reflecting the Problems of People, Forest and Land

- 1 This is based on the claim that a particular species of fern which flourishes only at highly clean air and are usually found only in Level-7 Ozone forest appear to thrive in Wang Nam Khiao. in "หนีเสือปะจระเข้ วังน้ำเขียว-เขาแผงม้า ชื่อที่ "ส.ป.ก.-กบพ.5" ผุดริสอริต?". *Food Security Plan*. 20 July 2011. Retrieved from <http://www.food-resources.org/news/20/07/11/12385>.

- 2 “ชวนน้องตูน-ดูแมลงที่สะแกราช “แหล่งสวนชีวพรรณ” แห่งแรกของไทย”. *ASTV Manager online*. 10 January 2011.
- 3 “แห่งสัมผัสหนาววังน้ำเขียว าคศสพ 30 ล.”. *Komchadluek*. 23 January 2011.
- 4 “เขาใหญ่อุด ราคาที่ดินพุ่ง 40% เผย CP ทุนใหญ่กวาด “วังน้ำเขียว””. *ASTV Manager Daily*. 8 February 2011.
- 5 “3 หน่วยงานขายผลผลิตคืนที่ป่าจ้อหรือ ‘เขาค้อ-เขียงใหม่-ภูเก็ด’”. *Prachacharturakij*. 23 July 2011.
- 6 “อุทยานฯ ลั่นรื้อรีสอร์ทรุกป่าอย่างเดียว-วนเข้าใจ”. *Thairath*. 22 July 2011.
- 7 “3 หน่วยงานขายผลผลิตคืนที่ป่าจ้อหรือ ‘เขาค้อ-เขียงใหม่-ภูเก็ด’”. *Prachacharturakij*. 23 July 2011.
- 8 “10 ชาวเกษตร-สิ่งแวดล้อมเด่นในรอบปี 54”. *Naewna*. 30 December 2011.
- 9 “ผู้ว่าฯ โคราชแนะ ‘ให้เขา’ แก่รุกที่ ปลัด ทส. สุ่มพื้นที่ซบเซาทั้งลูก”. *Matchon*. 28 July 2011.
- 10 “คนวังน้ำเขียวผวาถูกไล่ที่ขู่ก่อม็อบจี้รัฐแก้ปัญหา”. *Thai Post*. 28 July 2011.
- 11 “คนวังน้ำเขียวลุกฮือต้านรื้อรีสอร์ท”. *ASTV Manager Daily*. 4 August 2011.
- 12 “คนวังน้ำเขียวฮือปิดถนน-ล่าซื้อที่ดิน”. *Komchadluek*. 5 August 2011.
- 13 “433 รีสอร์ททศกกลางป่า”. *Bangkokbiznews*. 18 January 2012.
- 14 “แจ้งมวังน้ำเขียวโมเดล เขาจริงหรือโมเดลชื้อเวลา”. *Post Today*. 31 July 2011.
- 15 Apichart Thongyuu. “ใครบุกกรุกทำลาย ‘วังน้ำเขียว’”. *Thai Post*. 30 July 2011.
- 16 “เกาะติดภารกิจ ‘วังน้ำเขียวโมเดล’ ถึงเวลาทวงคืนป่าคืนจากกลุ่มทุน”. *Naewna*. 8 August 2011.
- 17 Sarinee Archavananthakul. “ความเหลื่อมล้ำบับพทพฯ”. Office of National Reform. March 2011.
- 18 “ผู้ว่าฯ โคราชบินดูรีสอร์ทรุกป่าจริง หนุนคืนป่าสู่ธรรมชาติ อัด ชรก. มีเอี่ยวให้ทำผิด”. *Komchadluek*. 24 July 2011.
- 19 Mingsun Kao Sa-Ard. “นโยบายที่ดินป่าไม้ถึงเวลาต้องลึงคายนานา”. *Matchon*. 7 September 2011.
- 20 “ส.ป.ก. เร่งแก้ กม.ปฏิรูปที่ดินสอดรับสถานการณ์ปัจจุบัน”. *Naewna*. 23 August 2011.
- 21 “เอกสารสิทธิที่ดินในเขต ส.ป.ก. ของเกษตรกร”. *Post Today*. 22 August 2011.

3. Right to Refuse Treatment: When Death is the only Dignified Option

- 1 “คำประกาศิตตตาย ส.ส.-ส.ว. โดยขวาง วันนังคมบับพทพ”. *Banmuang*. 27 March 2002.
- 2 “จากแพทย์กรณยฆาตสุลิตีในการเลือกทางตาย”. *Naewna*. 11 June 2011.
- 3 Amara Sunthomthada and Hathairat Siengdang. 2006. “วาระสุดท้ายแห่งชีวิตและสิทธิการตาย” in *IPSR Annual Report 2006: Mortality...The Reflection of Population Security*. Kritaya Archavanitkul and Vorachai Thongthai (eds). Nakompathom: Population and Social Publishing.
- 4 Natthakorn Withanont. “สิทธิในการตาย”. *Bangkokbiznews*. 22 February 2007.
- 5 “สิทธิการตาย” เรื่องใหม่ของคนไทย”. April 2007. Retrieved from <http://www.oknation.net/blog/print.php?id=29498>.
- 6 “สิทธิการตาย เสรีภาพของผู้ป่วย บนทางแพร่งของสังคม”. *ASTV Manager*. 1 June 2010.
- 7 “โพลล์หนุน ‘การรณยฆาต’ ช่วยผู้ป่วยตายพ้นทรมาน”. *Naewna*. 28 June 2002.
- 8 Thanawat Petchlawien. “เจตจำนงครั้งสุดท้ายของคนไข้ขอใช้สิทธิเลือกตาย”. *Post Today*. 28 May 2011.
- 9 “แพทย์สมาชิกกรณค่านสิทธิการตาย ชี้อยู่หรือตายเงินเป็นปัจจัยหลัก”. *Bangkokbiznews*. 6 April 2002.
- 10 “จ้อคิวคลอด กม. ให้ ‘คนไข้’ มีสิทธิเลือกตาย-สงบ”. *Daily News*. 12 September 2005.
- 11 “แพทย์สมาชิก ‘จดหมายเจตนตาย’”. *Thairath*. 9 June 2011.
- 12 “แพทย์รณมถ กม.ขอใช้สิทธิการตาย”. *ไทยโพสต์*. 11 June 2011.
- 13 “มติอนุช สิทธิการตาย แพทย์สภาฯ รอมว.ส. ใหม่ แก่ 4 ข้อหลัก”. *Matchon*. 2 August 2011.
- 14 Thidamont Pimpachai. “แพทย์สภา-หมออาวุโส ถกกฎหมาย ‘สิทธิการตายอย่างสงบ’”. *Information Center for Community*. 13 July 2011. Retrieved from <http://www.isranews.org/community-news/ประชาชนนิยม-ประชาคม/23-community-network/2816-แพทย์สภา-หมออาวุโส-ถกกฎหมาย-สิทธิการตายอย่างสงบ.html>.

4. Thailand Reform: Unfinished Uprooting of the Poisonous Tree

- 1 Sarinee Archavananthakul. “ความเหลื่อมล้ำบับพทพฯ”. Office of National Reform. March 2011.
- 2 Nithi Eiwsiwong. “ความเหลื่อมล้ำ”. *Matchon Weekly*. Vol. 1567 (27 August-2 September) 2010.
- 3 “‘อานันท์-ประเวศ’ ตั้งเป้าลดเหลื่อมล้ำในสังคม”. *Komchadluek*. 18 June 2010.
- 4 “‘คปร.’ ชี้ความเหลื่อมล้ำ 5 ด้านต้นตอปัญหาของชาติ”. *Komchadluek*. 13 July 2010.
- 5 The National Reform Committee. “แนวทางการปฏิรูปประเทศไทย ข้อเสนอต่อพรรคการเมืองและผู้มีสิทธิเลือกตั้ง”. Office of National Reform. 3 July 2011.
- 6 “ปิดประชุมสมัชชาปฏิรูปได้ 9 ประเด็นลดเหลื่อมล้ำ”. *Komchadluek*. 26 March 2011.
- 7 Sarinee Archavananthakul. “ความเหลื่อมล้ำบับพทพฯ”.

- 8 The National Reform Committee. “แนวทางการปฏิรูปประเทศไทย ข้อเสนอต่อพรรคการเมืองและผู้มีสิทธิเลือกตั้ง”.
- 9 “‘อานันท์’ ชงตั้งงบ 5 แสนล้าน หนุนปฏิรูปที่ดินแก่เหลื่อมล้ำ”. *Bangkokbiznews*. 28 February 2011.
- 10 “คปร. แนะนำปฏิรูปการบริหารท้องถิ่น”. *Post Today*. 18 April 2010.
- 11 “ตามคาด ‘อานันท์’ แถลง คกก.ปฏิรูปประเทศลาออกยกชุด” *Thairath*. 14 May 2010.
- 12 “เทศบาลปฏิรูปประเทศกลับมาก่อแล้ว”. *Komchadluek*. 22 June 2010.
- 13 “‘เอแบคโพลล์’ ชี้ ปชช. ไม่เชื่อมั่นแผนปฏิรูปประเทศ”. *Bangkokbiznews*. 14 June 2010.

5. Hurdles towards the ASEAN Community

- 1 Department of ASEAN Affairs, Ministry of Foreign Affairs. 2007. *ASEAN Community*. Retrieved 10 January 2012, from <http://www.mfa.go.th/asean/ASEAN%20Main.pdf>; Division 1, Department of ASEAN Affairs, Ministry of Foreign Affairs. 2010. *ASEAN Political-Security Community Blueprint*. Bangkok: ASEAN.
- 2 Foreign Office, The Government Public Relation Department. 2011. *Thailand and ASEAN*. Bangkok: The Government Public Relation Department, pp. 111-112.
- 3 Foreign Office, The Government Public Relation Department, pp. 112-113.
- 4 Department of ASEAN Affairs, Ministry of Foreign Affairs.; Foreign Office, The Government Public Relation Department, pp. 113-114.
- 5 Foreign Office, The Government Public Relation Department, pp. 145, 167-168, 170, 190.
- 6 “อาเซียนคืนหน้าทั้งห้าทั้งเร็ว สู่ประชาคมอาเซียนในปี 2558”. *Naewna*. 1 September 2011.
- 7 “ธีระชัยยันต์สิทธิบีโอไอ แลกคณาธิบดีรับมือ ‘เออีซี’”. *Bangkokbiznews*. 6 September 2011.
- 8 Foreign Office, The Government Public Relation Department, p. 161.
- 9 Karunant Ratanasanwong. “โอกาสที่ไทยต้องรีบคว้า การศึกษากับประชาคมอาเซียน”. *Thai Post*. 19 January 2011.
- 10 “ลงมติปรับปฏิทินมหา’ลัยสากล”. *Thai Post*. 26 December 2011.
- 11 “ประธานทปอ.มรท. เหมินเลือนเปิดเทอมที่ไร้สาระ”. *Komchadluek*. 9 August 2011.
- 12 Kiatanant Luankaw. “ถ้าจะเลื่อนเปิดเทอมมหาวิทยาลัยต้องทำอะไรต่อ”. *Bangkokbiznews*. 12 August 2011.
- 13 “แนะทุกสถาบันเพิ่มทักษะภาษาอังกฤษ ‘สุรินทร์’ ท่วงไทยไม่พร้อมแข่งอาเซียน”. *Thansethakij*. 5 May 2011.
- 14 “ภาษาอังกฤษคนไทยอยู่อันดับ 43 ในเอเชีย”. *Matchon*. 31 August 2011.
- 15 Samlee Raksuthee. “เมื่อกระทรวงศึกษาธิการ...ให้ (บังคับ) ครูและนักเรียนต้องพูดภาษาอังกฤษ”. *Matchon*. 1 January 2012.
- 16 Wassayo Ngamkam. “เปิดปม 6 ปัญหาหลักของชาวมอญอาเซียน”. *Post Today*. 17 October 2011.

6. Thai-Cambodian Border Conflict: Tension Continues after Ceasefire

- 1 “1 troop killed, 4 injured in renewed skirmish”. *The Nation* (online). 5 February 2011.; “What happen and when”. *The Nation* (online). 8 February 2011.; “ทป.ปฐนบ่าเหนือ 9 ชั้นพร้อมเลื่อนศพันตรีให้สืบเอกชนกร พูล.เพิ่ม”. *MOCT.*, 9 February 2011.; “10 Thai Troops injured in Surin after ‘soft weapon clash’ on border”. *The Nation* (online). 1 May 2011.
- 2 “Cambodian PM says 24 Cambodians killed in border clashes with Thailand since 2008”. *Xinhua*. 21 June 2011.
- 3 The judgement of International Court of Justice, translated into Thai by Ministry of Foreign Affairs. in Borwamsak Uwanno. *Reveal The Most Secret of Preah Vihear 1962-2008*. Bangkok: Matchon, 2008. p. 116.
- 4 Borwamsak Uwanno, p. 249.
- 5 Draft Decision submitted by the World Heritage Committee, document 32COM 8B.102. 7 July 2008.
- 6 “Thailand wants Preah Vihear sign removed”. *The Nation*. 23 January 2011.
- 7 “Cambodia replaces controversial stone tablet”. *The Nation*. 26 January 2011.
- 8 “Cambodia removes second provocative tablet”. *The Nation*. 17 January 2011.
- 9 “Cambodia refuses to remove pagoda or flag”. *The Nation*. 2 February 2011.
- 10 Speech of Hun Sen, Prime Minister of Cambodia at the graduation and diploma conferment of Norton University, Phnom Penh. 7 February 2011.
- 11 “อภิสิทธิ์โทรปรับคืนมูม เชมระเมิดใช้พระวิหารยงถ่มไทย”. *Matchon*. 9 February 2011.
- 12 “Court hands JBC minutes back to parliament”. *The Nation*. 31 March 2011.
- 13 Request for interpretation of the judgement of 15 June 1962 in the case concerning the temple of Preah Vihear. 28 April 2011.
- 14 International Court of Justice’s order on the request for the indication of provisional measure. 18 July 2011.
- 15 “Thai doctor to treat Veera in Phnom Penh prison”. *The Nation*. 3 December 2011.
- 16 Borwamsak Uwanno. “แถลงการณ์ร่วมไทย-กัมพูชา : การขึ้นทะเบียนปราสาทพระวิหารฯ กับมาตรา 190 ของรัฐธรรมนูญ”. *Matchon*. 1 July 2008.

7. Revoking Licenses for Four Toxic Chemicals

- 1 “แกะรอย 6 ยักษ์ใหญ่ ค้าสารเคมีข้ามชาติ”. *Komchadluek*. 8 September 2011.
- 2 “มัจจุราชสีจาง วิกฤตยาฆ่าแมลง”. *Komchadluek*. 3 October 2011.
- 3 “ชงภาษีพิเศษ บริษัทเคมีพิษ ทำกองทุนรักษาชาวนา”. *Komchadluek*. 21 November 2011.
- 4 Information Center, Bio Thai Foundation. “ฟ้องศาลปกครองสั่งถอนผู้ทรงคุณวุฒิ คณะกรรมการวัตถุอันตราย”. 7 February 2011. Retrieved from <http://www.biothai.net/node/7341>.
- 5 Information Center, Bio Thai Foundation. “สถานการณ์ปัญหาสุขภาพของเกษตรกรและการควบคุมสารกำจัดศัตรูพืช”. 8 November 2010. Retrieved from <http://www.biothai.net/node/6139>.
- 6 Information Center, Bio Thai Foundation.
- 7 “แกะรอย 6 ยักษ์ใหญ่ ค้าสารเคมีข้ามชาติ”. *Komchadluek*. 8 September 2011.
- 8 “ชงภาษีพิเศษ บ.เคมีพิษ ทำกองทุนรักษาชาวนา”. *Komchadluek*. 21 November 2011.
- 9 “ชงภาษีพิเศษ บ.เคมีพิษ ทำกองทุนรักษาชาวนา”.
- 10 “9 กฎเหล็ก ห้ามผ่าน 4 สารพิษ เปิดใจ อธิบดีกรมวิชาการเกษตร”. *Komchadluek*. 22 September 2011.
- 11 “เครือข่ายเกษตรกรประท้วง จี้ยกเลิกสารเคมี 4 ชนิด”.
- 12 “2 สมาคมยักษ์คุมเคมีเกษตรหั่นล้าน”. *Komchadluek*. 30 November 2011.
- 13 “จับตาสารเคมีกำจัดศัตรูพืชขาดหนก ซึ้นทะเบียนไม่ทัน 22 ส.ค. ตามกม.”. *ASTV Manager*. 18 April 2011.
- 14 “กรมวิชาการเกษตรเสนอเลิกนำเข้าสารเคมีอันตราย 4 ชนิด”. Retrieved 10 September 2011, from <http://news.thaipbs.or.th>
- 15 “พิษสารเคมีตกค้าง ภาวะขาด ภาวะชีวิตคนไทย”. *Thai Post*. 6 February 2011.

8. Time for the first Thai Traditional Medicine Hospitals

- 1 see “การแพทย์แผนไทยในยุคแห่งอรุณรุ่ง”. *ASTV Manager*. 16, 24 February 2011.
- 2 see Thai Traditional Medicine Program, Ramkhamhaeng University. “ประวัติวิเวกรรรมแผนไทย”. Retrieved from <http://www.ttmp.ru.ac.th/km/ประวัติวิเวกรรรมแผนไทย.htm>.
- 3 “กว่าจะเป็นกรมพัฒนาการแพทย์แผนไทยและการแพทย์ทางเลือก”. *Siamrath*. 7 October 2011.
- 4 Thai Holistic Health Foundation. “บัญชียาหลักแห่งชาติจากสมุนไพร”. Retrieved from <http://www.thaihof.org/page/บัญชียาหลักแห่งชาติจากสมุนไพร>
- 5 “กัลลสมุนไพรไทยสูญพันธุ์ สธ.เร่งแผนคุ้มครอง”. *Thairath*. 14 November 2011.
- 6 “ขึ้นทะเบียนรับรองหมอพื้นบ้านป้องกันสูญหาย ต่างชาติซุก”. *Komchadluek*. 25 November 2011.
- 7 “วิทย์ฯ ดันใช้แพทย์แผนไทยทุกรพ.หวังลดนำเข้ายาออกปีละ 5 พันล้าน”. *Post Today*. 1 September 2011.
- 8 “จัดตั้งสถาบันยาแผนไทยผู้ผู้ประกอบการ เพิ่มศักยภาพแข่งตลาดอาฟต้า”. *Thansethkaj*. 22-24 September 2011.
- 9 “อึ้ง คนไทยใช้ยามูลค่าสูงกว่า 1.3 แสนล้านบาท”. *ASTV Manager*. 19 August 2011.
- 10 see Marcia Angell, M.D. *The Truth about Drug Companies*. Bangkok : Folk Doctor Foundation, 2006. [Translated into Thai]
- 11 see Ray Moynihan and Alan Cassels. *Selling Sickness*. Bangkok : Folk Doctor Foundation, 2007. [Translated into Thai]
- 12 “จุดตัดสำคัญสมุนไพรยาไทยแห่งชาติ”. *ASTV Manager*. 20 April 2010.
- 13 National Health Assembly. “โรงพยาบาลแพทย์แผนไทยแห่งแรก ปฏิรูประบบสุขภาพชุมชน-คนไทย”. 5 May 2010. Retrieved from <http://www.gotoknow.org/blogs/posts/372009>.
- 14 “ตั้งรพ.แพทย์แผนไทยแห่งแรก เพิ่มทางเลือก-อนุรักษ์ภูมิปัญญา”. *Bangkokbiznews*. 29 March 2010.
- 15 “สธ.เปิดรพ.แผนไทย 9 แห่ง”. *Thai Post*. 24 March 2011.
- 16 “การแพทย์แผนไทย”. Retrieved from <http://www.th.wikipedia.org/wiki/การแพทย์แผนไทย>.
- 17 see “ไทยกับทรัพย์สินภูมิปัญญา ความรู้ไม่ทันกาลโงของผู้จวยโอกาส”. 2 August 2007. Retrieved from <http://www.oknation.net/blog/buzz/2007/08/02/entry-1>
- 18 “ภูมิปัญญาไทยยังเสี่ยงถูกต่างชาติซุก จับตา 13 สมุนไพร-นวด-ฤาษีติดตูดถูกลอบจดทะเบียน”. *ASTV Manager*. 4 May 2009. Retrieved from <http://www.manager.co.th/QOL/ViewNews.aspx?NewsID=9520000049489>.
- 19 “เร่งออกกฎหมายสกัดกั้นภูมิปัญญาไทย จี้พื้นฐานข้อมูลภูมิปัญญาไทย”. *Thai Post*. 5 September 2011.
- 20 “จุดตัดสำคัญสมุนไพรยาไทยแห่งชาติ”.
- 21 “ไทย ผู้นำการแพทย์ดั้งเดิมอาเซียนฯ”.

9. Child ID Cards and Unanswered Questions

- 1 The Secretariat of the Cabinet. Circular Notice no. นร 0504/ว172 Smart Card. 11 July 2003.
- 2 Interviewed by Thai Health Staff on 12 January 2012.
- 3 The Royal Decree providing name titles to women BE 2460.

- 4 Section 6.2, first paragraph: The card is valid from the day of issue and to last eight years from the cardholder's birthday after issue.
- 5 Section 5, first paragraph: Every Thai national from seven to seventy years old whose name appears in House Registration must hold a card according to this Act.
- 6 “มท.ตีเดียร์10ก.ค.ทำบัตรประช.เด็ก 7 ปี”. *Komchadluek*. 6 July 2011.
- 7 “ตีเดียร์ 10 ก.ค. ทำบัตรประชาชนเด็ก จัดรทกรกถึงโรงเรียน”. 8 July 2011. Retrieved from <http://hillight.kapook.com/view/58807>
- 8 “เด็กชนเผ่าม้งทำบัตรประชาชน ทำมกลางบรรยากาศคึกคัก”. 11 July 2011. Retrieved from <http://www.thainews70.com>
- 9 “7 ขวบ ตัวตนเด็กไทย ได้เวลาบัตรประชาชนรุ่นใหม่”. *ASTV Manager*. 5 July 2011.
- 10 “เดินหน้า 7 ขวบทำบัตรประชาชน เด็กหรือผู้ใหญ่ ใครได้ประโยชน์”. 8 July 2011. Retrieved from <http://www.phoncharoen.net>
- 11 “ความพิลึกของสังคมไทยเมื่อเด็ก 1 ขวบ (จะ) มีบัตรประชาชน”. *ASTV Manager*. 11 October 2011.
- 12 “เดินหน้า 7 ขวบทำบัตรประชาชน เด็กหรือผู้ใหญ่ ใครได้ประโยชน์”.
- 13 “กำชับเข้ม ทะเบียนราษฎร” สกเด็กต่างตัวสวมบัตรประช.”. *Komchadluek*. 12 May 2011.

10. BOI and Investment Promotion Policy to Strengthen Healthcare Systems

- 1 Duangkamol Sajirawanakul. “ต้นแผน ‘เมดิคัล ฮับ’ ดึงผู้ป่วยนอก สร้างไทย ‘ศูนย์กลางสุขภาพโลก’”. *Bangkokbiznews*. 6 May 2010.
- 2 “สส. เน้นนโยบาย 4 ด้านผลักดัน Medical Hub”. *Matichon*. 24 September 2010.
- 3 an organisation under the Fiscal Policy Research Institute Foundation, Ministry of Finance.
- 4 “BOI แจกคลังศึกษายกระดับสิทธิประโยชน์คนไทยเมดิคัลฮับ”. *Prachacharturakij*. 11 August 2010.
- 5 “บอร์ดบีโอไอออกเครื่อง เชื้อลงทุนอุตสาหกรรมสุขภาพ”. *Thairath*. 25 November 2010.
- 6 “อัมมาร” ดำเนิน “เมดิคัลฮับ” โฉมเดียวเร็วที่สุด ทำระบบสาธารณสุขไทยป่วน”. *Thai Post*. 30 October 2010.
- 7 “เสนอตั้งกองทุน ‘เมดิคัลฮับ’”. *Matichon*. 25 November 2010.
- 8 “ขึ้นนโยบายอุตสาหกรรมสุขภาพขีดรัฐธรรมนุญ สช. หวังเร่งธุรกิจโคโรทบทคนไทย-ชงเข้า คสช. 24 ธ.ค.”. *Komchadluek*. 9 December 2010.
- 9 “นายกฯ สั่งเร่งบีโออี ธุรกิจ รพ.”. *Thai Post*. 25 December 2010.
- 10 “วางแผนพัฒนาสุขภาพ 4 ด้านสถานพยาบาล-บริษัทยาใหม่”. *Matichon*. 30 June 2011.
- 11 Duangkamol Sajirawanakul. “สช. ชงกรอบลงทุนอุตสาหกรรมสุขภาพ เบรก “บีโอไอ” เร่ง “เมดิคัลฮับ””. *Bangkokbiznews*. 3 July 2011.

4 Notable Thai Contributions to the Health of Thais

1. Thai traditional medicine won gold medal as a food supplement product at the International Exhibition of Inventions in Geneva, Switzerland

- ไข่มะตูม รักษาโรค คั่วรางวัลนานาชาติ. (2011, 28 April). *Thai Post*.
 แพทย์แผนไทยคั่วรางวัล. (2011, 28 April). *Lokwannee*.
 แพทย์แผนไทยคั่วรางวัลระดับโลก. (2011, 29 April). *Daily News*.
 แพทย์แผนไทยนำสารสกัด “ไข่มะตูม-ผลมะตูม” คั่วรางวัลจากเจนีวา. (2011, 27 April). *ASTV Manager Online*. Retrieved 10 January 2012, from <http://www.manager.co.th/science/viewnews.aspx?NewsID=9540000051895>.
 แพทย์แผนไทย คั่วรางวัลเหรียญทอง เจนีวา 2011. *Office of the National Research Council of Thailand*. Retrieved 10 January 2012, from <http://pr.nrct.go.th/home/91-pr-news-3.html>.
 หมอบุญดี แพทย์แผนไทยเจิ้งคั่วรางวัลระดับโลก. Retrieved 10 January 2012, from <http://www.snaturerepay.com/snatur-news/thai-traditional-medicine/>.

2. National Health Security Office (NHSO) provided 170 million baht to promote health of senior citizens

- สปสช.ทุ่ม 170 ล้าน บริหารผู้สูงอายุ. (2011, 10 April). *Thairath*. Retrieved 10 January 2012, from <http://www.thairath.co.th/content/edu/162808>.
 ทุ่มงบ 170 ล้าน ทำ 4 พันโครงการสนับสนุนผู้สูงอายุไทย. (2011, 11 April). *ASTV Manager Online*. Retrieved 10 January 2012, from <http://www.manager.co.th/QOL/ViewNews.aspx?NewsID=9540000044811>.

3. Chambers of Commerce set up Anti-Corruption Network (CAN)

- ดุสิต นนทะนาคร ผู้จัดประกาย สร้างภาคีต้านคอร์รัปชัน. (2011, 31 December). *Post Today*.
 แผน Clean Thailand DIY ภาคีเครือข่ายต่อต้าน ‘คอร์รัปชัน’. (2011, 16 December). *Matichon Weekly*.
 เทียบผลสำรวจ ‘คอร์รัปชัน’ ปัญหาใหญ่แต่คนสนใจน้อย. (2011, 15 December). *Bangkokbiznews*.

หอการค้าฯ ลงมติขยับไม่จ่ายใต้โต๊ะ. (2011, 11 December). *Komchadluek*.
ตั้ง 'ประมนต์' ประธานภาคีคอรัปชั่น. (2011, 8 October). *Matchon*.
คนไทยห่วงปากท้องเงินเยยแก่คอรัปชั่น. (2011, 15 September). *Post Today*.
เดลินิวส์ปลูกด้าน 'คอรัปชั่น' ดุสิตให้หอการค้าตั้งศูนย์รื้อร้อยเรียนส่งปชช. ฟัน. (2011, 4 August). *Thai Post*.
ตะลึงคอรัปชั่นไทยแรงเข้าขั้นโคม่า หอการค้าฯ ออก 5 ปีมูลค่าการทุจริตสูงถึง 5 แสนล.ปี. (2011, 30 June). *Khaosod*.
ไทยคอรัปชั่น 3 แสนล้านปี ปลูกด้านโกง. (2011, 30 June). *Thai Post*.
Board of Trade of Thailand. ภาคีเครือข่ายต่อต้านคอรัปชั่นจับมือสื่อเชิญชวนร่วมโครงการ. Retrieved 11 January 2012, from Board of Trade of Thailand website: <http://www.thaichamber.org/scripts/detail.asp?nNEWSID=4699>

4. Promoting virtues in the Deep South

ศอ.บต. ดิวเข้มชาวมุสลิมก่อนเดินทางไปพิธีฮัจย์. (2011, 17 September). *Naewna*.
Muslim Today. ศอ.บต. ปรึกษาการสนับสนุนคนดีมีคุณธรรม. Retrieved 13 January 2012, from website <http://www.muslimtoday.in.th/?modules=article&id=601>
Thai Muslim News. ศอ.บต. ส่งผู้เดินทางไปทำฮัจย์ตามโครงการส่งเสริมคนดีมีคุณธรรมที่สนามบินหาดใหญ่. Retrieved 13 January 2012, from Thai Muslim News website: <http://www.thaimuslim.com/view.php?c=9&id=16326>
Thai Muslim News. ศอ.บต. หนุนโครงการส่งเสริมคนดีมีคุณธรรมแก่มุสลิม 5 จชต. ไปทำฮัจย์ที่ซาอุฯ. Retrieved 13 January 2012, from Thai Muslim News website: <http://www.thaimuslim.com/overview.php?c=1&id=5541>
Southern Border Provinces Administration Centre. ศอ.บต. พบปะผู้ไปประกอบพิธีฮัจย์หลังเดินทางกลับ พร้อมสรุปผลการดำเนินโครงการฯ. Retrieved 13 January 2012, from Southern Border Provinces Administration Centre website : http://www.sbpac.go.th/index.php?cmd=news&cate_id=1&mode=detail&id=1020
Muslimthai Post. ผู้ได้รับคัดเลือกตามโครงการส่งเสริมคนดี มีคุณธรรมใน จชต. ไปประกอบพิธีฮัจย์ ขอขอบคุณรัฐบาลที่ช่วยเหลือประชาชนในพื้นที่. Retrieved 13 January 2012, from Muslimthai Post website : <http://www.muslimthai.com/muslimthai/main/index.php?page=view&category=19&id=4786>
Department of South Asia, Middle East and Africa Affairs. โครงการส่งเสริมคนดีมีคุณธรรมในจังหวัดชายแดนภาคใต้ไปประกอบพิธีฮัจย์ประจำปี 2554. Retrieved 13 January 2012, from Ministry of Foreign Affairs website : http://sameaf.mfa.go.th/th/news/detail.php?ID=2573&SECTION=EMB_ACT
Southern Border Provinces Administration Centre. ผลการดำเนินงานที่สำคัญของ ศอ.บต. ประจำปีเดือนตุลาคม 2554. Retrieved 13 January 2012, from Southern Border Provinces Administration Centre website : <http://www.sbpac.go.th/files/download/2011120322446hisne.pdf>

Food Security: the Illusion of Money vs the Reality of Food

Personal data sources

Anuch Arpapirom, Area Based Development Research Journal, Thailand Research Fund (TRF). February 8, 2011.
Decha Siripat, Khao Kwan Foundation (KKF). January 24, 2012.
Sirikiat Liangkobkit, MD., Thai Health Promotion Foundation (THPF). August 9, 2011.
Witoon Lianchamroon, BioThai Foundation (BIOTHAI). September 13, 2011.

Thai Documents

Anuch Arpapirom. 2003. *Food Situation and Outlook: time for National Food Policy*. Bangkok: C-Two Media Company Limited.
Anuch Arpapirom. 2011. *Success and crisis in modern agriculture*. Matchon weekly, years 32, Vol.1634, 2011, December 9-15.
Benchaphun Ekasingh, Jirawan Kitchaicharoen, and Pornsiri Suebongsung. 2011. *Risks in Agricultural Systems Commitment in Chiang Mai and Lamphun: Impact on Small Farmers Linked to Public Policy*. Article presented in the academic arena a commitment to justice in agriculture, On Friday, December 23, 2011, at Conference centers Chulabhorn Research Institute (CRI), Bangkok.
BioThai Foundation. (n.d.). *Handbook for Food Insecurity and Solution of Thailand*. Nonthaburi:
BioThai Foundation. Eathipol Srisawaluck, et al. 2006. *Local Land Management*. Bangkok: Thailand Research Fund (TRF).
Kritsada Boonchai, Buntoon Sedsitrot, Witoon Lianchamroon, and Arnuch Arpapirom. 2007. *The Concept and the Policy of Food Resources Base*. Nonthaburi: BioThai Foundation. Office of Agricultural Economics. 2010. *Agricultural Statistics of Thailand 2009*. Bangkok: Office of Agricultural Economics.

Pattapong kessomboon, Nusaraporn Kessomboon, and .Natthida Weerapreeyakul. 2004. *6 Dangerous Chemicals: Threat of Thais Health*. Nonthaburi: Healthy public policy and health impact assessment (HPP-HIA) and Health Systems Research Institute (HSRI).
Permsak Makarabhirom. 2011. *Reduce Inequality with Limited the Seizure of Land Holdings*. Matchon on January, 16 2011.
Pibul Isaraphan. 2011. *Situation of Pesticides Poisoning in Thailand*. Conference documents for surveillance of agricultural chemicals, 2011, June 16-17 at the Century Park hotel.
Rapichan Phurisamban. 2011. *The Situation of Chemical Pesticides in Thailand*. The Conference documents to monitor agricultural chemicals, 2011, June 16-17 at the Century park hotel Bangkok.
Sayamol Kaiyourawong, et al. 2006. *Disputes and Conflicts of Land in Thailand*. Bangkok: Thailand Research Fund (TRF).
Thai National Food Commission (TNFC). 2011. *Strategic Framework for Food Management in Thailand*, Thai Health Promotion Foundation.
Thailand's Reforms. 2011. *The Proposal for the Reform in Political Parties and Voters in Thailand*. The Reform Thailand office.
The group of corporate monitoring. 2009. *C.P. in Thai Agriculture*. Nonthaburi: BioThai Foundation.
The group of Household economies, *The National Statistical Office (NSO)*. 2003. *Preliminary Report on Agricultural Census in 2003*. Bangkok: *The National Statistical Office (NSO)*.
The United Nations Development Programme-UNDP. 2009. *2009 Thailand Human Development Report: Human Security, Today and Tomorrow*. Bangkok: The United Nations Development Programme-UNDP.
Vanchai Tantivitayapitak. 1998. *M.C. Sittiporn Krisdakorn "Money is an Illusion, Food is a Real"*. Sarakadee Magazine. Years 14, Vol. 159, May 1998.
Varaporn Punyawadee. 2007. *The Economic of Agricultural Chemical Policy*. Environment and Natural Resources Journal Vol.5, No.2, December 2007.
Witoon Lianchamroon, Suriyon Tankitjanukit, et al. 2008. *Future use of biotechnology in Agriculture and genetically engineered crops in Thailand*. Nonthaburi: BioThai Foundation.
Witoon Lianchamroon. 2011. *Agricultural Reform and Food Security: Research and Action Policy*. Nonthaburi: BioThai Foundation.
Wittaya Chearaphan. 2010. *(หนี้สินเกษตรกรไทย) Obligation of Thai Farmers*. Bangkok: The Thailand Research Fund (TRF).
Working Group on food security. 1996. *Public Policy for Food Security. The ASEAN Free Trade Area: Implications for Agriculture*. BioThai Foundation, food-resources (PRAFA), Sustainable Agriculture Foundation (Thailand), Alternative Agriculture Network.

Website sources

BioThai Foundation. 2011. *The Role of Agricultural and Food Corporations, Rural and Society Changes in Thailand*. Available: <http://www.biothai.net/node/10889>. (Access date: December 15, 2011).
Hazardous Substances Act (No. 3). 2008. Available: <http://www.chemtrack.org/Law/Diw-M-2551.pdf>. (Access date: October 12, 2011).
Kehakaset (House Agricultural Magazine). 2011. *Chemical Pesticides after August 22, 2011*. Available: http://www.kehakaset.com/index.php?option=com_content&view=article&id=474:2011-08-26-02-34-03&catid=38:information. (Access date: February 15, 2012).
Panubate Maharauankwan. 2011. *Contract Farming and Permission of Rights of Agricultural in Small bussiness*. Available: <http://www.manager.co.th/daily/ViewNews.aspx?NewsID=9540000165028>. (Access date: December 28, 2011).
Panubate Maharauankwan. 2011. *Agricultural System Reform for the Quality of Life of Farmers*. Available: <http://www.manager.co.th/Daily/ViewNews.aspx?NewsID=9540000161831>. (Access date: December 30, 2011).
Panubate Maharauankwan. 2011. *Agricultural Chemicals Reform: Turn a Critical Quality of Life for Thais people*. Available: <http://www.manager.co.th/daily/viewnews.aspx?NewsID=9540000109572>. (Access date: December 30, 2011).
Suriyon Tankitjanukit, Jirawat Panpeng, Nattaree Tangyongtrakul, and Nawarod Parakmasit. 2010. *Farmers Living in Central Region: Policy Development to the Final Scenery of Thailand*. The National Economic and Social Development journal, 47, Vol.2, (April-June 2010). P 15-19. Nonthaburi: Office of the National Economic and Social Development Board
Witoon Lianchamroon, Rapichan Phurisamban. 2011. *Farmers Health and Pesticide Control Situation*. Available: <http://www.biothai.net/node/6139>. (Access date: December 19, 2011).

The Process of Writing the Thai Health Report 2012

11 Thai Population and Health Indicators

The Process

1. Select interesting and important issues to be included in the health indicators through a series of meetings of the Steering Committee
2. Identify experts to be contacted, then hold meetings to plan each section
3. Assign an expert to each approved section to prepare a draft
4. Brainstorm the draft papers, considering suitability, content, coverage, data quality, and possible overlaps
5. Meetings with experts responsible for each section, to review the draft papers and outline key message for each section
6. Broad review of the draft papers by experts, followed by revisions of the papers

Guidelines for health indicator contents

1. Find a key message for each section to shape its contents
2. Find relevant statistics, particularly annual statistics and recent surveys to reflect recent developments
3. Select a format, contents and language suitable for diverse readers

10 Outstanding Health Situations and 4 Notable Thai Contribution to the Health of Thais

Criteria for selecting the health issues

1. Occurred in 2011
2. Have a significant impact on health, safety, and security as broadly defined
3. Include public policies with effects on health during 2011
4. Are new or emerging
5. Recurred during the year

Health showcases are success stories in innovation, advances in health technologies, and new findings that positively affected health in general.

Procedure for ranking the issues

1. A survey was conducted using a questionnaire listing significant issues in 2011 before the survey date. The situations obtained from the survey were ranked using a Likert scale with three levels: high (3 points), medium (2 points), and low (1 point).
2. The ranking data were analysed using the SPSS statistics package. Issues with high mean scores were given high priority.
3. The Steering Committee for the Thai Health Report Project made the final decision to approve the content.

Special Feature

There are two types of special topics: target group oriented and issue oriented. The types alternate each year. The topic is sometimes selected from the 10 health issues.

Important criteria in selecting the special topics include

1. Political significance
2. Public benefits
3. The existence of diverse views and dimensions

Working process

1. The Steering Committee met to select the topic
2. The working group outlined a conceptual framework for the report
3. Experts were contacted to act as academic advisors
4. The working group compiled and synthesised the contents. Each article's content was thoroughly checked for accuracy by academics and experts.
5. The report was revised in line with reviewers' suggestions.

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With sincere gratitude,
Thai Health Working Group

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